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SOIL AND CULTIVATION IN THE PAPUA NEW GUINEA HIGHLANDS: II. A COMPARISON OF INDIGENOUS AND SCIENTIFIC PERSPECTIVES.

Dr Paul Sillitoe¹

ABSTRACT

This is the second in a two part series of papers investigating the assertions of some Southern Highlanders that they do not inspect soil before clearing sites for cultivation. This paper assesses the status of their disclaimers through the analysis of the results of a survey of soil sites. A classification of soil resources is built up using multivariate techniques, by first assessing horizon variations, then constructing profile sequences, and finally combining these with clusters of site characteristics. A comparison of the resulting soil resource classification with indigenous assessments of, and agricultural use of soils reveals no apparent relationship, although there are some interesting soil-cultivation trends. The analysis fails to go beyond what local people assert about inspection of soils before cultivation, for there are apparently no observable patterns of properties by which they might assess agricultural potential.

Key words. Papua New Guinea, Southern Highlands Province, soil/site description, soil classification, multivariate analysis.

INTRODUCTION

The Wola of the Southern Highlands Province of Papua New Guinea say that inspection of soil does not figure in their selection of sites for cultivation, as related in Part I of this series of papers. In an attempt to assess the status of their disclaimers about soil appraisal, and to evaluate generally the standing of local soil knowledge, the results of a survey of soil sites conducted in the west of their region are presented and discussed here.

The sites surveyed occurred, by and large, on the local territories of two neighbouring *semonda* clan communities, situated adjacent to the Waga and Augu rivers, in Nipa District. It also included parts of the territories of other neighbouring *semonda* clan communities, particularly those with locations that had good examples of certain soil classes, such as sandy and gley soils, alluvial soils on extensive water-borne deposits (at lower altitudes in the vicinity of Lake Kutubu) and clayey soils on volcanic parent materials (Rutherford and Haantjens 1965; Bleeker 1983; Wood 1984; Radcliffe 1986). The total number of sites described was eighty-five.

The sites were not selected randomly, but with two aims in mind, related to the gardeners' unexpected disclaimers about soil appraisal. Firstly, to describe

and classify the soils of the area according to a framework sympathetic to local perceptions and judgements, and secondly, to accommodate and appraise the affects of local land use and agriculture on the soils (Clarke and Street 1967; Wood 1979). In relation to the first aim, an effort was made to include in the survey sample representative examples of the different soil types identified in the area. And in relation to the second aim, sites were selected according to their vegetational cover and slope, in an effort to obtain representative coverage of different land uses, both past and present, and so allow for their impact on the soils.

Table 1 lists the classes of site distinguished according to land use, vegetational cover and slope, and the number of sites described in each class. While trying to obtain a representative sample of the soils in the survey region, by structuring the selection of sites according to the above guidelines to ensure the necessary distribution, sites were otherwise selected in a casual manner depending to some extent on local people's ideas of where would be a good place to look at a particular soil that met certain of the above criteria. Another factor that influenced the choice of sites was that a wide geographical spread of sites from around the region was more desirable than bunching in one locality, where this was commensurate with the above objectives. A final factor was that landowners did not object to me digging profile pits on sites (a consideration that applied to gardens only).

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Table 1. Distribution of sites in soil survey sample according to land use, vegetation cover and slope.

LAND USE	VEGETATION	SLOPE	
		Steep	Shallow Flat
Uncultivated land	Primary forest	6	6
	Wetland vegetation		2
	Secondary forest	5	7
	Cane grassland	5	7
Disturbed land	Grasses & herbs	2	6
	(long term gardens) (short term gardens)	5	3
	Cultivated until recently		
	Cultivated long ago		
Currently cultivated land	Primary forest	2	3
	Secondary forest	2	2
	Cane grassland	3	2
	Primary forest	3	1
	Secondary forest	2	2
	Cane grassland		
	Wetland vegetation		
	Bare ground (abandoned house site)		2
	Established long term gardens cleared from:		
	Recently cultivated gardens cleared from:		

The sites and soils were described according to the Soil Survey of England and Wales procedure, as detailed in the *Soil Survey Field Handbook* (Hodgson 1976). The nominal depth of the profiles described was set at 50 cm, as the depth most relevant to an assessment of soil-related factors affecting agricultural land use, but this was often exceeded. The local description of the soil and assessment of its agricultural potential was supplied by those who assisted me, plus any other individuals who happened to be on site during the survey. They were asked to comment on the agricultural potential of the soil and to assess its status on a six-point scale (as very good, good, middling, poor, very poor, or waterlogged)¹.

DATA ANALYSIS

The data were subsequently programmed into an Amdahl 5860 and analysed multivariately using the SPSS-X computing package, employing ordination by principal components analysis, with cross-tabulation, factor analysis and cluster analysis (Cuanelo and Webster 1970; Goel and Gaikawad 1974; Webster and Burrough 1974; Webster 1977; Oliver and Webster 1987). The analysis distinguished between different classes of soils according to all the survey data, suggesting correlations that might help assess both the effects of soil status on local land use and of subsequent agricultural practices on the soils. And it compared these findings with indigenous soil judgements and perceptions, to assess the validity of assertions that the soil does not significantly influence and guide cultivation decisions.

The 'unearthing' of correlations between land use and soils, and local assessments of the cultivation potential of different soils, demands the classification of the soils described by profile and site. Firstly, different horizon types are defined, after assessing intra-horizon variations in soil properties. Secondly, different profiles are distinguished, as comprising different horizon sequences. And thirdly, these soil profiles are correlated with the site data to generate a soil resource classification. The strategy overall produces a classification of entire soils, as comprising sequences of defined horizons occurring in specified site locations. Finally, this soil resource classification is compared with land use and local assessments of soil-worth in an attempt to trace connections between cultivation practices and soil status.

HORIZON VARIATION

Any pattern to the variation in properties within horizons was assessed initially in a series of cross-tabulations of those pairs of soil properties that might reasonably be expected to show some correlation in their variation. While some evidenced a degree of correlation, the results were not conclusive, indicating that the horizons do not vary internally in any straightforward manner with certain properties varying regularly in relation to one another. The majority of properties showed a random distribution and no correlation. This lack of success was not surprising because if such an obvious variation in properties was present within horizons local people might be expected to comment upon it. We have to anticipate a more complex classification than one where only a few key parameters control class ascription. Principal components analysis was used to begin generating such a classification and assess what properties were responsible for the larger part of the variation within horizons (Rayner 1966; Webster 1977). The first three factors account for the greater part of the variation that occurs within each horizon.

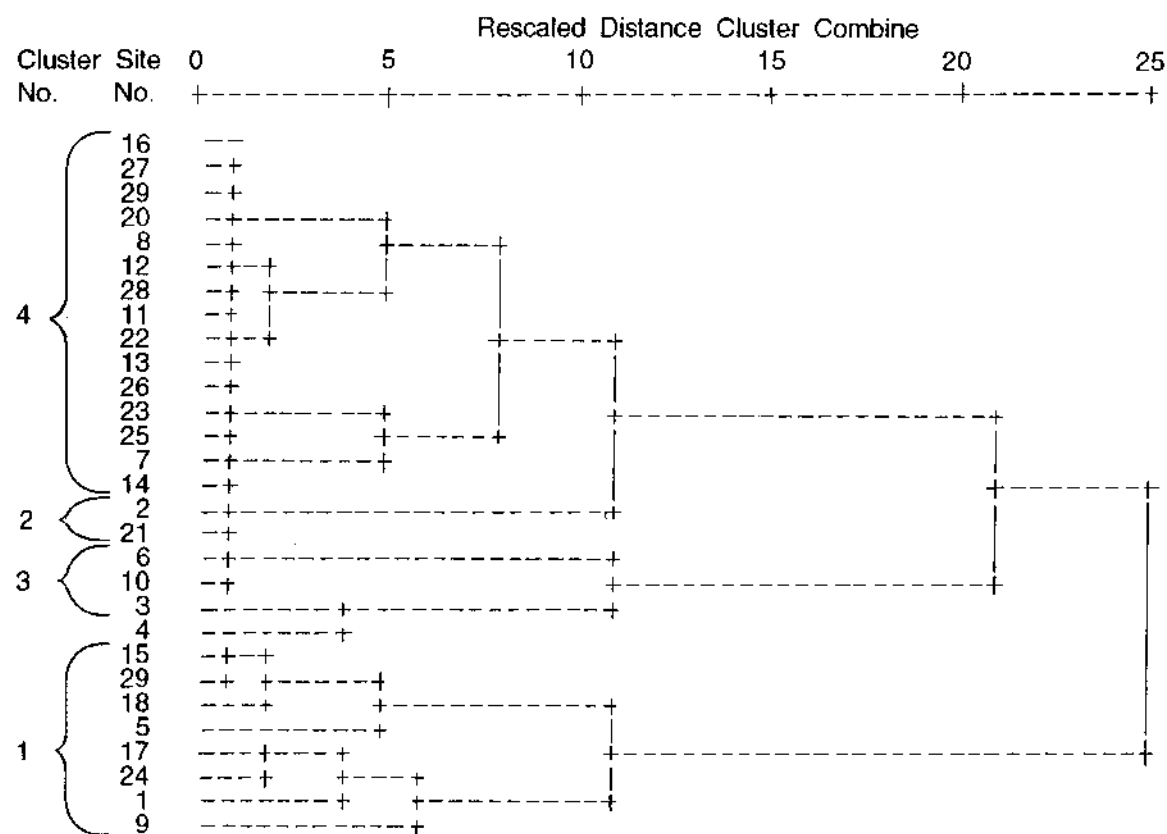
The HORIZON VARIATION is as follows:

HORIZON 1: The first three principal components account for 50% of the variation (twenty-four factors were required to account for 100%). The first principal component represents stoniness, not merely the presence of stones but their abundance, size, shape and lithology, together with depth of the horizon, plus associated depth of rooting and abundance of roots. The second principal component represents colour (hue and value), which can possibly be associated tenuously with organic matter status, as they might be expected to vary in relation to one another. The third principal component represents texture. In summary, we can characterise the variation that occurs in horizon 1 as due principally to stoniness, thickness of horizon and depth of rooting, and differences in colour and texture.

HORIZON 2: The first three principal components account for 39% of the variation (thirty-four factors were required to account for 100%). The first principal component largely represents mottles, their abundance, size, contrast and boundaries. Of secondary importance are the related properties of texture and consistency (stickiness, plasticity and strength), to-

Table 2. Cluster dendrogram for horizon 1

Dendrogram using Average Linkage (Between Groups)



gether with the structural properties of ped packing, shape and size. The second principal component represents stoniness (abundance, size and shape of stones). The third principal component relates to colour (value and chroma), together with the thickness of the horizon and the related property of rooting depth. In summary, we can characterise the variation that occurs in horizon 2 as due principally to differences in mottling, together with structure, consistence and texture.

HORIZON 3: The first three principal components account for 53% of the variation (sixteen factors were required to account for 100%). The first principal component represents the related properties of texture and consistence (stickiness and strength), and organic matter status and colour (value and chroma), and to a considerably lesser extent stoniness (abundance, size and lithology of stones) and porosity (size and percentage of macropores). The second principal component represents

mottles, their abundance, size, contrast and boundaries. And the third principal component relates to horizon thickness, and to a lesser extent to bulk density and acidity. In summary, we can characterise the variation that occurs in horizon 3 as due principally to differences in texture, consistence, organic matter status and colour, plus mottling and horizon thickness.

HORIZON 4: The first three principal components account for 37% of the variation (thirty-two factors were required to account for 100%). The first principal component represents mottles, their abundance, size, contrast and boundaries, and to a lesser extent stoniness (abundance, size and lithology of stones - the latter scoring high under factor 2). The second principal component relates to texture primarily. The third principal component relates to depth, abundance and type of roots, and to a lesser extent to colour (chroma and value - the former scoring high under factor 2), and poros-

Table 3. The mean/predominating properties for horizon 1 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Thickness	6 cm (1.8)	4 cm (2.1)	2 cm (0.5)	7 cm (1.8)
Boundary (1/2)	merging smooth	smooth merging	smooth sharp	smooth
Colour : hue	2,1 (50%) 5.6YR (0.4)	2,1 (50%) 7.5R (0)	2,1 (50%) 10.6R (1.2)	1,1 (33%) 1.2YR (3.3)
: value	2.9 (0.1)	2.0 (0.3)	2.3 (0.3)	2.0 (0)
: chroma	2.1 (0.2)	2.5 (0.5)	2.5 (0.3)	2.1 (0.2)
Organic matter	H 3 (0.4)	H 3 (0)	H 3 (0.5)	H 3 (0)
Texture	sandy silt loam 3 (0.4)	silt loam 4 (0)	silt loam 4 (0)	silt loam 4 (0.3)
Stones : abundance	<1% 1 (0.4)	1-5% 2 (0.7)	zero 1 (0)	1-5% 2 (0.5)
: size	very small 1 (0.7)	small 3 (2.8)	- 0 (0)	very small & small 2 (0.8)
: shape	rounded/sub-rounded 2 (1.6)	rounded 1 (2.6)	- 0 (0)	rounded 1 (0.8)
: lithology	chert 1 (100%)	chert 1 (100%)	- 0 (0)	volcanic 5 (50%)
Soil water	slightly moist 2 (0.4)	very moist 3 (0)	very moist 3 (0.5)	slightly moist 2 (0.3)
Consistence : stickiness	non-sticky 1 (0.4)	non-sticky 1 (0)	non-sticky 1 (0)	non-sticky 1 (0)
: plasticity	slight 2 (0.4)	non-plastic 1 (0)	slight 2 (0.5)	slight 2 (0.3)
: strength	very friable 2 (0.4)	very friable 2 (0)	very friable 2 (0.5)	very friable 2 (0)
Structure : ped shape	granular 5 (88%)	granular 5 (100%)	granular 5 (75%)	granular 5 (53%)
: ped size	medium 3 (0.7)	fine-medium 2 (0)	fine 1 (0.5)	fine-medium 3 (0.3)
: ped grade	moderate 2 (0.4)	moderate 2 (0.7)	moderate 2 (0.5)	weak 1 (0.3)
: packing density	low 1 (0)	low 1 (0)	low 1 (0)	low 1 (0)
Voids : pore size	very fine, fine, medium 5 (0.7)	medium 7 (1.4)	medium 7 (1.5)	medium 6 (0.5)
: pore %	3.13 (0.7)	5.0 (0)	5.0 (0)	4.20 (0.3)
Roots : abundance	many 3 (0.4)	abundant 4 (0.7)	abundant 4 (0)	abundant 4 (0.3)
: size	very fine, fine, medium (0.7)	very fine, fine medium, coarse (0)	medium (1.0)	very fine, fine, medium, coarse (0.3)
: depth	6 cm (1.8)	4 cm (2.1)	2 cm (0.5)	7 cm (1.8)
: type	fibrous	woody, fibrous, freshy	woody, fibrous, freshy	woody, fibrous
pH	3 (50%) 5.10 (0.2)	7 (50%) 5.05 (0.15)	7 (70%) not measured	2 (67%) 4.89 (0.08)

ity (size and percentage of macropores). In summary, we can characterise the variation that occurs in horizon 4 as due principally to differences in mottling and stoniness, texture, rooting, colour and porosity.

HORIZON CLASSIFICATION

Cluster analysis was used to create horizon classes (Rayner 1966; Webster 1977). The results of this agglomerate method, which creates a hierarchy from a similarity matrix by the nearest neighbour strategy, can be shown as a dendrogram or tree-diagram, on which the vertical lines represent distance in character space, and the horizontal lines correspond to the distance at which fusion occurs. The similarity measures relate to the above principal components, which give the properties that most differentiate between groups. The following discussion identifies four clusters per horizon, giving mean values and standard errors for the soil properties defining each cluster.²

The HORIZON CLASSES are as follows:

HORIZON 1 (Tables 2 and 3): The dendrogram indicates the presence of three major groupings, the larger of which can be divided at a considerably lesser distance into two groups, to give the four clusters required. The number of cases in these clusters is variable (at 2, 4, 8 and 15). They are differentiated largely by thickness, colour, stoniness and rooting, as follows:

Cluster 1: Thick (6 cm), dark reddish brown, virtually stoneless horizon with many fibrous roots throughout.

Cluster 2: Thin to thick (av. 4 cm), very dark reddish brown, very slightly stony horizon (small rounded chert stones) with abundant woody, fibrous and fleshy roots throughout.

Cluster 3: Thin (2 cm), very dark reddish brown, stoneless horizon with abundant woody fibrous and fleshy roots throughout.

Cluster 4: Thick (7 cm), very dark reddish brown, very slightly stony horizon (very small and small rounded volcanic stones) with abundant woody and fibrous roots throughout.

There is not a great deal of variation within horizon 1 on this analysis (even between the two main groupings of cluster 1 and clusters 2, 3 and 4) and the lumping of all such horizons into a single class called *waip* by the local people is understandable.

HORIZON 2 (Tables 4 and 5): The dendrogram indicates the presence of two major groupings, the larger of which can be divided at a considerably lesser distance into three groups, to give four clusters. The number of cases in these clusters is again variable (at 2, 20, 30 and 31). They are differentiated largely by thickness, colour, mottling, texture, consistence, structure and porosity (although the standard errors indicate considerable overlap between clusters in some of these properties - e.g. colour) as follows:

Cluster 1: Thick (21 cm), brownish black, scarcely mottled silt loam; slightly sticky, moderately plastic and friable; blocky and granular structured, medium packed acidic horizon of middling porosity.

Cluster 2: Average thickness (14 cm), dark brown scarcely mottled silt loam; slightly sticky and plastic and very friable; granular structured loosely packed acidic horizon of high porosity.

Cluster 3: Thick (17 cm), brown, faintly mottled silty clay loam; slightly sticky, moderately plastic and friable; granular and angular blocky structured medium packed acidic horizon of low porosity.

Cluster 4: Variable (av. 8 cm), greyish brown, unmottled silty clay loam; moderately sticky and plastic, and very friable; granular or angular blocky structured medium packed alkaline horizon of low porosity.

The differences between these horizon 2 clusters is again not large, as the standard errors demonstrate, and the lumping of all such horizons by the local people into a single category called *suw pombray* is reasonable (which they may qualify as necessary according to stoniness (*pombray arayto*), wetness (*pa pombray*) and sandiness (*muw pombray*)). The principal difference between the two main groupings (cluster 2 and clusters 1, 3, 4) is structural: a loosely packed soil of low density, poor coherence and highly porous crumb structure on

Table 4. Cluster dendrogram for horizon 2. (Dendrogram using Average Linkage (Between Groups))

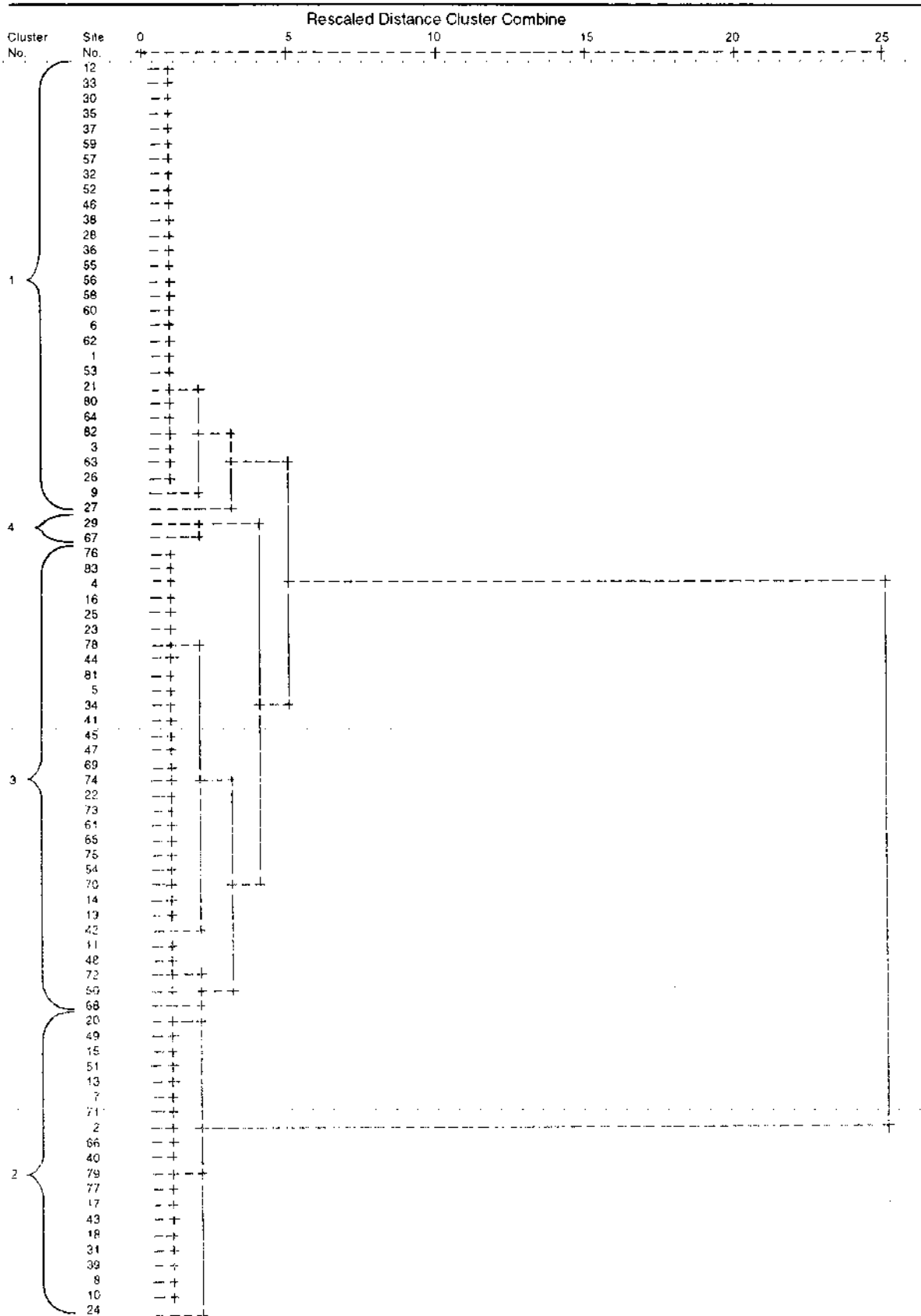
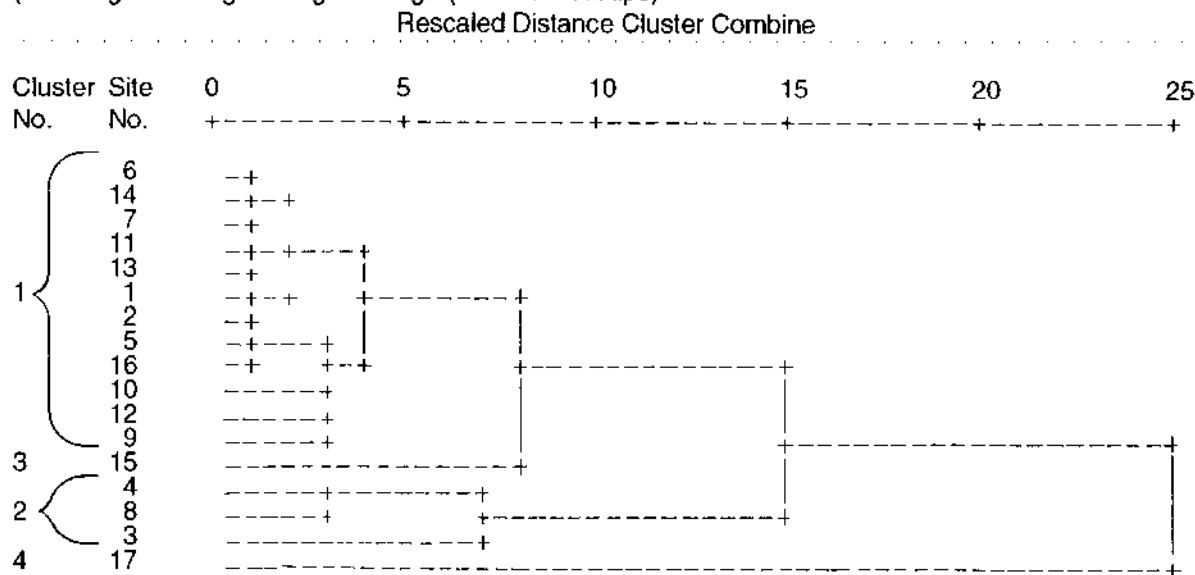


Table 5. The mean/predominating properties for horizon 2 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Thickness	20.5 cm (2.8)	13.7 cm (3.0)	17.3 cm (1.9)	8 cm (5.0)
Boundary : (2/3;2/4)	merging smooth 2, 1 (60%)	merging smooth 2, 1 (45%)	merging smooth 2, 1 (55%)	merging smooth 2, 1 (50%)
Colour : hue	7.1 YR (0.3)	6-9 YR (0.3)	7.5 YR (0.3)	6.3 YR (1.3)
: value	2.9 (0.1)	3.2 (0.2)	3.7 (0.2)	3.5 (0.5)
: chroma	2.4 (0.2)	2.5 (0.2)	2.8 (0.2)	2.0 (0.9)
Mottles : abundance	very few 0 (0.2)	very few 0 (0.2)	very few 0 (0.2)	none 0 (0)
: size	extremely fine 1 (0.4)	- 0 (0.5)	extremely fine 1 (0.4)	- 0 (0)
: contrast	- 0 (0.2)	- 0 (0.2)	tanint 1 (0.2)	- 0 (0)
: boundaries	- 0 (0.2)	- 0 (0)	- 0 (0.2)	- 0 (0)
Organic matter	Intimate 2 (0)	Intimate 2 (0)	Intimate 2 (0)	Intimate 2 (0)
Texture	silt loam 4 (0.2)	silt loam 4 (0.5)	silty clay loam 5 (0.4)	silty clay loam 5 (0)
Stones : abundance	1-5% 2 (0.2)	1-5% 2 (0.2)	1-5% 2 (0.2)	1-5% 2 (0.7)
: size	small 3 (0.6)	small 3 (0.7)	very small, small, medium 4 (0.7)	very small 1 (0.7)
: shape	subrounded & subangular 4 (0.4)	rounded & subrounded 2 (0.4)	subrounded & subangular 3.5 (0.3)	subrounded 3 (2.1)
: lithology	chert 1 (81%)	chert 1 (60%)	chert 1 (62%)	volcanic 5 (100%)
Soil water	slightly moist 2 (0)	slightly moist 2 (0.2)	very moist 3 (0.2)	slightly moist 2 (0)
Consistence : stickiness	slight 2 (0)	slight 2 (0.2)	slight 2 (0)	moderate 3 (0.7)
: plasticity	moderate 3 (0.2)	slight 2 (0.2)	moderate 3 (0.2)	moderate 3 (0.7)
: strength	friable 3 (0.2)	very friable 2 (0.2)	friable 3 (0.2)	very friable 2 (0)
Structure : ped shape	angular blocky & granular 3 (67%)	granular 5 (50%)	angular blocky & granular 3 (61%)	angular blocky or granular 1, 5 (100%)
: ped size	fine to medium 2 (0.2)	fine to medium 2 (0.2)	fine to medium 2 (0.4)	fine, medium, coarse 4 (0)
: ped grade	moderate 2 (0.2)	moderate 2 (0.2)	moderate 2 (0)	moderate 2 (0)
: packing density	medium 2 (0)	low 1 (0)	medium 2 (0)	medium 2 (0.7)
: bulk density	1.05 g cm ⁻³ (0.02)	0.96 g cm ⁻³ (0.04)	1.13 g cm ⁻³ (0.03)	1.15 g cm ⁻³ (0)
Voids : pore size	fine & medium 5 (0.4)	fine & medium 5 (0.5)	fine 3 (0.2)	fine & medium 5 (0.7)
: pore %	2.0% (0)	5.0% (0)	0.5% (0.04)	0.5% (0)
Roots : abundance	many 3 (0.2)	many 3 (0.2)	many 3 (0.2)	many 3 (0)
: size	very fine, fine, medium 4 (0.4)	very fine, fine, medium 4 (0.5)	medium 5 (0.4)	very fine, fine, medium 4 (0.2)
: depth	21 cm (2.9)	14 cm (2.9)	21 cm (2.2)	9 cm (5.7)
: type	woody & fibrous 2 (40%)	fibrous 3 (40%)	woody & fibrous 2 (45%)	woody & fibrous 2 (0)
CaCO ₃	<0.5% 0 (0.2)	<0.5% 0 (0)	<0.5% 0 (0)	1-5% 2 (2.1)
pH	4.99 (0.05)	4.85 (.04)	4.84 (.04)	6.15 (.035)
Pedogenic factors	not evident 0 (0)	not evident 0 (0)	not evident 0 (0)	not evident 0 (0)

Table 6. Cluster dendrogram for horizon 3.

(Dendrogram using Average Linkage (Between Groups))



the one hand, and more packed soil of higher density and coherence, and less porous more aggregated blocky structure on the other.

HORIZON 3 (Tables 6 and 7): The dendrogram indicates the existence of two anomalous sites, the others falling into two clusters, to give four. The number of cases in these clusters is consequently very variable (at 1, 1, 3 and 12), and their distribution is markedly skewed with 71% of the sample falling into one cluster. They are differentiated largely by thickness, colour, mottles, texture, stoniness, soil water, consistence, structure and porosity, and roots, as follows:

Cluster 1: Average thickness (23 cm), bright/yellowish brown, mottled, very slightly stony (small subrounded chert), mineral, sandy clay loam; slightly moist, moderately sticky, very plastic and firm; fine through coarse angular blocky or angular blocky and granular structured horizon of low porosity and few roots.

Cluster 2: Thin (6 cm), brown, unmottled, slightly stony (very small to medium angular chert), humose sandy clay loam; very moist, moderately sticky and plastic, and friable; fine and medium granular and/or angular blocky structured horizon of low porosity and roots common.

Cluster 3: Average thickness (28 cm), dark reddish grey, unmottled, stoneless, humose silty clay loam; wet, slightly sticky, moderately plastic and very friable; fine through very coarse angular blocky structured horizon of low porosity and many roots.

Cluster 4: Thick (41 cm), dull brown, unmottled, stoneless, humose sandy loam; slightly moist and sticky, moderately plastic and very friable; fine and medium granular and angular blocky structured horizon of middling porosity and few roots.

The differences between sub-types of horizon 3 are more marked than for the previous two horizons, although they may be more apparent than real given the skewed distribution. If we discount the markedly anomalous site, we can distinguish two major groupings (clusters 1, 3 and cluster 2), the principal differences between which relate to colour, stoniness, structure and rooting: on the one hand a more red-brown, nearly stoneless horizon with larger more aggregated peds and deep to fine roots, and on the other a more yellow-brown slightly stonier horizon with smaller less aggregated peds and shallower to very fine roots. This dual division parallels the identification of two principal types of transition horizon between top-soil and sub-soil by the local people (when they identify any at all). They distinguish between and name these horizons ac-

Table 7. The mean/predominating properties for horizon 3 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster
Thickness	23.3 cm (3.7)	6 cm (2.6)	28 cm (0)	41 cm (0)
Boundary	merging smooth 2, 1 (76%)	sharp irregular 1, 3 (67%)	merging smooth 2, 1 (100%)	-
Colour : hue	8.7YR (0.4)	9.2 YR (0.8)	2.5 YR (0)	7.5YR (0)
: value	4.9 (0.2)	4.0 (1.2)	3.0 (0)	4.5 (0)
: chroma	5.5 (0.5)	3.7 (1.2)	1.0 (0)	4.0 (0)
Mottles : abundance	few 1 (0.3)	none 0 (0)	none 0 (0)	none 0 (0)
: size	very fine 2 (0.9)	- 0 (0)	- 0 (0)	- 0 (0)
: contrast	faint 1 (0)	- 0 (0)	- 0 (0)	- 0 (0)
: boundaries	sharp 1 (0.3)	- 0 (0)	- 0 (0)	- 0 (0)
Organic matter	not evident 1 (0.3)	intimate 2 (0.6)	intimate 2 (0)	intimate 2 (0)
Texture	sandy clay loam 7 (0.9)	sandy clay loam 7 (1.7)	silty clay loam 5 (0)	sandy loam 2 (0)
Stones : abundance	1-5% 2 (0.3)	6-15% 3 (1.2)	zero 1 (0)	zero 1 (0)
: size	small 3 (1.2)	v.small, small, medium 4 (1.7)	- 0 (0)	- 0 (0)
: shape	sub-rounded & subangular 3.5 (0.6)	angular 7 (0)	- 0 (0)	- 0 (0)
: lithology	chert 1 (63%)	chert 1 (100%)	- 0 (0)	- 0 (0)
Soil water	slightly moist 2 (0)	very moist 3 (0.6)	wet 4 (0)	slightly moist 2 (0)
Consistence : stickiness	moderate 3 (0.3)	moderate 3 (0.6)	slight 2 (0)	slight 2 (0)
: plasticity	very plastic 4 (0.3)	moderate 3 (0.6)	moderate 3 (0)	moderate 3 (0)
: strength	firm 4 (0)	friable 3 (0.6)	very friable 2 (0)	very friable 2 (0)
Structure : ped shape	angular blocky + granular 1, 3 (100%)	angular blocky &/or granular 1, 3, 5 (100%)	angular blocky 1 (100%)	angular blocky & granular 3 (100%)
: ped size	fine, medium, coarse 4 (0.7)	fine & medium 2 (0.9)	fine, medium, coarse, very coarse 7 (0)	fine & medium 2 (0)
: ped grade	moderate 2 (0)	moderate 2 (0.6)	moderate 2 (0)	moderate 2 (0)
: packing density	high 3 (0.3)	medium 2 (0.6)	medium 2 (0)	medium 2 (0)
: bulk density	1.22 gcm ³ (0.04)	not measured	1.10 gcm ³ (0)	1.20 gcm ³ (0)
Voids : pore size	fine 3 (0.9)	very fine & fine 2 (1.2)	v.fine, fine, medium 4 (0)	v.fine, fine, medium 4 (0)
: pore %	0.25% (0.06)	0.5% (0.2)	0.5% (0)	2.0% (0)
Roots : abundance	few 1 (0)	common 2 (0.6)	many 3 (0)	few 1 (0)
: size	v.fine, fine 2 (0.3)	very fine 1 (0.6)	v.fine, fine 2 (0)	v.fine, fine, medium 5 (0)
: depth	35 cm (4.0)	27 cm (5.2)	66 cm (0)	46 cm (0)
: type	fibrous 3 (58%)	fibrous 3 (100%)	woody & fibrous 2 (100%)	fibrous & fleshy 4 (100%)
pH	4.85 (0.04)	4.67 (0.07)	4.80 (0)	4.90 (0)
Pedogenic factors	not evident 0 (0.3)	not evident 0 (0.6)	not evident 0 (0)	not evident 0 (0)

Table 8. Cluster dendrogram for horizon 4.

Dendrogram using Average Linkage (Between Groups)

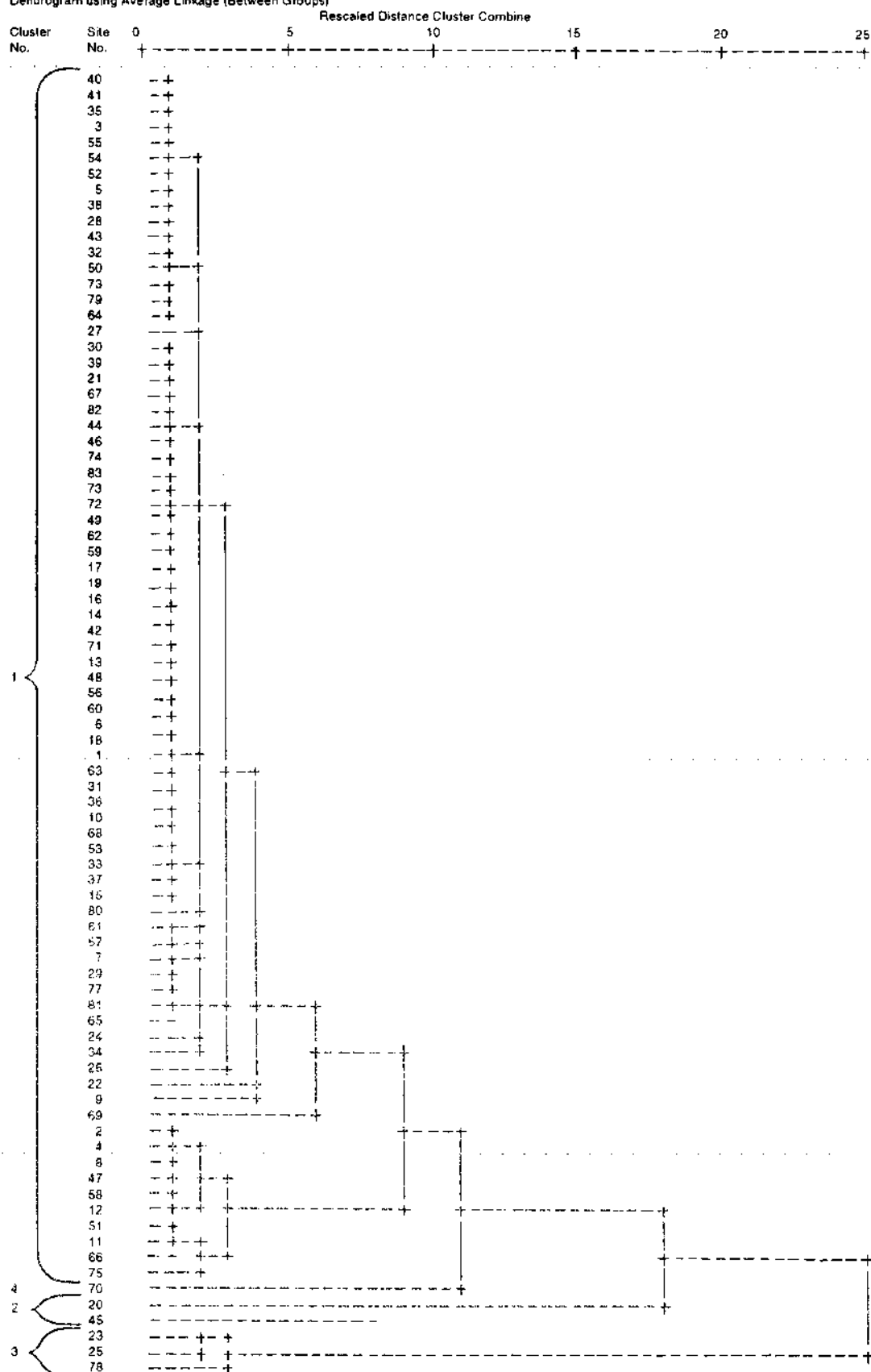


Table 9. The mean/predominating properties for horizon 4 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Thickness	> 20 cm (0)	> 20 cm (0)	> 20 cm (0)	> 20 cm (0)
Colour : hue	8.3 YR (0.2)	7.5 YR (0)	1.7 YR (1.7)	7.5 YR (0)
: value	5.8 (0.1)	4.5 (0.5)	5.3 (0.3)	7.0 (0)
: chroma	6.9 (0.2)	4.5 (1.5)	5.3 (0)	1.0 (0)
Mottles : abundance	few 1 (0.1)	few 1 (0.7)	few 1 (0.6)	very many 4 (0)
: size	v.fine, fine 3 (0.5)	v.fine, fine, medium 5 (5.0)	fine 4 (2.9)	medium, coarse 9 (0)
: contrast	faint 1 (0.2)	faint/distinct 2 (1.4)	distinct 3 (1.2)	prominent 4 (0)
: boundaries	sharp 1 (0.10)	sharp 1 (0.7)	sharp 1 (0.6)	diffuse 3 (0)
Organic matter	not evident 1 (0)	intimate 2 (0.7)	not evident 1 (0)	not evident 1 (0)
Texture	silty clay 9 (0.10)	sandy clay 8 (0.7)	silty clay 9 (0.6)	sandy clay 8 (0)
Stones : abundance	6-15% 3 (0.2)	16-35% 4 (2.8)	< 1% 1 (0.6)	1-5% 2 (0)
: size	v.small, small, medium 4 (0.5)	small & medium 5 (4.2)	v.small & small 2 (2.3)	v.small, small, medium 4 (0)
: shape	subrounded & subangular 3.5 (0.2)	rounded & subrounded 1.5 (1.3)	rounded 1 (0.4)	subrounded & subangular 4 (0)
: lithology	chert 1 (75%)	volcanic 5 (100%)	volcanic 5 (100%)	volcanic 5 (100%)
Soil water	slightly moist 2 (0.1)	slightly moist 2 (0)	wet 4 (0)	very moist 3 (0)
Consistence : stickiness	moderate 3 (0.1)	very sticky 4 (0.7)	very sticky 4 (0)	very sticky 4 (0)
: plasticity	very plastic 4 (0)	very plastic 4 (0.7)	very plastic 4 (0)	very plastic 4 (0)
: strength	firm 4 (0)	firm 4 (0)	friable 3 (0.6)	firm 4 (0)
Structure : ped shape	angular blocky 1 (71%)	angular blocky & granular 3 (100%)	angular blocky 1 (100%)	angular blocky 1 (100%)
: ped size	fine, medium & coarse 4 (0.2)	medium & coarse 5 (1.4)	medium & coarse 5 (2.3)	fine, medium, coarse 4 (0)
: ped grade	moderate 2 (0)	moderate 2 (0)	moderate 2 (0.6)	moderate 2 (0)
: packing density	high 3 (0)	medium 2 (0)	high 3 (0)	high 3 (0)
: bulk density	1.32 gcm ³ (0.02)	1.30 gcm ³ (0)	1.47 gcm ³ (0.2)	1.30 gcm ³ (0)
Voids : pore size	v.fine, fine 2 (0.2)	medium 6 (1.4)	very fine 1 (0.6)	v.fine, fine, medium 7 (0)
: pore %	0.21% (0.03)	2.0% (0)	0.2% (0.2)	0.1% (0)
Roots : abundance	few 1 (0)	few 1 (0)	common 2 (0.6)	few 1 (0)
: size	v.fine, fine 2 (0.2)	v.fine through coarse 6 (0)	v.fine, fine 2 (1.2)	v.fine through coarse 6 (0)
: depth	41 cm (2.2)	57 cm (5.0)	64 cm (2.9)	39 cm (0)
: type	fibrous 2 (0.2)	woody, fibrous 6 (0)	fibrous 2 (1.2)	woody, fibrous 6 (0)
CaCO ₃	< 0.5% 0 (0)	< 0.5% 0 (0)	< 0.5% 0 (0)	0.5-1.0% 1 (0)
pH	4.79 (0.02)	4.60 (0)	4.87 (0.07)	5.80 (0)
Pedogenic factors	not evident 0 (0)	concretions 1 (0)	not evident 0 (0.6)	concretions 1 (0)

Table 10. Rationalised profile classification

Profile class	Horizon 2 cluster(s)	Horizon 4 cluster(s)	No. of sites	Descriptive gloss
a.	1 3 4	1 2 4	58	coherent topsoil over orange clay
b.	2	1 2 4	20	looser topsoil over orange clay
c.	1 3 4	3	3	gleyed soils
d.	1 3 4	0	2	recent alluvial soils
e.	0	1 2 4	2	thin organic layer over clay horizon

cording to the dominance of properties from either the top-soil (horizon 2) above or the sub-soil (horizon 4) below as *pombray sha* or *hundbiy sha* (qualified further for stoniness by the term *araytol* where necessary). Their discrimination rests largely on colour differences.

HORIZON 4 (Tables 8 and 9): The dendrogram indicates the existence of four variably sized clusters (of 1, 2, 3 and 77 cases), one overwhelmingly dominant, accounting for 93% of the sample. The cluster groupings are differentiated largely by colour, mottles, texture, stoniness, soil-water, porosity and root depth, as follows:

Cluster 1: Orange/bright yellowish brown, few to fine faint mottles, slightly stony (very small through medium subrounded chert), silty clay; slightly moist, low porosity, with few shallow (41 cm) woody and fibrous roots.

Cluster 2: Brown, few to medium to distinct mottles, moderately stony (small and medium rounded volcanic), sandy clay; slightly moist, moderately porous with few deep (57 cm) fibrous and fleshy roots.

Cluster 3: Greenish/bluish grey, few fine distinct mottles, almost stoneless, silty clay; wet, low porosity with deep (64 cm) fibrous roots common.

Cluster 4: Light grey, very many to coarse prominent mottles, very slightly stony (very small through medium subrounded and subangular volcanic), sandy clay; very moist, low porosity with few shallow (39 cm) woody and fibrous roots.

The cluster analysis separates some (though not all) of the anaerobic gleyed horizons from the

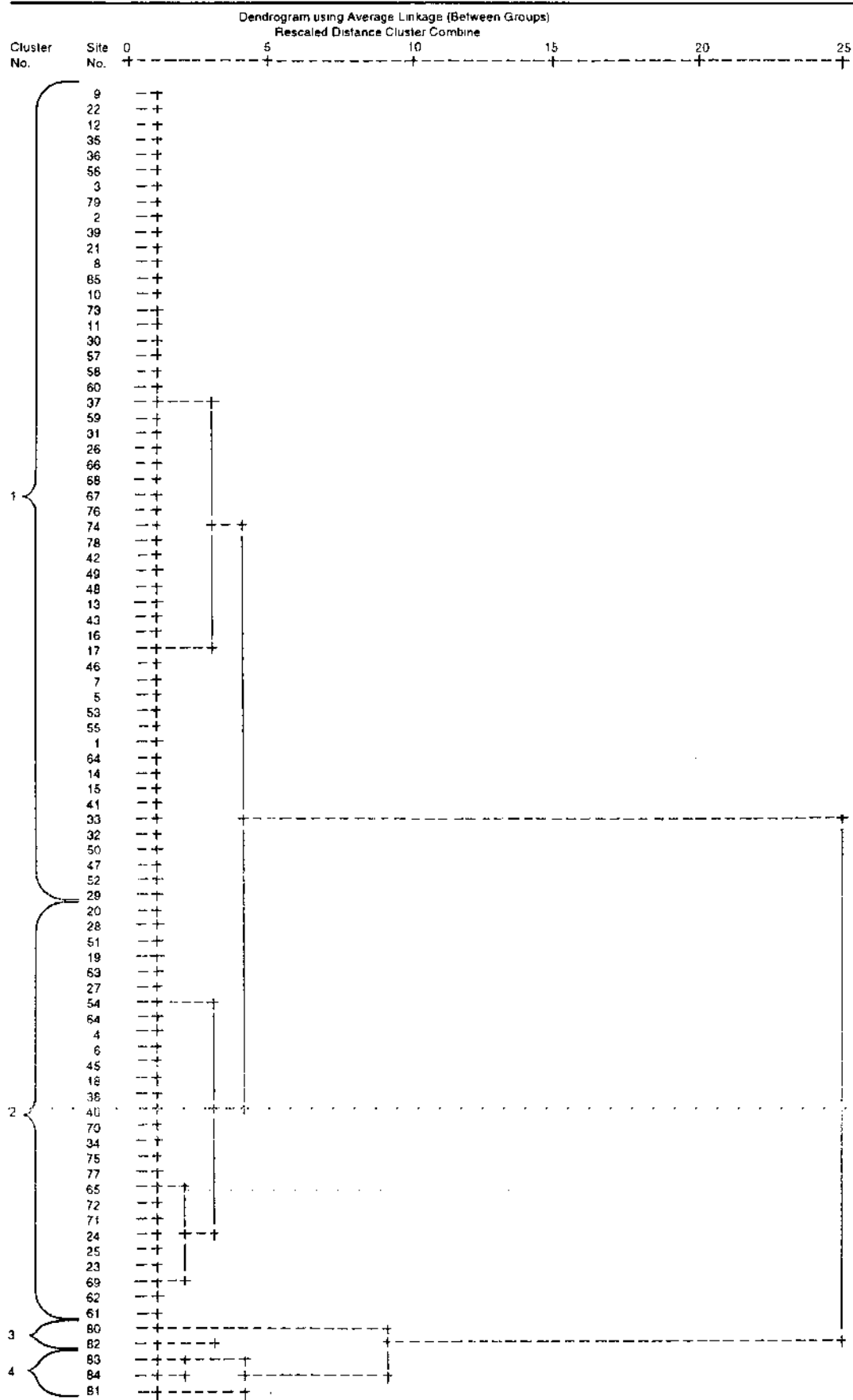
aerobic ones, which parallels a local named discrimination, between gleyed horizons called *pa tongom* and aerobic ones called *suw hundbiy*. It is difficult to see any other similarities between cluster groups and local distinctions. According to this agglomerative analysis there is little variation in horizon 4 at most locations. When we consider the extensive range of properties by which we are differentiating between horizons, these horizons are more similar than dissimilar. The homogeneity of the horizon is demonstrated further when an attempt is made to divide it into more clusters.³ At the five cluster level, differentiation between horizons depends almost exclusively on stoniness alone, the larger of the two new clusters generated being very slightly stony (1-5%) with small subrounded stones, and the smaller of them being very stony (36-70%) with large angular and subangular stones. This division parallels another distinction made by the local people, who regularly suffix a horizon designation with the word *araytol* or stony when the soil has a considerable stone content. The reverse of further division into smaller clusters is required however, if we are to come up with a manageable classification scheme, particularly given the fine distinctions made between some of the above horizon clusters and the small numbers of sites represented by them.

PROFILE CLASSIFICATION

When the horizon clusters are amalgamated together into profile sequences, a total of twenty-eight combinations results. These vary considerably in occurrence, fifty percent are represented by only one site. This classification is too cumbersome. It has too many classes defined by too many fine distinctions. It needs to be rationalised to a manageable scheme.

The following steps are taken to rationalise it: 1). Ignore horizon 1 because under cultivation it is a transitory horizon, it is lost entirely when a site is

Table 11. Cluster dendrogram for site parameters.



cultivated; furthermore, when present, this horizon evidences very little variation. 2). Ignore horizon 3 because it is a transition horizon that is often not present all all, and is infrequently identified by the local people. 3). Divide horizon 2 into two clusters; the cluster analysis justifies this with two major groups (comprising (i). cluster 2 and (ii). clusters 1, 3, 4). 4). Divide horizon 4 into two clusters; again the cluster analysis justifies this with two major groups (comprising (i). clusters 1, 2, 4 and (ii). cluster 3).

Only five of the eight possible rationalised horizon combinations occur together as surveyed PROFILE CLASSES (Table 10), as follows:

PROFILE (a): Coherent, more clayey topsoil with aggregated less porous structure; over a slightly stony and moist, faintly mottled, firm aerobic orange clay subsoil. The most abundant profile in the region.

PROFILE (b): Looser, more silty topsoil with crumbly porous structure; over a slightly stony and moist, faintly mottled, firm, aerobic orange clay subsoil. The second most abundant profile in the region.

PROFILE (c): Coherent, more clayey topsoil with aggregated less porous structure; over a wet and distinctly mottled, very sticky anaerobic greenish-grey subsoil. A waterlogged and gleyed profile. An uncommon profile in the region.

PROFILE (d): Coherent, more clayey topsoil with aggregated less porous structure, extending to considerable depths (>50 cm). A recent alluvial profile. An uncommon profile in the region.

PROFILE (e): Thin organic horizon 1; over a slightly stony and moist, faintly mottled, firm aerobic orange clay subsoil. An uncommon profile in the region.

SITE VARIATION

The generation of an overall classification of soil resources as perceived by the local people requires the combination of the above profile classes with site parameters. This demands firstly the establishment of some patterned variation between the sites surveyed. Again, a series of preliminary cross-tabulations of those parameters that might reason-

ably be expected to show some degree of relatedness in their variation evidenced surprisingly little patterning, other than the obvious. A subsequent principal components analysis of SITE VARIATION, gave the following results:

SITES: The first three principal components account for 53% of site variation (thirteen factors were required to account for 100%). The first principal component represents the related factors of drainage and local relief, together with altitude. The second principal component represents the related factors of vegetation and litter form and depth. And the third principal component represents rock outcrops, and to a lesser extent surface evenness. In summary, we can characterise the variation that occurs between sites as due principally to differences in their relief and drainage, altitude and vegetational factors, plus outcropping rock to a lesser extent.

SITE CLASSIFICATION

The next step involves the creation of site classes. Again, a cluster analysis was used. The dendrogram (Table 11) indicates the presence of two major site groupings, both of which can be divided at a considerably lesser distance into two further groups, to give four clusters. The variation between the two major groupings (clusters 1 and 2, and 3 and 4) centres on differences in altitude and parent material, whereas variation between the two clusters comprising each of these major groupings centres largely on differences in aspect and slope, and to a lesser extent drainage, relief and vegetation.

The number of sites in each cluster varies considerably. The skewedness of the distribution of sites between the clusters reflects the overriding importance of higher altitude locations to the Wola. The greater part of their territory is in the highlands, the vast majority live and cultivate here. These site clusters are not as useful as they might be, the agglomerative program concentrating on the few strikingly different sites from lower altitudes at the expense of the more numerous high altitude sites. Doubling the number of clusters to eight to overcome this problem gives too many classes to produce a manageable classification when combined with the soil profile classes. It was decided to combine all the low altitude sites (<1500 m) into a single group of varied sites to overcome this problem. This reduces the site classes down to five, and possible soil resource classes to twenty-five. The

Table 12. The mean/predominating parameters of site clusters.

	Previous cluster 1		Previous cluster 2		Previous cluster 3 & 4
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Altitude	2015 m (8)	1815 m (12)	1983 m (10)	1770 m (21)	1230 m (102)
Aspect	73° (9)	68° (7)	311° (12)	300° (16)	260° (57)
Slope	23° (2)	24° (2)	18° (3)	12° (4)	8° (8)
Slope form	straight (1 (83%))	straight 1 (70%)	straight 1 (56%)	straight 1 (73%)	straight 1 (100%)
Surface evenness	fairly even 1 (40%)	fairly even 1 (67%)	fairly even or hummocky 1, 3 (69%)	fairly even with obstacles 2 (46%)	fairly even 1 (80%)
Local relief	interfluvial: ridge top or basin side 1, 2 (57%)	valleyside: middle to footslope 6, 8 (67%)	interfluvial: ridge top or basin side 1, 2 (63%)	valleyside: footslope or bench 8, 9 (63%)	valley floor floodplain or valleyside bench 9, 11 (80%)
Drainage	normal 2 (0.2)	normal 2 (0.20)	shedding 1 (0.30)	receiving, run-off 3 (0.3)	receiving, run-off 3 (0.5)
Erosion	none 0 (35%)	none 0 (50%)	none 0 (44%)	none 0 (73%)	none 0 (60%)
Rock outcrops	none 0 (0)	none 0 (0.2)	none 0 (0.3)	none 0 (0)	none 0 (0)
Parent material	limestone 1 (96%)	limestone 1 (87%)	limestone 1 (94%)	limestone 1 (91%)	limestone 2 (60%)
Vegetation	secondary regrowth 2, 3, 4 (52%)	grasses or crops (sweet potato) 4, 7 (63%)	secondary regrowth 2, 3, 4 (63%)	secondary regrowth 2, 3, 4 (46%)	secondary regrowth or crops 2, 4, 7, 9 (80%)
Litter form	bare soil/tree leaves 1, 9, 10, 11 (52%)	bare soil 1 (33%)	bare soil/tree leaves 1, 9, 10, 11 (50%)	bare soil/tree leaves 1, 9 (64%)	tree leaves 9, 10, 11 (60%)
Litter depth	~ 1 cm (0.2)	~ 1 cm (0.2)	~ 1 cm (0.3)	~ 1 cm (0.6)	~ 1 cm (0.5)

Table 13. Site classification by rationalised site clusters

	Site cluster(s)	No. of sites	Descriptive gloss
(i).	1	23	high altitude, ENE facing, up-slope locations
(ii).	2	30	mid-altitude, ENE facing, down-slope locations
(iii).	3	16	higher altitude, NW facing, up-slope locations
(iv).	4	11	mid-altitude, NW facing, up-slope locations
(v).	5,6,7,8	5	low altitude, variable down-slope locations

resulting SITE CLASSIFICATION (Table 12) is as follows:

SITE (i). (Cluster 1): Higher altitude (2000 m), east-north-east facing, steeply sloping, normally drained interfluvial site on limestone, possibly supporting secondary regrowth.

SITE (ii). (Cluster 2): Mid-altitude (1800 m), east-north-east facing, steeply sloping, normally drained lower valley side site on limestone, probably supporting grass or crops.

SITE (iii). (Cluster 3): Higher altitude (2000 m), north-west facing, steeply sloping, shedding interfluvial site on limestone, possibly supporting secondary regrowth.

SITE (iv). (Cluster 4): Mid-altitude (1750 m), west-north-west facing, variably moderately steeply sloping, receiving (with some run-off) lower valley side site on limestone, possibly supporting secondary regrowth.

SITE (v). (Cluster 5): Low altitude (1250 m), variably north through west to south facing, level to steeply sloping, receiving (with some run-off), plane valley floor or bench site on

volcanics or alluvium supporting secondary regrowth or crops.

In summary, this classification divides sites by an interrelated series of parameters: altitude, local relief, drainage and slope. Higher altitude sites occupy up-slope locations on interfluvies and upper valley sides, from which, steeper sloping, drainage is good due to rapid run-off. Mid to low altitude sites tend to occupy the lower down-slope locations on valley sides and floors which are more gently sloping and from which drainage is more likely to be poor (Table 13).

SOIL RESOURCE CLASSIFICATION

The final step in this investigation of the surveyed soil data requires the combination of the soil profile and sites classifications to generate an overall soil resource classification, which we can compare with local people's perceptions of, and agricultural use of, their land. Fourteen of the possible soil profile and site class combinations are represented (Table 14). Some of these SOIL RESOURCE CLASSES were represented in the surveyed sites considerably more often than others, occurring from twenty-one times down to once only.

Table 14. The distribution of sites surveyed between soil resource classes

Soil profile classes	Site classes				
	(i)	(ii)	(iii)	(iv)	(v)
(a)	16	21	11	8	2
(b)	7	8	3	1	1
(c)		1		2	
(d)					2
(e)			2		

Table 15. The distribution of local assessment and land use classes between the soil profile and site components of the soil resource classes distinguished in this study.

	Soil resource classes									
	Soil profiles					Sites				
	a	b	c	d	e	i	ii	iii	iv	v
Local assessment class:										
1. very good	10	2		2		2	5		2	5
2. good	15	3				7	5	3	3	
3. middling	6	2				1	6	1		
4. poor	12	6				4	8	5	1	
5. very poor	14	6			2	9	5	7	1	
6. waterlogged	1	1	3				1		4	
Land use class										
1. never cultivated	12	2	2		1	5	2	5	4	1
2. long abandoned garden	20	4				8	9	3	3	1
3. recently abandoned garden	10	6		1		5	6	4	1	1
4. sweet potato garden (inc. fallow)	14	8				5	13	2	1	1
5. taro garden	1		1	1					2	1
6. mixed garden	1				1			2		

SOIL RESOURCES AND LOCAL SOIL ASSESSMENTS

We are now in a position to assess the status of Wola assertions regarding their non-inspection of soil before cultivating it, by comparing the computer generated soil resource classes with local assessments of the cultivation value of the soils surveyed and the use to which they actually put the land. A cross-tabulation of local assessments of soils against the soil resources classes revealed no apparent relationship. It appears that none of the soil resources classes painstakingly distinguished correlates with any local assessment class, the very best and worst soils are likely to occur in almost all the soil resource classes. We cannot say that any of the classes in which the majority of soils surveyed fall represent better or indifferent arable soils. The exceptions have too few sites to allow us to draw reliable conclusions. But there are some trends noticeable upon inspection which merit comment (Table 15 - soil profile and site classes are separated to make comparison easier).

The soil profile class (a) 'coherent topsoil over orange clay' soil profile predominates over the

entire spectrum of classes, except for (6). waterlogged soils. But the ratio to profile class (b) 'loose topsoil over orange clay' changes as assessment falls, from 4:1 for assessment classes 1 and 2 to 2:1 for classes 4 and 5. In other words, any soil resource class featuring loose topsoil is more likely to be judged an agriculturally poor soil.

The predominant sites in all local assessment classes, except for (6). waterlogged soils, are (i) 'high altitude ENE facing up-slope sites' and (ii) 'mid-altitude ENE facing down-slope sites'. The feature they have in common is aspect, and this complies with Wola assertions that the best arable land faces the sun to the north-east. The predominance of sites with this aspect reflects the non-random selection of the survey sample, which strived to accommodate all local land usages; hence it includes a large number of cultivated or once cultivated sites, which have this favoured aspect. But aspect alone is not sufficient to give a soil agricultural promise, and sites facing in a north-easterly direction cover the entire range of assessment from good to poor. The distribution of the next site class (iii) 'high altitude NW facing up-slope sites' between good and poor assessment classes

further illustrates the importance of aspect, for these sites are twice as likely to occur in the poor classes 4 and 5 as they are in the good classes 1 and 2.

The low altitude sites (v) occur without exception in the first-class local assessment category. Although they are too small a sample to draw firm conclusions from, they reflect Wola assertions that sites occurring at lower altitudes are better, that crops grow more quickly there. They say that they avoid them because they fear sickness (notably malaria) and also because they are adjacent to the region of the Foi people whom they fear as sorcerers. Higher temperatures contribute to the perceived increase in agricultural productivity, but people attribute it in part to the occurrence of larger areas of favourable land too. A considerable part of this lower region has recent alluvial soils, and soils surveyed in this profile class (d) fall into the best local assessment class 1.

The soil profile class (e) 'thin organic layer over mineral horizon' predictably falls into the worst assessment class 5. And profile class (c) 'gleyed soils' predominates in local assessment class 6 of waterlogged soils suitable for taro cultivation. All the soils occurring in this assessment class fall as expected in the down-slope locations of site classes (ii) and (iv) where drainage is more likely to be poor. It is the uncommonly occurring alluvial, gleyed and skeletal soils that display a certain predictability regarding their local assessment; the majority of sites surveyed show scant pattern. Furthermore, it seems dubious to build an argument on the basis of local assessments of soil potential, when the people themselves both deny that they inspect the soil before they decide whether or not to cultivate it, and it is suggested that they are possibly unaware of any pedological judgements they make. We can overcome this objection to some extent by comparing the soil resource classes against land use.

SOIL RESOURCES AND LAND USE

The use people make of land is equivalent to their assessment of its worth in practice, rather than hypothetically (although this approach has shortcomings too, for we cannot simply equate cultivation of land with good soil, because the condition of the soil may have deteriorated under cultivation from what it was before clearance; nor can we equate recently abandoned plots with poor soil, because factors other than soil-related ones can

prompt abandonment). The fourteen land use classes distinguished in the survey (Table 1) are too many for ready comparison and they are reduced to six for analysis (Table 15). Again, the initial impression of a cross-tabulation is that no land use predominates in any of the soil resource classes, which suggests that none of them are indicative of good or poor arable soils. But there are once more some trends worthy of comment.

The soil profile class (a) 'coherent topsoil over orange clay' again predominates over the entire spectrum of land uses. There is no indication that a larger proportion of the soils in this class are likely to be under cultivation rather than under secondary regrowth or primary forest, they are fairly evenly spread. The profile class (b) 'loose topsoil over orange clay' is not so evenly distributed, the figures suggesting that it is likely to be cultivated, with a ratio of 2:3 sites cultivated: uncultivated, compared to 1:3 sites cultivated: uncultivated for soil profile class (a). This contradicts the trend of the local soil assessment comparison where any class featuring the loose topsoil is more likely to be assessed as agriculturally poor. This may be explained, at least in part, by the larger proportion of (b) profile class soils coming from recently abandoned gardens (at a ratio of 1:2 recently abandoned sites to other land use classes, compared to 1:4 for profile (a) class soils). This suggests that a larger proportion of them might be judged as agriculturally tired soils on which cultivation has been stopped for an interval to allow them to recover. It is also likely that some of the soils under cultivation were showing signs of declining productivity, and with a large proportion of soil profile class (b) soils under cultivation there is an increased chance of them showing signs of becoming productively poor soils.

There is a wider spread of different land uses across the various site classes than across the soil profile classes (Table 15). There is perhaps a weak trend for down-slope sites to be preferred over up-slope sites for cultivation. The aspect preference is again evident, with a greater proportion of north-east facing sites under cultivation and north-west facing ones under natural vegetation. The land under primary forest and never cultivated covers the whole range of soil-site classes, indicating that none of the soil resource classes identified is either the product of cultivation nor is so preferred above others and widely used as to occur less commonly under virgin forest. It also suggests adequate availability of sites adjudged suitable for cultivation by the Wola. The low altitude soils also show an

even spread over the land use range. The position with wet soils and sites under taro is not so clear-cut as might be anticipated, the multivariate analysis not assigning all wet soils to the gley class, some evidencing more properties akin to another class.

CONCLUSION

This comparison of local assessment and land use against a computer-generated soil resource classification evidences surprisingly little correlation where some might have been anticipated. We cannot tell the local Wola people, using the soil resource classification painstakingly built up by analysing data on their soils, what they might unwittingly look for in selecting a site for cultivation. The analysis has strived to identify a series of soil and site types, to uncover some hidden pattern underlying them that might relate to soil potential and cultivation use, and it has largely failed for the vast majority of soils to reveal anything other than a few trends, some of which are fairly weak and tenuous.

In some regards this may be deemed a negative result, the study be thought to have somehow failed. But only to those who assume the superiority of Western environmental scientific method, that it should come up with a more insightful and informed interpretation of soil resources than the people who for generations have successfully derived their livelihood by exploiting them. The analysis vindicates the opposite viewpoint, that the knowledge of local people is just as well informed. Regardless of efforts to generate a scientifically grounded appraisal of soil resources, this series of papers has failed to go beyond what the local people say about them. They see no point in inspecting soil closely before cultivating it, not because they are unaware of possible variations in fertility status, but because there are no observable properties, taken singly or in combination, by which they might classify and readily assess the agricultural potential of the majority of their region's soils.

Finally, and perhaps most importantly, this series of papers, demonstrating that a scientific survey and computer analysis cannot better local lore, lends support to those who advocate local participation in programmes of sustainable agriculture development (Eyben & Ladbury 1992). It shows that the proposition that experts should respect local knowledge and consult it closely, before they try to improve on it, has substance (Thomasson 1981; Chambers *et al.* 1989; Skoog *et al.* 1990) no matter how impossible that knowledge may first appear.

FOOTNOTES

¹ The Wola are familiar with such ranking procedures, having a series of linguistic markers to indicate gradations (e.g. *ebay ora* very good, *ebay* good, *ebay sha* middling, *kor poor*, *kor ora* very poor and *suw pa* waterlogged).

² In Tables 3, 5, 7, 9 and 12 each entry comprises two rows. The top row gives the cluster average for each soil property, and the lower row the mean class score and standard error, or where more appropriate, the class percentage. Figures outside brackets in the lower row are property mean class scores, or the predominant survey class number for non-averageable variables. These numbers refer to the list order of parameters in the *Soil Survey Field Handbook* (except for none/non-relevant which score zero). The figures inside brackets are either standard errors of the means, calculated as $\sigma/\sqrt{N}$ (the larger the standard error value the wider the mean distribution and the less representative the mean of any property for the entire cluster), or they show the percentage of the cluster falling in the predominant class listed. (percentages are used where properties vary non-linearly and discontinuously, and could not be sensibly averaged into means with associated standard errors). Properties which did not vary to any extent within a sample (e.g. cementation) or were entirely absent (e.g. mottles from horizon 1) were omitted from the analysis as having no effect on variance.

³ At the five cluster level, the large cluster 1 divides into two groups comprising 10 and 67 sites. The larger of these clusters remains surprisingly resistant to further splitting, the next three divisions splitting off just one or two sites. The mean values and standard deviations of properties for the two groups generated with the splitting in two of cluster 1 further support the conclusion that the members of this large horizon 4 cluster are very similar on the whole, for they are almost identical for all properties except stones. On the basis of this analysis it was decided not to press the division of horizon 4 beyond four clusters, an urge prompted more by an aesthetic need to achieve a better numerical balance between clusters than by pedological considerations. It is common in soil surveys to find that one class of soil predominates in a region over others; the skewedness of this sample reflects nature's irregular distribution.

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THE TOTAL MERCURY CONCENTRATIONS IN FISH FROM CERTAIN SOUTHERN COASTAL WATERS AND NORTH SOLOMONS PROVINCE OF PAPUA NEW GUINEA.

Ian Ini Onaga¹

ABSTRACT

Total mercury concentrations using potassium permanganate digestion in barramundi fish (*Lates calcarifer*) from Western Province were found to be higher than those from Gulf province. Some individual barramundi from Western province had total mercury levels in the excess of the WHO recommended limit of 0.50 micrograms per gram (ug/g) based on wet weight (WW). Jewfish or croakers (*Sciaenidae*) and threadfins salmon (*Polynemidae*) from Gulf province had mercury concentrations within the acceptable limit. Mercury levels in one area was quite high. The mackerel (*Scombridae*) fish from Mullins Harbour, Milne Bay Province had their mercury levels ranged from 1.81 - 3.59 ug/g WW and the mean concentration was 2.60 ug/g WW. Some of the barramundi caught in the Mullins Harbour had also been found to have mercury concentrations above 0.50 ug/g WW.

Key words: Barramundi fish (*Lates calcarifer*), jewfish or croakers (*Sciaenidae*), threadfins salmon (*Polynemidae*), mackerels (*Scombridae*), mercury concentrations, flameless atomic absorption spectrophotometer, cold vapour generation unit.

INTRODUCTION

The importance of mercury in the food system has become better understood in recent years. Inorganic and organic mercury derivatives from anthropogenic sources or as effluent from industrial wastes end up in the sediment of lakes and rivers. These derivatives are converted by chemical reactions or by the action of microbes into the organic compounds such as methylmercury, which are very poisonous to animal life (Goldwater 1971; Kyle and Ghani 1981; Hord *et al.* 1990).

Methylmercury, unlike the inorganic form is soluble and is transported downstream to the sea and can be taken in by the organisms such as fish, in which it may accumulate to high levels. Mercury poisoning of fish predators can occur by metallic mercury and its inorganic salts and organic mercurial compounds (Clarke and Clarke 1975; Hord *et al.* 1990).

Mercury poisoning derived from environmental and industrial sources reached major prominence in relation to human health at Minamata Bay, Japan in the early 1950's and has been referred to since then as Minamata disease (Goldwater 1971; Kyle and

Ghani 1981; Kyle 1984). It is now recognised that the use of mercury compounds in Agriculture and Industry can cause dramatic increases in mercury levels in living organisms both on land and in water (Clarke and Clarke 1975; Kyle and Ghani 1981; Hord *et al.* 1990). The most common source of mercury poisoning in man is fish.

There have been several incidents of mercury poisoning reported other than in Japan. These include incidents in the Middle East, Asia, Europe, Central and North America have led to the setting up of international controls on safe levels of mercury in fish for human consumption. (Goldwater 1971; Bakir *et al.* 1973; Hord *et al.* 1990). Fish can acquire mercury from two possible pathways, via the food chain or by direct extraction from the water across gill tissue (Clarke and Clarke 1975; Kyle and Ghani 1981). Most of the mercury form, which accumulates in fish is present in the more toxic methylmercury, because it has an ability to diffuse across cell membranes and has high fat solubility (Kyle and Ghani 1981).

The symptoms of mercury poisoning in human have been described by Petr 1978/79; Holdsworth 1975; Kyle and Ghani 1981.

Fish form a major part of the diet of a large number of coastal people in Papua New Guinea, and are an

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important export. (Kyle and Ghani 1981). The Papua New Guinea Government earns revenue of some millions of kina per annum from export of marine products. Export protocols require testing of fish samples for mercury. This is necessary to ensure that the minimum mercury level required by the destination country is not exceeded. This paper presents data derived from such analytical tests for mercury conducted at the National Veterinary Laboratory on marine products destined for export market and local consumption over a period of four years (1986-1989).

MATERIALS AND METHODS

The fish analysed were caught by commercial fishing companies during the period of 1986-1989. Most came from the mouth of the Fly river and Daru waters of Western Province, Baimuru area of Gulf Province, Yule Island waters of Central Province and Mullins Harbour of Milne Bay Province. In addition a few fish were caught in waters of the Kieta area of North Solomons Province (Fig 1, Table 1).

The fish were delivered to the laboratory as whole or filleted frozen specimens from time to time by inspectors of the Department of Fisheries and Marine Resources. A few fish specimens were received from Provincial Health Inspectors (Fig 1).

The total number of fish samples received for mercury analysis were 228, ranging in numbers from 3 from North Solomons Province to 130 from Gulf Province. The species of fish included barramundi (*Lates calcarifer*), jewfish or croakers (Sciaenidae), threadfins salmon (Polynemidae), mackerel (Scombridae) (Kan *et al.* 1989; Matsuoka *et al.* 1991) and a small number of unidentified edible fish (Table 1). Also analysed was a single mud crab (*Scylla serrata*) from Baimuru area in Gulf Province.

The Equipment

A Varian model AA-475 Atomic Absorption Spectrophotometer (AAS) was used at the wavelength of 253.7 nanometer (nm). The settings of AA-475 were double beam and peakheight with absorption mode used for reading the absorbance. The slit width (spectral Band width) and a single mercury lamp current were set at 0.5 nm and 4.0 nm respectively. A Varian model 65 Vapour Generation Unit was placed on a convenient position close

to the AAS and the inert gas (nitrogen) connected to it at a pressure of 1.4 KG/CM². The flow-through mercury cell assembly was inserted into the burner mount and aligned with optical path in the AAS (Okuno *et al.* 1972; Brodie 1979). A Varian model 9176 Recorder was also used to record the peakheight readings.

Sample Digestion

The digestion method was described by (Meir 1976). Duplicate samples 2.0-5.0 grams (g) of fish muscle was weighed into clean 125 millilitre (mL) graduated Erlenmeyer flasks. About 20 mL of AR grade nitric acid was added and digested at room temperature with occasional swirling to break the lumps of sample and left over night. On the following day 40 mL of 5 percent (w/v) potassium permanganate solution was added with occasional swirling to reduce frothing. An additional 2.0 g of solid potassium permanganate was added to samples which were high in fat. The mixture was left overnight again for digestion to continue. An extra 20 mL of permanganate solution was added on the following day and the mixture placed in a 60°C waterbath for 30 minutes, which destroyed any remaining froth. The flasks were removed from the waterbath and placed in a tray with cold water to cool rapidly to room temperature and 6-10 mL of hydroxylamine solution was added to remove excess permanganate and manganese oxide. The solution was made up to 100 mL with the distilled water and analysed for mercury using an atomic absorption spectrophotometer equipped with a hydride vapour generation unit.

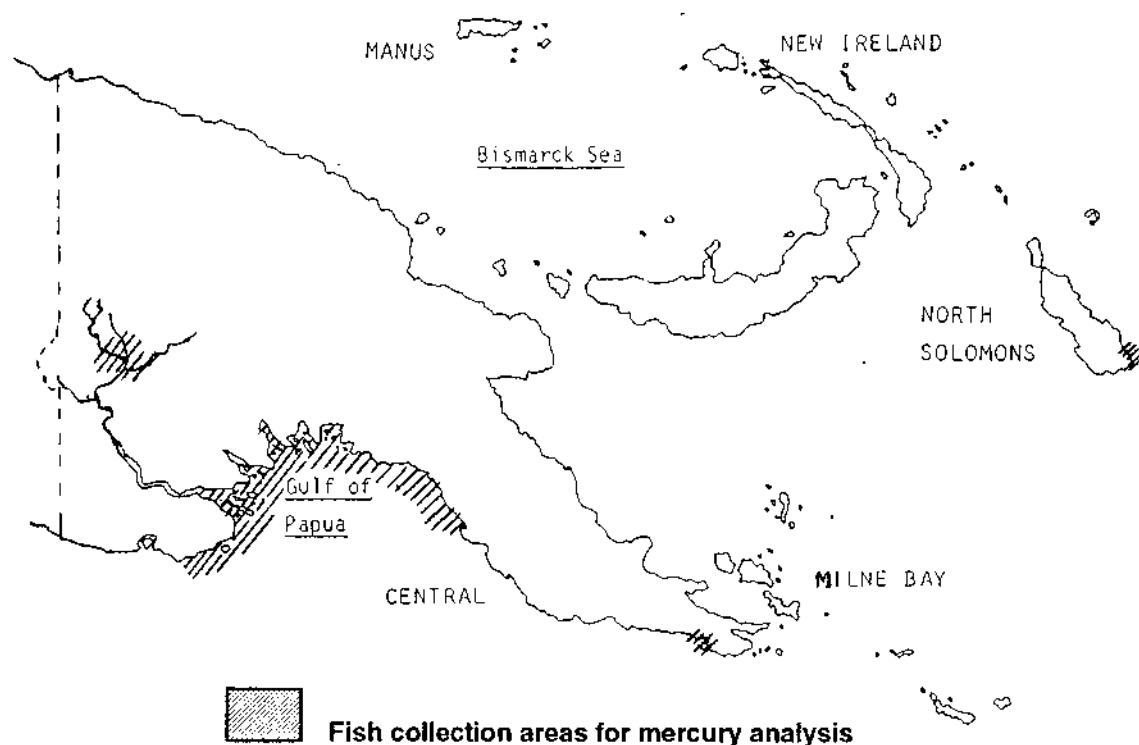
Spiked samples with known concentrations were prepared with each batch of tests to calculate full percentage recovery. The same procedure was followed with standard reference materials, namely dried ground dogfish* and agalfish* muscles. (Kacprzak and Chvojka 1976; Brodie 1979; Evans *et al.* 1986).

All glassware used had been previously soaked overnight in a hot solution containing one percent potassium permanganate and 5 percent (v/v) sulphuric acid. On the following day the solution was discarded and hydroxylamine solution added to remove the excess permanganate. Finally the

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Figure 1. Map of Papua New Guinea



glassware was thoroughly rinsed with distilled water and dried in an oven.

Standard Preparation and Sample analysis

A stock mercury solution of 1000 ug/ml mercuric nitrate, Spectrosol, British Drug House (BDH) was used for mercury standard. An intermediate mercury standard of 0.10 ug/ml was made up with 5 percent (v/v) nitric acid, AR grade. The working standard mercury solutions of 1, 2, 4, 8, 12 and 16 ng/ml were prepared with 5 percent (v/v) nitric acid.

The AAS was calibrated to zero absorbance before reading the standard and sample solutions. Twenty millilitre (mL) of the blank, standard or sample solution was added the reaction vessel of the cold vapour generation unit. One millilitre of stannous chloride solution (w/v) was injected through the septum and the magnetic stirrer switched on for 90 seconds. The inert gas was purged through the reaction vessel to transport the mercury vapour into the flow-through cell. After an integration period of 10 seconds, the absorbance and peak height were read simultaneously. The reaction vessel was

thoroughly cleaned with distilled water before the next sample was analysed using the same procedure.

RESULTS

The mercury concentrations of the two reference standard materials analysed were $0.843 \text{ ug/g} \pm 0.079 \text{ ug/g WW}$ for dogfish and $0.49 \text{ ug/g} \pm 0.6 \text{ ug/g WW}$ for agalfish. The values are in close agreement with the manufacturers values of $0.798 \text{ ug/g} \pm 0.074 \text{ ug/g WW}$ for dogfish and $0.48 \text{ ug/g} \pm 0.06 \text{ ug/g WW}$ for agalfish, with recoveries of 105 percent and 102 percent respectively.

The mean recovery of mercury concentrations from spiked samples was 110 percent ranging from 90-117 percent which confirms that no mercury was lost during the process of digestion and analysis.

The results of the analysis over the testing period are summarised in Table 1. Results quoted are mean values for duplicate analyses. No comparative and statistical analyses of the data have been attempted due to the bias sample sizes from differ-

ent provinces. Fish from Milne Bay have the average mercury concentrations of 2.60 ug/g WW. The mercury concentration analysed for a single mud crab (*Scylla serrata*) was 0.01 ug/g WW.

DISCUSSION

Fish are an important export commodity and revenue earner for the country and also form an essential part of the basic diet for coastal living Papua New Guineans. Because of the danger from on-going mining industry, for example in Western Province and for public health reasons in general, chemical analysis was important to determine the levels in heavy metals such as mercury and its edibility of the fish. Testing of such foods as fish is necessary due to an increasing awareness by society to the dangers to human health of heavy metals, such as mercury in the diet and the potential for fish to have dangerously high levels, particularly where caught in waters associated with mining ventures (Anon. 1989).

There is no universally accepted safe level of mercury in fish for human consumption; each country has its own standard (Petr 1978/79; Kyle 1984). However, the recommended limit set by the World Health Organisation (WHO), and adopted by such countries as Australia, is 0.50 ug/g WW (Kyle and Ghani 1982). Because various countries have their own regulations concerning the safe limits of mercury, the fish which were being exported had continually been tested for mercury to meet the required levels for the country of destination. In the present study the WHO levels were exceeded only in the Milne Bay area are in mackerel, with 6/6 samples exceeding 0.50 ug/g level. Barramundi from the same area had mean levels 0.48 ug/g WW, with 3/4 exceeding the 0.50 ug/g level.

Several studies into the mercury levels of fish have been conducted in various localities of Papua New Guinea. In a survey sponsored by the then Department of Primary Industry in 1972-74, Kyle and Ghani (1982) found the total mercury concentrations ranged from 0.32-0.57 ug/g WW in 31 barramundi from Lake Murray, Kaweto and Fly estuary of Western Province was in the excess of the World Health Organisation (WHO) recommended limit of 0.5 ug/g WW (Kyle and Ghani 1982).

Lamb (1977) found mercury levels of 0.026-0.18 ug/g WW in nine species of fish sampled from OK Tedi and Upper Fly River area, with one barramundi

from Lake Murray having 0.494 ug/g WW (Lamb 1977). Reynolds and Price (1974) reported total mercury levels in some 214 samples of barramundi from Lake Murray, lower reaches of the Fly River and coastal waters around Daru contained high mercury levels, whereas low mercury concentrations were seen in fish from Baimuru and Kikori waters, Gulf Province. Kyle and Ghani (1984/85) also found that the total mercury concentrations vary with location from Gulf of Papua.

The present data collected between 1986 and 1989 show that the mean total mercury levels of fish (barramundi) from Western province were below the WHO recommended limit but the limit was exceeded in individual fish (Table 1).

None of the four species of fish (barramundi, jewfish or croakers, threadfins salmon and mackerel) from Gulf Province exceeded the WHO recommended level; the maximum level in an individual fish (barramundi) was 0.29 ug/g WW. Mercury levels of barramundi and of unidentified fish tested from Central and Bougainville Provinces likewise were below 0.50 ug/g WW and, as in Gulf Province, the fish with the highest levels were barramundi.

The highest levels of mercury recorded in the present data were in fish from Mullins Harbour, Milne Bay Province. A mean of 0.48 ug/g WW was found in barramundi, while mackerel tested from this locality had mercury levels ranged from 1.81-3.59 ug/g WW and mean concentration is 2.60 ug/g WW which is not safe for human consumption. There is no mining activity in the area so it has to be assumed that the fish acquired the mercury from non anthropogenic sources. These findings warrant investigations to determine the source of the mercury in the Mullins Harbour area.

As barramundi (and mackerel) are migratory fish it is possible that mercury was acquired from a locality other than Mullins Harbour. Another factor to consider is that mercury accumulates in the bodies of fish over time; the levels of mercury in a fish can therefore be linked to age. It needs to be ascertained if barramundi for example, are caught at an older age than most other edible fish and whether mackerel of any age have high mercury levels in the Mullins Harbour area (Petr 1978/79; Lamb 1977; Kyle and Ghani 1981).

Although the only mud crab (*Scylla serrata*) tested had low level of mercury there is a need to investigate and determine the mercury levels of such

Table 1. Total mercury concentration in various types of fish from provinces indicated.

PROVINCE	TYPE OF FISH	NO. OF	MERCURY CONCENTRATION	MERCURY CONCENTRATION
		SPECIMEN	MEAN, ug/g WW	RANGE, ug/g WW*
WESTERN	BARRAMUNDI	80	0.25	(0.02 - 1.00)
	(<i>L. calcarifer</i>)	(75)	(0.21)	(0.02 - 0.43)
		(5)	(0.54)	(0.51 - 1.00)
GULF	BARRAMUNDI	56	0.11	0.02 - 0.29
	JEW FISH OR	36	0.08	0.01 - 0.12
	CROAKERS (<i>Sciaenidae</i>)			
	THREADFINS	34	0.04	0.01-0.10
	SALMON (<i>Polynemidae</i>)			
CENTRAL	MACKEREL	4	0.06	0.05 - 0.07
	(<i>Scombridae</i>)			
	BARRAMUNDI	3	0.33	0.27 - 0.41
MILNE BAY	WHOLE FISH	2	0.10	0.02 - 0.17
	(sp. unidentified)			
NORTH SOLOMONS	BARRAMUNDI	4	0.48	0.36 - 0.56
	MACKEREL	6	2.60	1.81 - 3.59
	WHOLE FISH	3	0.05	0.02 - 0.07

* WW - wet weight

marine bottom dwelling crustacea as crabs, prawns and crayfish as they, also, are important export commodities and form an important part of the diet of coastal people of Papua New Guinea.

The average concentrations of mercury analysed in barramundi, jewfish or croakers and threadfin salmon over the testing period between 1986-1989 (Table 1) were close to the limit of 0.50 ug/g WW set by the Australian Government and WHO. The mackerel from Mullins Harbour, Milne Bay have very high mercury levels.

Mercury concentrations of 0.02-0.2 ug/g WW may be regarded as normal for fresh water fish from

waters that are not polluted with mercury (Lamb 1977). The total mercury levels in the Western Province ranged from 0.02-1.00 ug/g WW. Thirty three percent of the samples' mercury concentrations, were < 0.20 ug/g WW. Forty five of 80 barramundi samples from Western Province had mercury concentrations ranging from 0.20-1.00 ug/g WW and 9 samples were between 0.51-1.00 ug/g WW.

This confirms the previous findings by various authors (Reynold and Price 1974; Petr 1978/79; Kyle and Ghani 1984/85) that the mercury levels in fish, especially barramundi from Western Province are excessively high. Though the sample size

between Western and Gulf Provinces differ by 24 samples the indication of the differences in the mean mercury concentrations of 0.25 ug/g WW and 0.11 ug/g WW is highlighted respectively.

On whole barramundi from Lake Murray, was found to have mean mercury concentration of 0.10 ug/g WW, though below the 0.50 ug/g WW limit the barramundi could be in its growth stage, according to the various authors' findings (Petr 1978/79; Lamb 1977; Kyle and Ghani 1981). The 36 jewfish or croakers and the 34 threadfish salmon specimens analysed from the Gulf Province for the total mercury concentrations showed in the range of 0.01-0.12 ug/g WW and 0.01-0.10 ug/g WW respectively. The fish were safe for human consumption because the levels were well below the WHO recommended value of 0.50 ug/g WW.

The results from other provinces cannot be compared due to the bias sample sizes. However the Barramundi samples from Yule island, Central and Mullins Harbour, Milne Bay Provinces show elevation in the mercury concentrations, which require investigation of the mercury sources in this area. The mackerel samples from Mullins Harbour in Milne Bay province showed excessively high mercury levels. A thorough study is required to investigate the cause of considerable high level of mercury in Mullins Harbour, Milne Bay Province. Three samples of whole fish (sp. unidentified) from Take village in the Kieta area of North Solomons Province were submitted for mercury test and the analysis showed that the mercury levels ranged from 0.02-0.07 ug/g WW.

CONCLUSION

The mercury concentrations in some of the barramundi fish (*Lates calcarifer*) in Western Province were higher than barramundi fish from Gulf Province. The fish from Milne Bay Province had levels of mercury, which exceeded the WHO recommended limit of 0.50 ug/g WW. Further investigations are needed to determine the cause of elevated mercury concentration in the fish from this Province. None of the 135 fish sampled from Gulf or Central Provinces exceeded the WHO recommended mercury concentration of 0.50 ug/g WW. In Western Province, 6 percent of barramundi sampled, exceeded this concentration.

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DISTRIBUTION AND ABUNDANCE OF ANTS IN A BRAZILIAN SUBTROPICAL COFFEE PLANTATION

J D Majer¹ and MV B Queiroz²

ABSTRACT

The ground and arboreal ant fauna were surveyed by pitfall trapping, tree beating and by baiting in a 400 m² area of coffee plantation at Viçosa, Minas Gerais, Brazil. A total of 37 ant species were sampled in the plantation, with 29 being present on the ground and 12 on the trees. Only four species were common to both strata. The biscuit/honey/fish baits which were placed on the ground and in trees were largely exploited by ground- and tree- dwelling ants respectively. Maps of the distribution of arboreal ants suggested that the most frequently occurring ants were distributed in a mosaic-like manner. However, the numbers of ant individuals in tree-beat samples suggested that, with the possible exception of *Crematogaster* sp. 59, none of the species reached the numerically dominant status of ants which have been observed elsewhere in the tropics. The possible reasons for the lack of dominant ants in this subtropical plantation are discussed and the overall findings are then related to the potential value of ants in the limitation of pests of coffee.

INTRODUCTION

There are many instances of ants being utilised to limit pests, both in the tropics or neotropics, and in temperate ecosystems (see reviews in Gotwald 1986, Majer 1986 and Way & Khoo 1992). However, for various reasons, most of the ant species within a region do not function as significantly beneficial species.

Finnegan (1971) lists the criteria used for evaluating predacious ant species as potential biological control agents. These are: (1) **Size**. Large size of individual ants is usually considered a desirable quality, particularly when the pest is large or well protected. If the ant has large colonies, the size of individuals is not necessarily important. (2) **Food Requirements and Nest Populations**. Species with large colonies, and hence food requirements, are considered to be the most desirable. (3) **Colonial Nests**. Species with multidomous colonies, or with the ability to produce numerous additional colonies over adjacent areas, are particularly useful. By this attribute, ants are able to occupy considerable areas at high densities. (4) **Queens**. Species with more than one queen or with a queen replacement system are considered to have longer-lived colonies. (5) **Ant-Homoptera Relationships**.

Ants which tend and encourage undesirable Homoptera often bring about results that offset any benefits.

To Finnegan's criteria we add the following: (6) **Species Habitat Range**. Species with broad habitat ranges are potentially more amenable to being promoted in areas where they are not already present. Important characteristics include the ranges of temperature, moisture and insolation that can be tolerated, and also the ability to tolerate seasonal fluctuations in these factors and in food resources. (7) **Dominance Hierarchy**. Species that are unlikely to be outcompeted by other ants in the crop are desirable.

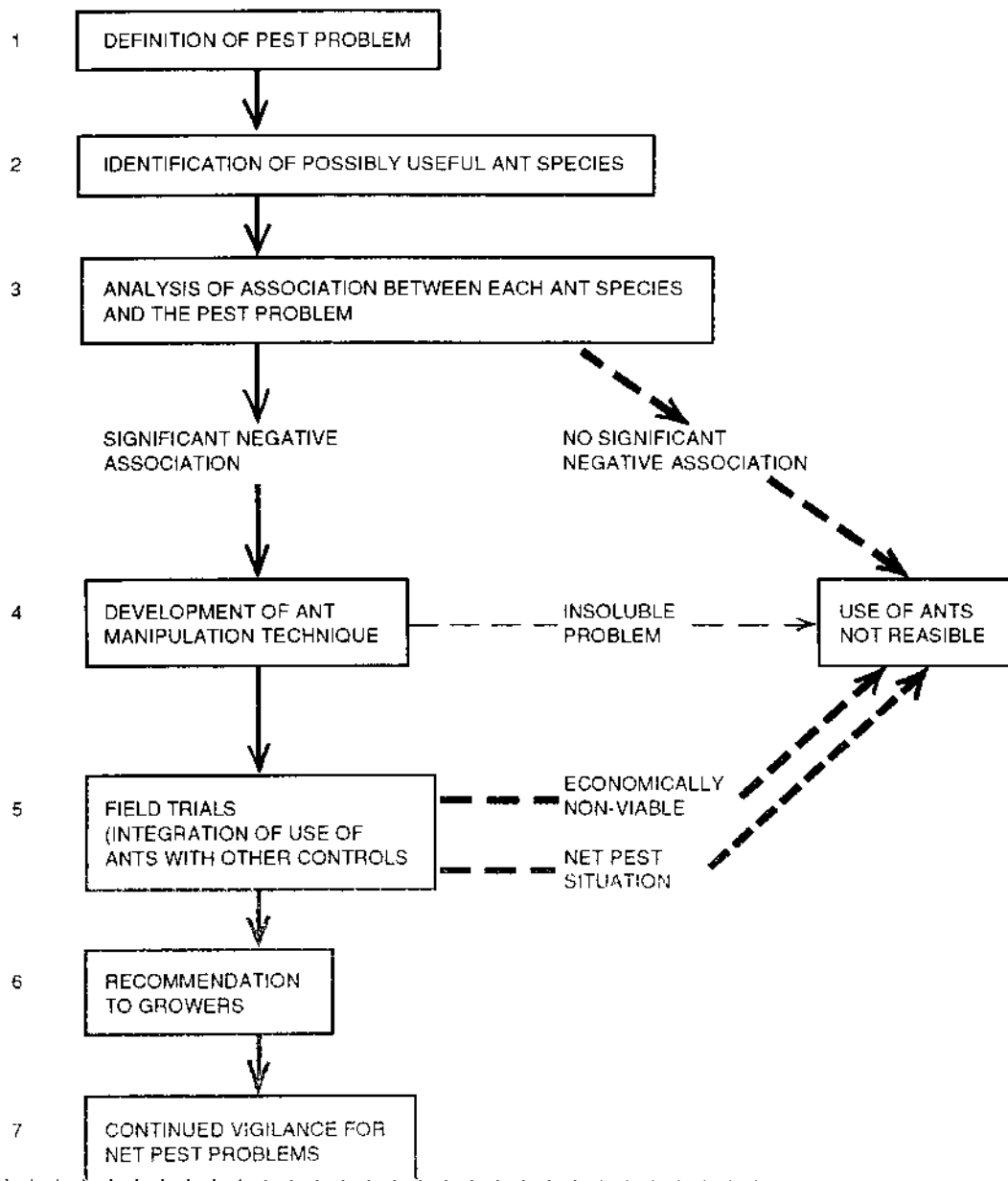
Room (1973) has drawn up a formalised scheme for selecting and developing ants as pest control agents. His scheme is shown in Figure 1. **Stage 1** involves definition of the pest or the pest complex. The biology of the pest is evaluated and their interaction with the crop is elucidated. **Stage 2** involves identification of potentially useful ant species. **Stage 3** is concerned with demonstrating whether or not any ant species has controlling effects on the pest complex. This may be evaluated by a sampling program designed to show how ant and pest species are distributed with respect to each other. Researchers are warned of spurious ant control effects resulting from ant and pest having different habitat preferences rather than from the ant having any direct negative influence on the pest.

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Figure 1. Suggested scheme for the selection and development of an ant as a pest control agent (redrawn from Room, 1973).

STAGE

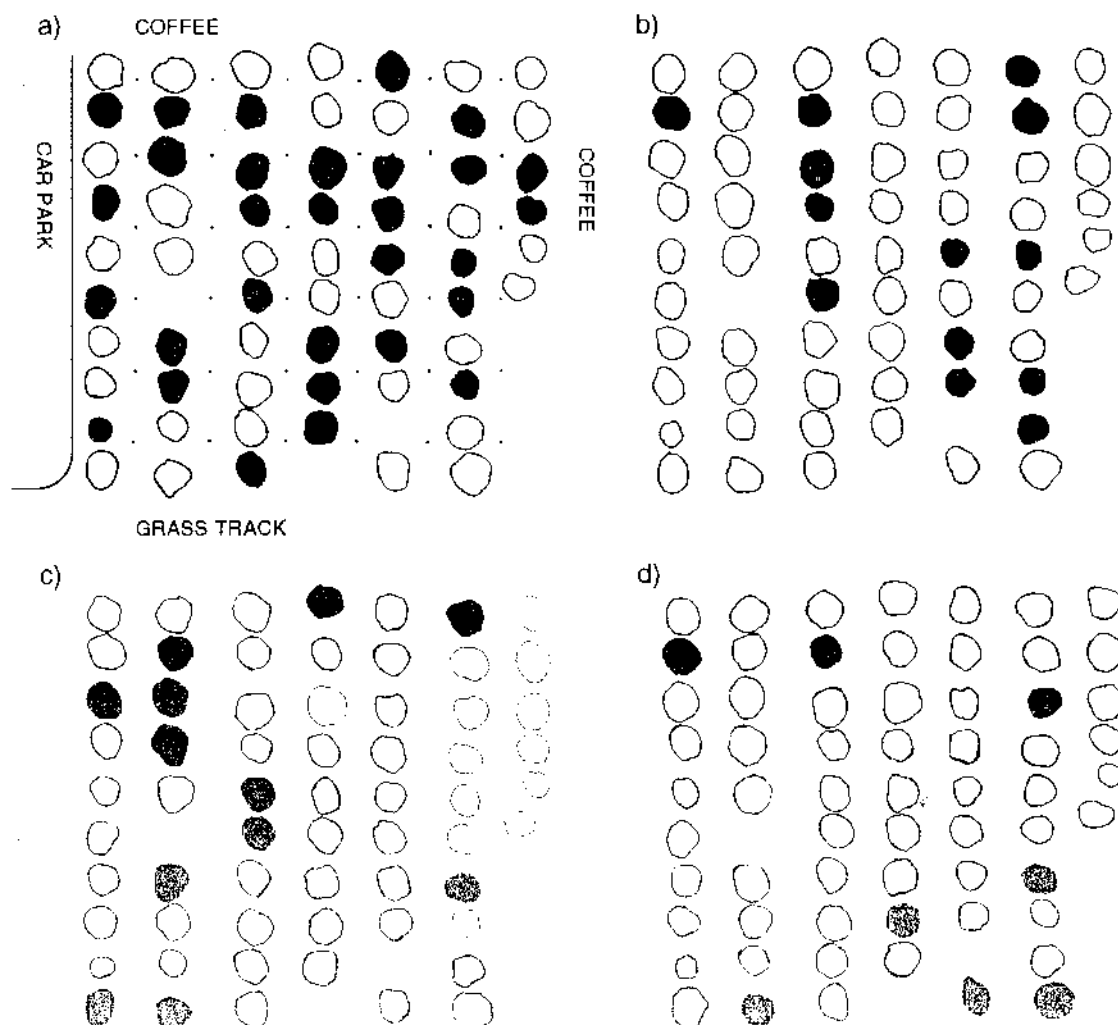


If a beneficial ant is revealed, the scheme enters **Stage 4**. Here techniques are investigated to manipulate the ant distribution in order to favour its spread. This is the most difficult stage to carry out. **Stage 5** is reached when field trials are performed to evaluate the practicality of ant manipulation and the efficacy of the control. The ant-based biological

control method may now become incorporated into a wider integrated pest management scheme. Finally, recommendations are made to growers on how to apply the control scheme, and for vigilance for new pest problems that may require modifications to the scheme.

Figure 2. Map of part of the Vicosa coffee plantation showing positions of pitfall traps () and the four most frequent species of canopy-associated ants: a) = *Crematogaster* sp. 59;

b) = *Pseudomyrmex* sp. 52; c) = *Camponotus* sp. 6; and d) = *Pseudomyrmex* sp. 50



Although the possibility of using ants in cocoa pest control has received some attention in the Brazilian State of Bahia (see review in Delabie 1990), and the Kayapó Indians have used ants of the *Azteca chartifex* gp. to limit leaf cutter ants in the State of Pará (Overal and Posey 1984), this topic has received little attention in the southern parts of Brazil. The aim of this paper is to document the distribution, diversity and abundance of the ground and arboreal ant fauna in a coffee plantation in the south of the Minas Gerais State of Brazil. Such a survey forms part of Room's (1973) **Stage 2** for the evaluation of the possible use of ants as biological control agents in coffee, or other tree crops growing within this region.

STUDY AREA AND METHODS

Observations were performed in a coffee plantation within the campus of the Federal University of Viçosa, Minas Gerais (20° 44' S, 42° 54' W). The crop, which consisted of a range of varieties of *Coffea arabica*, was planted in 1970 on a loamy soil at a spacing of 1.8 x 2.8 m. At the time of the survey the plantation consisted of trees of approximately 3 m height, with a herbaceous and grass understorey. The canopy of adjacent trees was generally not contiguous. The plot had been weeded six times a year and, in November 1987, the herbicide Gramoxone® was applied to the ground layer of vegetation. The plantation had never been sprayed with insecticides.

TABLE 1: Total and frequency of the various ant species caught on the ground by pitfall trapping and on trees by beating. The percentage of ground and tree baits visited by the various ant species is also shown.

	Ground (n = 36)			Trees (n = 63)		
	Total	% Frequency	% Baits	Total	% Frequency	% Bait
Ponerinae						
<i>Gnamptogenys</i> sp. 8	52	39	-	-	-	-
<i>Hypoponera</i> sp. 24	3	8	-	-	-	-
<i>Hypoconera</i> sp. 35	1	3	-	-	-	-
<i>Odontomachus</i> sp. 45	2	3	-	-	-	-
<i>Pachycondyla</i> sp. 7	1	3	-	-	-	-
<i>Pachycondyla</i> sp. 54	1	3	-	-	-	-
<i>Pachycondyla</i> sp. 56	3	8	-	-	-	-
Myrmicinae						
<i>Acromyrmex</i> sp. 57	2	6	-	-	-	-
<i>Crematogaster</i> sp. 29*	-	-	-	-	-	10
<i>Crematogaster</i> sp. 59*	-	-	10	105	48	10
<i>Cyphomyrmex</i> sp. 23	1	3	-	-	-	-
<i>Monomorium</i> sp. 49	-	-	-	8	8	-
<i>Mycocepurus</i> sp. 20	1	3	-	-	-	-
<i>Pheidole</i> sp. 1	6	3	-	-	-	-
<i>Pheidole</i> sp. 2	12	8	-	2	3	-
<i>Pheidole</i> sp. 11	5	3	-	-	-	-
<i>Pheidole</i> sp. 21	1	3	-	-	-	-
<i>Pheidole</i> sp. 42	1	3	-	-	-	-
<i>Pheidole</i> sp. 47	-	-	10	-	-	-
<i>Solenopsis</i> sp. 10	2	6	-	-	-	-
<i>Solenopsis</i> sp. 14	28	39	-	1	2	-
<i>Solenopsis</i> sp. 15	1	3	-	-	-	-
<i>Strumigenys</i> sp. 46	1	3	-	-	-	-
<i>Tetramorium</i> sp. 43	4	6	-	-	-	-
<i>Tetramorium</i> sp. 44	3	6	-	-	-	-
Pseudomyrmecinae						
<i>Pseudomyrmex</i> sp. 33*	-	-	-	-	-	10
<i>Pseudomyrmex</i> sp. 50*	-	-	-	15	13	-
<i>Pseudomyrmex</i> sp. 51*	-	-	-	14	3	-
<i>Pseudomyrmex</i> sp. 52*	-	-	-	18	21	-
Formicinae						
<i>Camponotus</i> sp. 6*	-	-	-	2	19	-
<i>Camponotus</i> sp. 58*	-	-	-	-	-	10
<i>Brachymyrmex</i> sp. 26	1	3	-	3	2	-
<i>Brachymyrmex</i> sp. 53	11	19	10	-	-	-
<i>Paratrechina</i> sp. 40	2	6	-	-	-	-
<i>Paratrechina</i> sp. 48	-	-	10	-	-	-
<i>Paratrechina</i> sp. 5d	1	3	-	-	-	-
Dolichoderinae						
<i>Iridomyrmex</i> sp.	13	-	10	-	-	-
Total species	-	25	5	-	9	4
		29			12	

* Denotes species which are believed to be tree nesters

Table 2. The number of ant species visiting ground- and tree-baits, classified in terms of whether they are ground or tree nesting species.

	Ant nesting habit		Total
	Ground	Tree	
Number of species at ground baits.	4	1	5
Number of species at tree baits.	0	4	4

During mid-August 1989 an area of approximately 400 m² was marked out for surveying the ants. A grid of 6 x 6 pitfall traps, spaced at 3 m intervals, was installed in this area (see Figure 2). The traps were of 2.5 cm internal diameter, contained an alcohol/glycerol preservative, and were run for 22 h from 0900 h onwards on 23 August 1989. The tree-associated ants on the 63 trees in the study plot were sampled by beating trees over a 70 cm diameter beating tray between 1000-1200 h on the same day.

In order to assess which ant species might rapidly respond to the existence of new food resources, 20 biscuit/honey/fish baits were placed at the base and in the canopy of 10 randomly selected trees within the plot. Baits were placed out at 1000 h on 23 August 1989 and the ants were collected from them at 1200 h.

The ants from all samples were sorted and counted to species level. They were determined at the generic level and then assigned code numbers to denote the individual species. The numbered reference collection is deposited in the Entomology Museum of the Federal University of Vigosa's Department of Animal Biology, and is named "J D Majer, Reference Collection".

RESULTS

Table 1 lists the 37 species of ants which were sampled and also shows the total and frequency of ants in the 36 pitfall traps (ground ants) and in the tree baits (arboreal ants). It also shows the frequency of ants observed at ground and tree baits.

Twenty nine ant species were present on the ground. Most of these were relatively restricted in the plot, although *Gnamptogenys* sp. 8, *Solenopsis* sp. 14 and *Brachymyrmex* sp. 53 were frequently sampled,

and the first-mentioned was relatively abundant in traps. Eighty one percent of the traps contained at least one species of ant.

Twelve ant species were sampled on the trees. In this stratum *Crematogaster* sp. 59, *Pseudomyrmex* spp 50 and 52, and also *Camponotus* sp. 6 were all relatively frequent, although only the first-mentioned species was abundant on trees. All species of *Crematogaster*, *Pseudomyrmex* and *Camponotus* which were sampled are believed to be arboreal nesters. Once again, 81% of trees supported at least one species of ant. Only four ant species, namely *Crematogaster* sp 59, *Pheidole* sp. 2, *Solenopsis* sp. 14 and *Brachymyrmex* sp. 26 were common to both strata.

Eight species of ants were found at baits, with five visiting those on the ground and four visiting tree baits. As indicated in Table 2, the ground baits were largely visited by ground-dwelling species and the tree baits by tree-dwelling ants. Only *Crematogaster* sp. 59 visited baits on the ground and on trees.

In addition to considering the abundance, frequency and responsiveness of ants to food resources, it is also important to consider the distribution pattern of the ants. Figure 2 shows the distribution pattern of the four most frequently occurring arboreal species. *Crematogaster* sp. 59 showed a tendency to occupy large contiguous blocks of trees, as to a lesser extent did *Pseudomyrmex* sp. 52 and *Camponotus* sp. 6. *Pseudomyrmex* sp. 50 was generally found scattered on individual trees throughout the plot. There was a tendency for the distribution of these four species to overlap each other on individual trees. Application of Fisher's Exact Test demonstrated no significant negative or positive associations between the distribution patterns of these four ant species.

DISCUSSION

Studies on arboreal ants elsewhere in the tropics have shown that plantations of tree crops generally support a range of dominant ant species (e.g. Leston 1973, Room 1971 in Ghana; Taylor 1977 in Nigeria; Jackson 1984 in Cameroon; Way 1953 in Tanzania; Greenslade 1971 in Solomon Islands; Way *et al* 1989 in Sri Lanka; Room 1975 in Papua New Guinea; and Jaffe *et al* 1986 in Venezuela). Dominant ants are species which numerically predominate to the exclusion of other ant species (Majer 1972). Furthermore, these dominant ants are usually distributed in a three-dimensional mosaic (Majer 1976a, b and c, and also see review in Majer 1986). It is the abundance of these dominant ants, and the fact that the mosaic is amenable to manipulation, that renders these tropical ants as potentially useful biological control agents.

In terms of their abundance and distribution, the ants in the Vicosa coffee plantation do not seem to conform to the trends observed in tropical tree crops. With the possible exception of *Crematogaster* sp. 59, none of the arboreal ants reached anywhere near the numerical levels noted elsewhere in the tropics. Even in the case of *Crematogaster* sp. 59, the mean number of 3.5 ants per beat sample is low compared with what would be expected in tropical tree plantations.

There are a number of reasons why ants are not abundant in the canopy of the Vicosa coffee plantation. The first possibility is that the canopy is dominated by an arboreal ant which is largely active during the night. Although we did not perform tree beat samples at night, casual observations made during hours of darkness indicated that no species of ant was particularly abundant on trees during this period.

The second possibility is that we may have sampled ants during a period of low ant activity. However, monthly pitfall trapping in this plantation has indicated that August is not a period of low ant activity (MVB Queiroz unpublished data).

The third possibility is that arboreal ants simply do not reach the levels of abundance which has been observed in more tropical regions. This is certainly the case in the subtropical part of northern Australia where, with the exception of *Oecophylla smaragdina* and to a lesser extent *Crematogaster* spp., ants are not abundant in the canopy of tree crops and rainforest trees (Majer 1990). Our observations in

tree crops and in secondary forest elsewhere in the Vicosa region suggest that this is the most likely explanation, although the causal factor for this phenomenon is not yet known.

Crematogaster sp. 59 is the only arboreal species which is sufficiently abundant and widespread in the plantation to show any potential value as a biological control agent. It is also fortuitous that it feeds both on the ground and on trees. This means that it could play some role in the limitation of both tree-dwelling and ground-dwelling pests, or alternatively in the limitation of a pest which occupies both the ground and trees.

The observations made at Vicosa do not concur with those made in cocoa in Bahia where members of the *Azteca chartifex* gp., *Azteca paraensis*, *Crematogaster* spp., *Ectatomma tuberculatum* and *Wasmannia auropunctata* can be abundant on trees (Delabie, 1990 and unpublished data). Bahia, however, has a more tropical climate than does the Vicosa region. Finally, the observations made at Vicosa are of a preliminary nature. They are presented here to provoke discussion and it is hoped that further work will follow in order to confirm or refute our observations. Only after further work is carried out will it be possible to evaluate whether any species of ants have potential value for control of pests in tree crops growing in this region.

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A CATALOG OF THE TESSARATOMIDAE OF THE WORLD

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PREFACE

The tessaratomids are primarily denizens of the Afrotropical, Indomalayan and Oceanian realms, although there are representatives in Australia and the Neotropics. In number of species, the family is moderate in size, containing about 235 species.

Most tessaratomid species are large and a few are agricultural pests; yet the taxonomy and phylogeny of the family have been relatively neglected, perhaps because the concentrations of taxonomists and tessaratomid species do not coincide. A surprising number of taxa appear only once in the primary literature. There is also a surfeit of uncertain synonymy as well as a vagueness concerning phylogeny. Perhaps this catalog will encourage taxonomic research on the family by easing the onerous task of searching for relevant literature.

INTRODUCTION

This synoptic and reference catalog of the Tessaratomidae of the world covers the literature from 1758 to 1990, inclusively, omitting intentionally only references to purely applied works and to anatomical or physiological works unless they concern the salivary or scent glands. However, with the above exclusions, papers appearing after 1990 that came to our attention are also included. We attempted to verify every reference. The few we did not see are so annotated in the bibliography.

Users of the catalog are reminded, perhaps unnecessarily, that this presentation of the Tessaratomidae is a composite reflecting the opinions and abilities of many authors over many years. The result is an overview of the family that is probably close to reality, but with certainty it is neither complete nor entirely accurate. The usual caveat as to the fallibility of the compilers is also pertinent.

We have been guided in classification at the family - group level by the work of Kumar, and Kumar and Ghauri. The arrangement of the catalog, summarized in Table 1, is alphabetical with miscellaneous categories at the end. The taxonomic literature has been accepted uncritically for the most part. Documented misdeterminations are entered in the cata-

log under both the correct and incorrect taxa, with a reference to the correct taxon following the entry under the incorrect taxon. The authority for the correction is noted, as is the authority reducing a name to the status of junior synonym. Subsequent verification of synonymy may also be indicated. As catalogers we have been neutral insofar as possible. However, where synonymy has been declared but inadequately supported we have treated all taxa involved as valid, at the same time noting that this position is not accepted by all.

The content of each reference is usually indicated cryptically or by fuller annotation unless it is obvious, as in the description of a new taxon. In accordance with the International Code of Zoological Nomenclature, a new name and its author are not separated by any punctuation mark, while the name of a taxon and that of a subsequent user are separated by a punctuation mark other than a comma, in this catalog by a colon. Abbreviations used in annotations and their meaning are given in Table 2. The letters a, b, etc. appearing after dates are used to distinguish among papers by the same author in one year.

The following are placed as new combinations: Rhoecus australasiae (Westwood, 1837); Candace intermedia (Schouteden, 1905); and Candace virescens (Distant, 1903).

The type species is given for each genus and the means of designation. In one instance a type species appears not to have been designated; we leave this act to the first reviser.

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The nominal date of publication has been accepted as correct in the absence of evidence to the contrary of which we are aware. Unless priority is involved, and we know of no unresolved priority problem in this family, we considered researching publication dates to be unrewarding.

The known distribution of each species is given, using current political units in most cases. Sometimes a physiographic unit - an island or mountain or desert - is a better boundary or the only possible one because of imprecise records.

The catalog is preserved on disk in DOS format in order that it may be corrected or updated with minimal effort. Disks are conserved in the American Museum of Natural History and the California Academy of Sciences.

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TABLE 1. ARRANGEMENT OF CATALOG

TESSARATOMIDAE

NATALICOLINAE

Cyclogastridea Elizabetha Empysarus
Encosternum Haplosterna Natalicola Phyllocoris
Selenymerum

ONCOMERINAE

Agapophyta Cumare Erga Garceus
Lyrarmorpha Musgraveia Neosalica Oncomeris
Peltocopta Piezosternum Plisthenes Rhoecus
Stilida Tamolia

TESSARATOMINAE

PRIONOGASTRINI

Prionogaster

SEPININI

PLATYTATARIA

Platyatus

SEPINARIA

Ipamu Malgassus Rhynchotinetus Sepina

TESSARATOMINI

EUSTHENARIA

Anacanthopus Asiarcha Aurungabada
Candace Carpona Dalcantha Eurostus Eurypleura
Eusthenes Eusthenimorpha Mattiphus
Megaedoeum Origanaus Pseudopycanum
Pycanum Sanganus Serrocapona

TESSARATOMARIA

Acidosterna Amisus Embolosterna Enada
Hypencha Mucanum Pygoplatus Siphnus
Tessaratomia

INCERTAE SEDIS

NOTOPOMINI

Notopomus

TABLE 2. ABBREVIATIONS USED IN ANNOTATIONS

- B** = biology
C = chromosomes
D = description or diagnosis
Dn = descriptive note
G = genetics
Ge = genitalia
Gp? = uncertain genetic position
H = host (s)
I = immatures
K = keyed
Kg = genera keyed
Ksg = subgenera keyed
Ks = species keyed
Kss = subspecies keyed
Kt = tribes keyed
L = listed
M = morphology
N = nomenclature
Nn = new name
P = parasite (s), predator (s)
R = record or distribution
S = synonymy
sg = scent gland
sgf = scent gland fluid
syn = synonymized
sec = on the authority of
T = type material
Ts = taxonomic status or position
Ts? = uncertain taxonomic status or position
Tsp = type species

TESSARATOMIDAE

Stål, 1865a

Type genus: *Tessaratomia* Lepeletier & Serville, 1825

- 1865 *Tessaratomia* Stål, Hem. Afr. 1:33, 223-226. (K, Kg)
 1870 *Tessaratomia*: Stål, Sv. Vet. Akad. Handl. 9(1):60. (K to sections; as subfamily of Pentatomidae)
 1871 *Tessaratomia*: Stål, Öfv. Vet. Akad. Förh. 27(7):642. (L; as subfamily of Pentatomidae)
 1881 *Tessaratomidae*: Distant, Biol. Cent. Am. Rh. 1:101 (R)
 1889 *Tessaratomia*: Atkinson, J. Asiatic Soc. Bengal 58 (pt.2):52. (D)
 1891 *Eustheninae* Bergroth, Rev. Ent. 10:213. (Nn for *Tessaratominae*)
 1893 *Tessaratomidae*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
 1900 *Tessaratomia*: Horváth, Term. Füzet. 23:339-340. (K to divisions; as subfamily)
 1902 *Tessaratominae*: Distant, Fauna Brit. India, Rh. 1:2, 256. (K, D)
 1903 *Tessaratominae*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(1):2. (K)

- 1905 *Tessaratominae*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):209. (S, D, Kt)
 1906 *Tessaratominae*: Oshanin, Verz. Pal. Hem. 1:163. (S; as subfamily of Pentatomidae)
 1909 *Tessaratominae*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 67. (*Delocephalus* removed)
 1909 *Tessaratominae*: Kirkaldy, Cat. Hem. 1:343-344, 363. (table of gen.; S, K)
 1922 *Tessaratominae*: Courteaux, Anim. Art. 1:272. (D)
 1933 *Tessaratominae*: China, Ann. Mag. Nat. Hist. (10):12-193. (phylogeny)
 1934 *Tessaratominae*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):51. (K)
 1935 *Tessaratominae*: Tang, Cat. Ins. Sin. 2:362. (S)
 1935 *Tessaratominae*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):104-105. (S, D, Kg of China)
 1937 *Tessaratominae*: Beier, Handb. Zool. 4(2) Ins. 2:2185, 2186. (K, D, tribes)
 1939 *Tessaratominae*: Torre-Bueno, Ent. Am. 19(3):196. (K)
 1940 *Tessaratominae*: Costa-Lima, Ins. Bras. :44. (K)
 1949 *Tessaratominae*: Vidal, Mem. Soc. Sci. Nat. Maroc. 48:53. (K)
 1951 *Tessaratominae*: Poisson, Traité Zool. 10(2): 1794. (Dn)
 1952 *Tessaratominae*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):234, 288. (K)
 1952a *Tessaratominae*: Villiers, Init. Afr. 9:52, 82. (K, D)
 1955 *Tessaratominae*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Kt)
 1955 *Tessaratominae*: China & Miller, Ann. Mag. Nat. Hist. (12)8:258. (check-list)
 1956 *Tessaratominae*: Miller, Biol. Het. ed. 1:49, 50. (E, Dn)
 1957 *Tessaratominae*: Zia, Acta Ent. Sin. 7:423-448. (Chinese genn. & spp.)
 1959 *Tessaratominae*: China & Miller, Bull. Brit. Mus. (N.H.) Ent. Ser. 8(1):5, 38. (K)
 1962 *Tessaratominae*: Yang, Econ. Ins. Fauna China 2:40. (Ks)
 1962 *Tessaratomidae*: Kumar, Ent. Tidskr. 83(1-2):60-61. (classification)
 1966 *Tessaratomidae*: McDonald, Quaes. Ent. 2:45, 59. (Ge)
 1969 *Tessaratomidae*: Kumar, Aust. J. Zool. 17:604. (classification)
 1970 *Tessaratomidae*: Woodward et al., Hem. Austral. 449, 450. (K)
 1971 *Tessaratominae*: Miller, Biol. Het. :58. (D)
 1972 *Tessaratominae* (sic): Jordan, Handb. Zool. 4(2)2/ 20:38-39. (K, D)
 1975 *Tessaratomidae*: Gross, Hem. S. Australia, pt. 1:76, 78. (K)
 1975 *Tessaratomidae*: Stys & Kerzhner, Acta. Ent. Bohemoslovaca 72(2):74. (classification)
 1977 *Tessaratominae*: Hsiao et al., Handb. Chinese Hem. Het. 1:53, 63-64. (K, Kg)
 1979 *Tessaratominae*: Rolston & McDonald, J. N. Y. Ent. Soc. 87(3):189, 190, 204. (K, Dn)
 1980 *Tessaratomidae*: Ahmad, Proc. 1st. Pakistan Congr. Zool. 121, 134-135. (taxa of Pakistan & Azad Kashmir)
 1981 *Tessaratomidae*: Froeschner, Smithsonian, Contr. Zool. 322:95. (Ts)
 1981 *Tessaratomidae*: Ahmad, Ent. Soc. Karachi Suppl. 4(1)(1979):84. (classification)
 1981 *Tessaratomidae*: Hinton, Biol. Ins. Eggs 1:593-594 (E)
 1982 *Tessaratomidae*: Zheng & Zou, Zool. Res. 3 Suppl. :113. (concur with removal of genus *Vitruvius*)

- 1982 Tesseractomidae: Slater, Syn. Class. 445. (D)
 1982 Tesseractomidae: Nuamah, Insect Sci. Application 3(1):14, 15, 21, 25. (C; classification)
 1986 Tesseractomidae: Jacobs, Ins. S. Africa. 142, 144. (K, D)
 1987 Tesseractomidae: Schaefer & Ahmad, Phytophaga 1:22, 27. (H)
 1988 Tesseractomidae: Froeschner, Cat. Het. 694. (Ts)
 1989 Tesseractomidae: Delvare & Alberlenc, Ins. Afr. Am. Trop. 114. (K)

NATALICOLINAE

Stål, 1870a

Type genus: *Natalicola* Spinola, 1850

- 1870 Cyclogastrina Stål, Sv. Vet. Akad. Handl. 9(1):60. (K as section)
 1900 Natalicolaria Horváth, Term. Füzet. 23:339. (K, S)
 1905 Natalicolaria Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 240. (K, S, Kg)
 1909 Aplosternini Kirkaldy, Cat. Hem. 1:358. (Nn for Natalicolaria)
 1937 Aplosternini: Beier, Handb. Zool. 4(2) Ins. 2:2186.
 1969 Natalicolinae: Kumar, Ann. Ent. Soc. Am. 62(4):687-689. (M, anatomy)
 1974 Natalicolinae: Kumar, J. Nat. Hist. 8(6):675-676. (Kg)

Aplosterna Westwood, 1837 — see *Haplosterna*.

Aplosterna delegorguei (Spinola, 1850) — see *Encosternum delegorguei*.

Aplosterna virescens Westwood, 1837 — see *Haplosterna virescens*.

Cyclogaster Westwood, 1838 — see *Natalicola*.

Cyclogaster subgenus *Liphaemus* Stål, 1872 — see *Haplosterna*.

Cyclogaster delegorguei (Spinola, 1850) — see *Natalicola pallidus*
Cyclogaster exsangui Stål, 1872 — see *Haplosterna virescens*
Cyclogaster pallidus Westwood, 1838 — see *Natalicola pallidus*
Cyclogaster vassei Courteaux, 1907 — see *Elizabetha vassei*

Cyclogastridea Reuter, 1884

Type species: *Cyclogastridea nigromarginalis* Reuter, 1884 by monotypy.

- 1884 *Cyclogastridea* Reuter, Öfv. Finska Vet.-Soc. Förh. 25(1882-1883):9-10
 1893 *Cyclogastridea*: Lethierry & Severin, Cat. Gen. Hem. 1:234. (S)
 1905 *Cyclogastridea*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240, 244. (K, S, D)
 1909 *Cyclogastridea*: Kirkaldy, Cat. Hem. 1:359. (S)
 1974 *Cyclogastridea* (sic) Kumar, J. Nat. Hist. 8(6):676 (K)

Cyclogastridea equatoria Distant, 1890 — see *Haplosterna virescens*

Cyclogastridea nigromarginalis Reuter, 1884

- 1884 *Cyclogastridea nigromarginalis* Reuter, Öfv. Finska Vet.-Soc. Förh. 25(1882-1883):10.
 1893 *Cyclogastridea nigromarginalis*: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)

- 1894 *Cyclogastridea nigromarginalis*: Haglund, Öfv. Vet. Akad. Förh. 51(8):406-407. (D, R)
 1904a *Cyclogastridea nigromarginalis*: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:160. (R)
 1905 *Cyclogastridea nigromarginalis*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):245-246, 275, figs. 114-115, pl. 5 fig. 10. (S, D, R, I)
 1909 *Cyclogastridea nigromarginalis*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 69. (R)
 1909 *Cyclogastridea nigromarginalis*: Kirkaldy, Cat. Hem. 1:359. (S)
 1921 *Cyclogastridea nigromarginalis*: Lehmann, Arch. Naturges. Berlin. 87A(6):39.
 1922 *Cyclogastridea nigromarginalis*: Courteaux, Anim. Art. 1:272, pl. 1, fig. 5. (R)
 1949 *Cyclogastridea nigromarginalis*: Villiers, I.F.A.N. Catalogues 5:89. (R)
 1952b *Cyclogastridea nigromarginalis*? Villiers, Mem. I.F.A.N. 19:307. (R)
 1964 *Cyclogastridea nigromarginalis*: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
 1969 *Cyclogastridea nigromarginalis*: Kumar, Ann. Ent. Soc. Am. 62(4):681-692, 684-687, fig. 1-4, 16A, 16B, 17, 19-23. (M, E, N, H)
 1974 *Cyclogastridea nigromarginalis*: Kumar, J. Nat. Hist. 8(6):fig. 4A. (antenna)
 1980 *Cyclogastridea nigromarginalis*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982 *Cyclogaster* (sic) *nigromarginalis*: Linnavuori, Acta Zool. Fenn. 163:11-12. (R)
Distribution: Cameroon, Ghana, Guinea, Ivory Coast, Kenya, Nigeria, Zaire.

Elizabetha Schouteden, 1916

Type species not fixed: *Cyclogaster vassei* Courteaux, 1907, and *Elizabetha courteauxi* Schouteden, 1916, are eligible as the type species.

Schouteden (1916) apparently intended the latter as type species:

- 1916 *Elizabetha* Schouteden, Rev. Zool. Afr. 4:278.
 1974 *Elizabetha* Kumar, J. Nat. Hist. 8(6):676 (K)

Elizabetha courteauxi Schouteden, 1916

- 1916 *Elizabetha courteauxi* Schouteden, Rev. Zool. Afr. 4:279.
 1954 *Elizabetha courteauxi* Leston, Publ. Cult. Comp. Diam. Angola 24:14-15, figs. 4-11. (D, R)
 1980 *Elizabetha courteauxi* Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Angola, Zaire

Elizabetha kisantu Schouteden, 1957

- 1957 *Elizabetha kisantu* Schouteden, Rev. Zool. Bot. Afr. 55(3-4):416-417.

Distribution: Zaire

Elizabetha vassei (Courteaux, 1907)

- 1907 *Cyclogaster vassei* Courteaux, Bull. Mus. Paris 1907:36-37.
 1909 *Natalicola vassei* Kirkaldy, Cat. Hem. 1:371. (L)
 1916 *Elizabetha vassei* Schouteden, Rev. Zool. Afr. 4:279 (Ts)

Distribution: Mozambique

Empysarus Martin, 1904

Type species: Empysarus: Empysarus depressus Martin, 1904, by monotypy.

Mussafira: Mussafira johni Oshanin, 1907, by monotypy.

- 1904 Empysarus Martin, Bull. Mus. Paris. 10:315-316.
 1907 Mussafira Oshanin, Ann. Mus. Zool. St. Petersb. 12:414-416. (syn. by Bergroth, 1908)
 1908 Empysarus: Bergroth, Mem. Soc. Ent. Belg. 15:187. (S)
 1908 Empysarus: Distant, Faun. Brit. India, Rh. 4(2):459-460.
 1909 Empysarus: Kirkaldy, Cat. Hem. 1:357. (S)
 1970 Empysarus: Kumar & Ghauri, Dt. Ent. Z. 17(1-3):15-16. (classification)
 1974 Empysarus: Kumar, J. Nat. Hist. 8(6):676. (K)

Empysarus depressus Martin, 1904

- 1904 Empysarus depressus Martin, Bull. Mus. Paris. 10:316.
 1907 Mussafira johni Oshanin, Ann. Mus. Zool. St. Petersb. 12:416-417. (syn. by Bergroth, 1908)
 1908 Empysarus depressus: Bergroth, Mem. Soc. Ent. Belg. 15:187. (S)
 1908 Empysarus (sic) depressus: Distant, Faun. Brit. India, Rh. 4(2):460, fig. 271.
 1908 Empysarus (sic) johni: Distant, Faun. Brit. India, Rh. 4(2):460-461, fig. 272. (D after Oshanin)
 1909 Empysarus depressus: Kirkaldy, Cat. Hem. 1:357. (S)
 1985 Empysarus johni: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:21-22, fig. 52. (Dn, R)

Distribution: Southern India, Sri Lanka.

Empysarus johni (Oshanin, 1907) — see Empysarus depressus

Empysarus Martin, 1904 — misspelling, see Empysarus

Encosternum Spinola, 1850

Type species: Encosternum: Encosternum delegorguei Spinola, 1850, by original designation.

Lamus: Lamus dallasi Stål, 1853 [= Encosternum delegorguei Spinola, 1850] by monotypy.

Malabama: Malabama aethiops Distant, 1898, by monotypy.

- 1850 Encosternum Spinola, Gen. Ins. Artr. 32: 67-69. (K)
 1852 Encosternum: Spinola, Mem. Soc. Ital. Modena 25(1):72, 107-109. (reprint of 1850 paper)
 1853 Lamus Stål, Öfv. Vet. Akad. Förh. 10(9):222 (syn. with Aplosterna Westwood, 1837, & Encosternum Spinola, 1850, by Stål, 1865)
 1865 Haplosterna Stål, Hem. Afr. 1:226, 232. (K, D)
 (emendation of Aplosterna Westwood, 1837, misdet.)
 1870 Haplosterna: Stål, Sv. Vet. Akad. Handl. 9(1):76. (part)
 1893 Haplosterna: Lethierry & Severin, Cat. Gen. Hem. 1:234. (part)
 1894 Encosternum: Montandon, Ann. Soc. Ent. Belg. 38(1893):643-644. (Aplosterna Westwood, 1837, not synonym)
 1898 Malabama Distant, Ann. Mag. Nat. Hist. (7)2:309. (syn. by Kumar, 1974)
 1905 Encosternum: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240, 252. (K, S, D)
 1905 Malabama: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240, 254. (K, D)

- 1908 Malabama: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 Encosternum: Kirkaldy, Cat. Hem. 1:359. (S)
 1909 Malabama: Kirkaldy, Cat. Hem. 1:360. (S)
 1972 Encosternum (sic): Jordan, Handb. Zool. 4(2):20:39. (L)
 1974 Encosternum: Kumar, J. Nat. Hist. 8(6):675, 676. (S, K)
 1980 Encosternum: Medler, Mem. Am. Ent. Inst., no. 30:120. (S)

Encosternum aethiops (Distant)

- 1898 Malabama aethiops Distant, Ann. Mag. Nat. Hist. (7)2:309.
 1905 Malabama aethiops: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):254-255. (quotes original description)
 1908 Malabama aethiops: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 Malabama aethiops: Kirkaldy, Cat. Hem. 1:360. (S)
 1980 Encosternum aethiops: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Ghana, Zimbabwe.

Note: Kumar, 1974, did not indicate the taxonomic status of Malabama aethiops when synonymizing Malabama Distant, 1898, with Encosternum Spinola, 1850.

Encosternum delegorguei Spinola, 1850

- 1850 Encosternum delegorguei Spinola, Gen. Ins. Artr. 32: 69.
 1852 Encosternum delegorguei: Spinola, Mem. Soc. Ital. Modena 25(1):109. (reprint of 1850 paper)
 1853 Lamus dallasi Stål, Öfv. Vet. Akad. Förh. 10(9):222. (syn. by Stål, 1865)
 1865 Haplosterna delegorguei: Stål, Hem. Afr. 1:232. (D, S)
 1870 Haplosterna delegorguei: Stål, Sv. Vet. Akad. Handl. 9(1):78. (S)
 1873 Aplosterna delegorguei: Walker, Cat. Het. Suppl. 27. (S)
 1893 Haplosterna delegorguei: Lethierry & Severin, Cat. Gen. Hem. 1:234. (S)
 1894 Encosternum delegorguei: Montandon, Ann. Soc. Ent. Belg. 38(1893):644-645. (D, S)
 1905 Encosternum delegorguei: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):252-254, figs. 120, 121, pl. 5 fig. 7. (S, D, R)
 1909 Encosternum delegorguei: Kirkaldy, Cat. Hem. 1:359. (S)
 1913 Encosternum delegorguei: Schumacher, Denkschr. Med. Ges. 17:60. (R)
 1921 Encosternum delegorguei: Lehmann, Arch. Naturges. Berlin. 87A(6):39. (R)
 1945 Encosternum delegorguei: Bröte, Zool. Meded. 25:308. (R)
 1951 Encosternum (sic) delegorguei (sic): Poisson, Traité Zool. 10(2):1793. (as human food)
 1952 Encosternum delegorguei: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
 1956 Encosternum delegorguei (sic) Miller, Biol. Het. ed. 1:38, 47. (human food)
 1969a Encosternum delegorguei: Kumar, Ann. Ent. Soc. Am. 62(4):684, figs. 8, 9, 13. (M)
 1971 Encosternum delegorguei (sic): Miller, Biol. Het. 55. (as human food)
 1986 Encosternum delegorguei: Jacobs, Ins. S. Africa, fig. 16.90. (fig. only)

Distribution: Gambia, Namibia, South Africa, Zimbabwe.

Encosternum Spinola, 1850 — see Encosternum

Gonielytrum Stål, 1853 — see **Natalicola**

Gonielytrum circuliventre Stål, 1853 — see **Natalicola pallidus**

Haplosterna Westwood, 1837

Type species: **Aplosterna virescens** Westwood, 1837, by monotypy.

Cyclogaster (Liphaemus): Cyclogaster exsanguis Stål, 1872 [= **Aplosterna virescens** Westwood, 1837], by monotypy.

- 1837 **Aplosterna** Westwood, Cat. Hope 1:26-27.
 1846 **Aplosterna**: Agassiz, Nomen. Zool. Hem. 2: (Ety)
 1851 **Aplosterna**: Dallas, List. Hem. 1:317, 337. (K)
 1865 **Haplosterna**: Stål, Hem. Afr. 1:226, 232. (misdet., see **Encosternum**)
 1870 **Haplosterna**: Stål, Sv. Vet. Akad. Handl. 9(1):78. (part)
 1872 **Cyclogaster (Liphaemus)** Stål, Sv. Vet. Akad. Handl. 10(4):130. (n. subgen.; syn. by Schouteden, 1905)
 1893 **Haplosterna**: Lethierry & Severin, Cat. Gen. Hem. 1:234. (part; see also **Encosternum**)
 1894 **Aplosterna**: Montandon, Ann. Soc. Ent. Belg. 38(1893):643-644. (cf. **Encosternum**; orthography)
 1894 **Liphaemus**: Montandon, Ann. Soc. Ent. Belg. 38(1893):645. (D)
 1905 **Haplosterna** (sic): Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240. (K)
 1905 **Haplosterna**: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):246-247. (S, D)
 1909 **Aplosterna**: Kirkaldy, Cat. Hem. 1:359. (S)
 1974 **Aplosterna**: Kumar, J. Nat. Hist. 8(6):676. (K)
 1975 **Haplosterna**: Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:8. (L)
 1980 **Aplosterna**: Medler, Mem. Am. Ent. Inst., no. 30:120. (S)

Haplosterna delegorguei (Spinola, 1850) — see **Encosternum delegorguei**

Haplosterna distincta Schouteden, 1909

1909 **Haplosterna distincta** Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1:170. (T)

Distribution: Tanzania.

Haplosterna virescens Westwood, 1837

- 1837 **Aplosterna virescens** Westwood, Cat. Hope 1:27.
 1851 **Aplosterna virescens**: Dallas, List. Hem. 1:338. (R)
 1859 **Aplosterna virescens**: Dohrn, Cat. Hem. 20. (L)
 1862 **Aplosterna virescens**: Schaum, Peter's Reise nach Mossambique 2:40. (R)
 1866 **Aplosterna virescens**: Walker, Cat. Het. 3:457. (R)
 1870 **Haplosterna virescens**: Stål, Sv. Vet. Akad. Handl. 9(1):78. (S)
 1872 **Cyclogaster (Liphaemus) exsanguis** Stål, Sv. Vet. Akad. Handl. 10(4):130. (syn. by Schouteden, 1905)
 1890 **Cyclogasteridea equatoria** Distant, Ann. Soc. Ent. Belg., 34 c.r. (ser. 4)(5):57-58. (syn. by Schouteden, 1905)
 1893 **Natalicola exsanguis**: Lethierry & Severin, Cat. Gen. Hem. 1:233. (L)
 1893 **Cyclogasteridea equatoria**: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)
 1893 **Haplosterna virescens**: Lethierry & Severin, Cat. Gen. Hem. 1:234. (S)
 1894 **Liphaemus equatoria**: Montandon, Ann. Soc. Ent. Belg. 38(1893):645. (Gp)
 1894 **Liphaemus exsanguis**: Montandon, Ann. Soc. Ent. Belg. 38(1893):645. (Dn, T)

1901 **Aplosterna virescens**: Distant, Proc. Zool. Soc. Lond. 1900 (4):819. (Ts)

1905 **Haplosterna virescens**: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):247-248, figs. 116, 117. (S, D, R)

1909 **Haplosterna virescens**: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1):70. (T)

1909 **Aplosterna virescens**: Kirkaldy, Cat. Hem. 1:359. (S)

1913 **Aplosterna virescens**: Schouteden, Rev. Zool. Afr. 2(2):197. (R)

1945 **Aplosterna virescens**: Blöte, Zool. Meded. 25:308. (R)

1952 **Aplosterna virescens**: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)

1969a **Aplosterna virescens**: Kumar, Ann. Ent. Soc. Am. 62(4):684, figs. 10, 11, 15. (M)

1969 **Aplosterna virescens**: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):10. (T)

1980 **Aplosterna virescens**: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Congo, Gambia, Ghana, Mozambique, Senegal, Sierra Leone, Zaire, Zimbabwe.

Haplosterna virescens virescens Westwood, 1837

1837 **Aplosterna virescens** Westwood, Cat. Hope 1:27.

1975 **Haplosterna virescens virescens**: Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:9-10, figs. 1a-h. (D, R)

Distribution: Gambia, Kenya, Zaire.

Haplosterna virescens combreticola Linnavuori, 1975

1975 **Haplosterna virescens combreticola** Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:9-10, figs. 1i-m.

1982a **Haplosterna virescens combreticola**: Linnavuori, Acta Zool. Fenn. 163:12. (R)

Distribution: Nigeria, Sudan

Haplosterna virescens senegalana Linnavuori, 1975

1975 **Haplosterna virescens senegalana** Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:10, figs. 1b, 2a-d.

Distribution: Senegal

Haplosterna Westwood 1837 - misspelling of **Haplosterna**

Lamus Stål, 1953 — see **Encosternum**

Lamus dallasi Stål, 1953 — see **Encosternum delegorguei**

Liphaemus Stål, 1972 — see **Haplosterna**

Liphaemus equatoria (Distant, 1890) — see **Haplosterna virescens**

Malabama Distant, 1898 — see **Encosternum**

Malabama aethiops Distant, 1898 — see **Encosternum aethiops**

Mussafira Oshanin, 1907 — see **Empysarus**

Mussafira johol Oshanin, 1907 — **Empysarus depressus**

Natalicola Spinola, 1850

Type species: **Cyclogaster**, **Cyclogaster pallidus** Westwood, 1837, by original designation.

Natalicola, **Natalicola delegorguei** Spinola, 1850

[= **Cyclogaster pallidus** Westwood 1837] by monotypy.

Gonielytrum, **Gonielytrum circuliventre** Stål, 1853

[= **Cyclogaster pallidus** Westwood, 1837] by monotypy.

- 1837 *Cyclogaster* Westwood, Trans. Ent. Soc. Lond. 2:20-21. (preoccup. Gronovius, 1760)
 1846 *Cyclogaster*: Agassiz, Nomen. Zool. Hem.:6. (Ety)
 1850 *Natalicola* Spinola, Gen. Ins. Artr.:70. (syn. with *Cyclogaster* Westwood by Stål, 1870)
 1851 *Cyclogaster*: Dallas, List. Hem. 1:318, 346. (K)
 1852 *Natalicola*: Spinola, Mem. Soc. Ital. Modena 25(1):110. (reprint 1850 paper)
 1853 *Gonielytrum* Stål, Öfv. Vet. Akad. Förh. 10(9):223. (syn. with *Cyclogaster* Westwood by Stål, 1870)
 1865 *Cyclogaster*: Stål, Hem. Afr. 1:226, 233. (K, D, S)
 1870 *Cyclogaster*: Stål, Sv. Vet. Akad. Handl. 9(1):77. (S)
 1891 *Natalicola*: Bergroth, Rev. Ent. 10:214. (valid name for *Cyclogaster* Westwood, 1837)
 1893 *Natalicola*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1905 *Natalicola*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240-241. (K, S, D)
 1909 *Natalicola*: Kirkaldy, Cat. Hem. 1:358. (S)
 1925 *Natalicola*: Hesse, Ann. S. Afr. Mus. 23(1):40. (S)
 1974 *Natalicola*: Kumar, J. Nat. Hist. 8(6):676. (K)

Natalicola delegorguei Spinola, 1850 — see *Natalicola pallidus*

Natalicola exsanguis Stål, 1872 — see *Haplosterna virescens*

Natalicola pallidus (Westwood, 1837)

- 1837 *Cyclogaster pallidus* Westwood, Trans. Ent. Soc. Lond. 2:21, pl. 2, fig. 6.
 1850 *Natalicola delegorguei* Spinola, Gen. Ins. Artr.:70. (syn. with *Cyclogaster pallidus* Westwood, by Stål, 1870, concurrence by Schouteden, 1909)
 1851 *Cyclogaster pallidus*: Dallas, List. Hem. 1:346. (R)
 1852 *Natalicola delegorguei*: Spinola, Mem. Soc. Ital. Modena 25(1):110. (reprint of 1850 paper)
 1853 *Gonielytrum circuliiventris* Stål, Öfv. Vet. Akad. Förh. 10(9):223. (syn. by Stål, 1865)
 1859 *Cyclogaster pallidus*: Dohrn, Cat. Hem. 1:21. (L)
 1865 *Cyclogaster pallidus*: Stål, Hem. Afr. 1:233. (D, S)
 1868 *Cyclogaster pallidus*: Walker, Cat. Het. 3:474. (R)
 1870 *Cyclogaster pallidus*: Stål, Sv. Vet. Akad. Handl. 9(1):77. (S, R)
 1877 *Cyclogaster delegorguei*: Distant, Ent. Mo. Mag. 14(159):133. (S, Dn, T, R)
 1893 *Natalicola delegorguei*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1893 *Natalicola pallidus*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1894 *Natalicola delegorguei*: Montandon, Ann. Soc. Ent. Belg. 38(1893):643. (cf. *Natalicola pallidus*)
 1898 *Natalicola pallida*: Distant, Ann. Mag. Nat. Hist. (7)2:302, 309, 315. (R)
 1905 *Natalicola delegorguei*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):241-243, figs 112, 113, pl. 5 fig. 5. (K, S, D, R)
 1909 *Natalicola pallidus*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1):69. (T, S, R)
 1909 *Natalicola delegorguei*: Kirkaldy, Cat. Hem. 1:359. (S)
 1909 *Natalicola pallidus*: Kirkaldy, Cat. Hem. 1:359. (S)
 1910a *Natalicola delegorguei*: Schouteden, Sjöstedt's Kilim. Meru Exp. 12(6):92. (R)
 1913 *Natalicola delegorguei*: Jeannel, Voy. Alluaud Hem. 1:109. (S, R)
 1913 *Natalicola delegorguei*: Schouteden, Rev. Zool. Afr. 2(2):197. (R)
 1925 *Natalicola pallidus*: Hesse, Ann. S. Afr. Mus. 23(1):40. (S, R)
 1935 *Natalicola delegorguei*: Hesse, Ann. Transv. Mus.

16(4):589. (R, S)

- 1945 *Natalicola delegorguei*: Blöte, Zool. Meded. 25:308. (R)
 1952 *Natalicola delegorguei*: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
 1956 *Natalicola delegorguei* (sic): Mancini, Fragm. Ent. 2(8):95. (R)
 1969a *Natalicola delegorguei*: Kumar, Ann. Ent. Soc. Am. 62(4):683-684, figs 5-7. (M)
 1980a *Natalicola delegorguei*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1980 *Natalicola pallidus*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Natalicola pallidus*: Linnavuori, Acta Zool. Fenn. 163:11. (R)
Distribution: Congo, Ethiopia, Gabon, Gambia, Guinea, Kalahari, Kilimanjaro, Malawi, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Togo, Zaire, Zambia, Zimbabwe.

Natalicola vassci (Courteaux, 1907) - see *Elisabetha vassci*

Phyllocoris Jeannel, 1913

Type species: *Phyllocoris acutus* Jeannel, 1913, by original designation.

- 1913 *Phyllocoris* Jeannel, Voy. Alluaud Hem. 1:109-110.
 1974 *Phyllocoris*: Kumar, J. Nat. Hist. 8(6):676. (K)

Phyllocoris acutus Jeannel, 1913

- 1913 *Phyllocoris acutus* Jeannel, Voy. Alluaud Hem. 1:110-111, pl. 4 figs. 39, 41.
 1954 *Phyllocoris acuta* (sic): Leston, Publ. Cult. Comp. Diam. Angola 24:15-16, figs 12-14 (Dn, R)
Distribution: Angola, Kenya, Kilimanjaro.

Phyllocoris jeanneli Schouteden, 1957

- 1957 *Phyllocoris jeanneli* Schouteden, Rev. Zool. Bot. Afr. 55(3-4):415-416.
Distribution: Zaire.

Selenyenum Montandon, 1894

Type species: *Selenyenum piriforme* Montandon, 1894, designated by Schouteden, 1905 (spelled *pyriforme*)

- 1894 *Selenyenum* Montandon, Ann. Soc. Ent. Belg. 38(1893):645-647.
 1905 *Selenyenum*: Schouteden, Ann. Mus. Congo Zool. ser. 3, 1(2):240, 249. (K, D)
 1907 *Selenyenum*: Oshanin, Ann. Mus. Zool. St Petersburg 12:416. (cf. *Mussafira*)
 1908 *Selenyenum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Selenyenum*: Kirkaldy, Cat. Hem. 1:XXXVI, 359. (Tsp, S)
 1974 *Selenyenum*: Kumar, J. Nat. Hist. 8(6):676. (K)

Selenyenum contractum Montandon, 1894

- 1894 *Selenyenum contractum* Montandon, Ann. Soc. Ent. Belg. 38(1893):648.
 1901 *Selenyenum contractum*: Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1905 *Selenyenum contractum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):251-252, fig. 119. (D)
 1908 *Selenyenum contractum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

- 1909 *Selenymerum contractum*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 70. (T, R)
 1909 *Selenymerum contractum*: Kirkaldy, Cat. Hem. 1:359. (S)
 1969 *Selenymerum contractum*: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):6-7. (T)
 1980 *Selenymerum contractum*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Congo, Sierra Leone, Zaire.

Selenymerum piriforme Montandon, 1894

- 1894 *Selenymerum piriforme* Montandon, Ann. Soc. Ent. Belg. 38(1893):647-648.
 1905 *Selenymerum pyriforme* (sic): Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):249-251, fig. 118. (D, R)
 1908 *Selenymerum piriforme*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Selenymerum pyriforme* (sic): Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 70. (T, R, S)
 1909 *Selenymerum piriforme*: Kirkaldy, Cat. Hem. 1:359. (S)
 1935 *Selenymerum? pyriforme* (sic): Hesse, Ann. Transv. Mus. 16(4):589. (R)
 1969a *Selenymerum piriforme*: Kumar, Ann. Ent. Soc. Am. 62(4):684, figs. 14, 18. (M)
 1980 *Selenymerum piriforme*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Kalahari, Sierra Leone, W. Africa, Zaire.

ONCOMERINAE

Stål, 1870

Type genus: Oncomerinae: *Oncomeris* Laporte, 1832

Piezosternaria: *Piezosternum* Amyot & Serville, 1843

- 1870 *Oncomerina* Stål, Sv. Vet. Akad. Handl. 9(1):60. (Kas section)
 1889 *Oncomeraria*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):82. (L as division)
 1900a *Oncomeraria*: Horváth, Term. Füzet. 23:339, 340-341. (K, Kg)
 1905 *Oncomeraria*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):209, 214. (K)
 1935 *Oncomerini*: Tang, Cat. Ins. Sin. 2:362. (L)
 1937 *Oncomerini*: Beier, Handb. Zool. 4(2) Ins. 2:2166. (D)
 1955 *Oncomerini*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62, 63-64. (K, Kg)
 1955 *Piezosternaria* Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63. (syn. by Kumar, 1969)
 1955 *Oncomerana*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63. (D)
 1969 *Oncomerinae*: Kumar, Aust. J. Zool. 17:601-604. (M)

ONCOMERINI Stål, 1870 - see ONCOMERINAE

Agapophyta Guérin-Meneville, 1831

Type species: *Agapophyta bipunctata* Guérin-Meneville, 1831a, by monotypy.

- 1831 *Agapophyta* Guérin-Meneville, Voy. Coq. Ins. pl. 11 fig. 15. (*Agapophyta bipunctata* figured)
 1833 *Agapophyta*: Laporte, Mag. Zool. (Guérin), 2:55, 63. (K, D)
 1835 *Agapophyta*: Boisduval, Voy. Astrolabe Ent. 2:626-627. (Dn)

- 1835 *Agapophyta*: Burmeister, Handb. Ent. 2:347, 353. (K, D)
 1838 *Agapophyta*: Guérin-Meneville, Voy. Coq. Ins. 2(2):168. (D)
 1840 *Agapophyta*: Blanchard, Hist. Nat. Ins. 3:143. (D)
 1843 *Agapophyta*: Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 162-163. (K, D)
 1846 *Agapophyta*: Agassiz, Nomen. Zool. Hem.:1. (Ety)
 1851 *Agapophyta*: Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1865 *Agapophyta*: Stål, Hem. Afr. 1:224. (K)
 1868 *Agapophyta*: Vollenhoven, Faune Ent. Indo-Neerl. 3:20. (D)
 1868 *Agapophyta*: Walker, Cat. Het. 3:470. (S)
 1870 *Agapophyta*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1893 *Agapophyta*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1909 *Agapophyta*: Kirkaldy, Cat. Hem. 1:XXXV, 346. (Tsp. S)
 1945 *Agapophyta*: Blöte, Zool. Meded. 25:286-287. (Ks)
 1952 *Agapophyta*: Dupuis, Bull. Soc. Zool. Fr. 77:452. (N)
 1955 *Agapophyta*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
 1957 *Agapophyta*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442.
 1972 *Agapophyta*: Jordan, Handb. Zool. 4(2)2/20:39. (L)

Agapophyta astridae Schouteden, 1933

- 1933 *Agapophyta astridae* Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51-52.
 1969 *Agapophyta astridae*: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):4. (T)

Distribution: Sumatra.

Agapophyta aurantiaca Blöte, 1945

- 1945 *Agapophyta aurantiaca* Blöte, Zool. Meded. 25:287, fig. 2a. (K)

Distribution: Solomons (Kei I.)

Agapophyta bipunctata Guérin-Meneville, 1831

- 1831 *Agapophyta bipunctata* Guérin-Meneville, Voy. Coq. Ins. pl. 11 fig. 15. (no text)
 1833 *Agapophyta bipunctata*: Laporte, Mag. Zool. (Guérin-Meneville), 2:63, pl. 54, fig. 9.
 1835 *Agapophyta bipunctata*: Boisduval, Voy. Astrolabe Ent. 2:626-627, pl. 2 fig. 5. (D)
 1835 *Agapophyta bipunctata*: Burmeister, Handb. Ent. 2:347, 353. (S, R)
 1838 *Agapophyta bipunctata*: Guérin-Meneville, Voy. Coq. Ins. 2(2):168. (D)
 1840 *Agapophyta bipunctata*: Blanchard, Hist. Nat. Ins. 3:143. (S, D)
 1843 *Agapophyta bipunctata*: Amyot & Serville, Hist. Nat. Ins. Hem. 136. (S, Dn)
 1851 *Agapophyta bipunctata*: Herrich-Schäffer, Wanz. Ins. 9:309. (L)
 1855 *Agapophyta bipunctata*: Montrouzier, Ann. Soc. Agric. Lyon (2)7(1):101. (Dn, H, R)
 1859 *Agapophyta bipunctata*: Dohrn, Cat. Hem. 20. (L)
 1868 *Agapophyta bipunctata*: Vollenhoven, Faune Ent. Indo-Neerl. 3:20-21. (S, D, R)
 1868 *Agapophyta bipunctata*: Walker, Cat. Het. 3:470. (S, R)
 1870 *Agapophyta bipunctata*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1888 *Agapophyta bipunctata*: Distant, Trans. Ent. Soc. Lond. 1888(4):480. (R)
 1893 *Agapophyta bipunctata*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900 *Agapophyta bipunctata*: Horváth, Zoolog.

- Forschungsreisen 5:117. (S, R)
- 1901 *Agapophyta bipunctata*: Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
- 1905 *Agapophyta bipunctata*: Kuhlitz, Zool. Jahrb., Suppl. 8, Festschr. Mobius: 601, 606-616, figs. G-H, J-N.
- 1907 *Agapophyta bipunctata*: Schouteden, Ann. Soc. Ent. Belg. 51:112. (L)
- 1909 *Agapophyta bipunctata*: Kirkaldy, Cat. Hem. 1:346. (S)
- 1933 *Agapophyta bipunctata*: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51.
- 1945 *Agapophyta bipunctata*: Blöte, Zool. Meded. 25:287, fig. 2b. (Dn, R, K)
- 1952 *Agapophyta bipunctata*: Dupuis, Bull. Soc. Zool. Fr. 77:452, 453. (N)
- 1957 *Agapophyta bipunctata*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447. (Ts, type locality)
- 1968 *Agapophyta bipunctata*: Black, Ent. Medd. 36:561. (R)
- 1969 *Agapophyta bipunctata*: Kumar, Aust. J. Zool. 17:557, 559, 560, 567, 569, 572, 581-585, figs. 2, 16, 66-69, 91, 109-113. (M, H, N)
- 1987 *Agapophyta bipunctata*: Schaefer & Ahmad, Phytophaga 1:27. (H)
- Distribution:** Australia (Queensland, Thursday I.), Bismarck Archipelago (Duke of York Is., New Britain), Malay Peninsula, Moluccas (Aru I., Buru I., Misool Is., Salawati I.), New Guinea (New Guinea, Woodlark I.), Solomons (Kei Is., Kilinailau Is.), Sulawesi (Celebes I.).
- Agapophyta boschmai* Blöte, 1945
- 1945 *Agapophyta boschmai* Blöte, Zool. Meded. 25:287-188, fig. 2c. (K)
- Distribution:** Moluccas (Aru Is.).
- Agapophyta distincta* Blöte, 1952
- 1952 *Agapophyta distincta* Blöte, Zool. Meded. 31(23):256-257, fig. 12.
- Distribution:** New Guinea.
- Agapophyta occidentalis* Blöte, 1945
- 1945 *Agapophyta occidentalis* Blöte, Zool. Meded. 25:287, 288-289, fig. 2
- Distribution:** Moluccas (Buru I.).
- Agapophyta similis* Blöte, 1945
- 1945 *Agapophyta similis* Blöte, Zool. Meded. 25:287, 289, fig. 2e. (K)
- Distribution:** New Guinea.
- Agapophyta ustulata* Blöte, 1945
- 1945 *Agapophyta ustulata* Blöte, Zool. Meded. 25:287-289, fig. 2f. (K)
- Distribution:** New Guinea.
- Agapophyta vankampeni* Blöte, 1945
- 1945 *Agapophyta vankampeni* Blöte, Zool. Meded. 25:287, 289-290, fig. 2g, h. (K)
- 1968 *Agapophyta vankampeni*: Black, Ent. Medd. 36:561. (R)
- Distribution:** New Guinea.
- Agapophyta viridula* Blöte, 1945
- 1945 *Agapophyta viridula* Blöte, Zool. Meded. 25:287, 290, fig. 2i. (K)
- 1952 *Agapophyta viridula*: Blöte, Zool. Meded. 31(23):256, fig. 11. (D)
- 1968 *Agapophyta viridula*: Cobben, Evol. Trends Het. Eggs: 112, 114, fig. 117. (E)
- 1981 *Agapophyta viridula*: Hinton, Biol. Ins. Eggs. 1:594.
- Distribution:** New Guinea.
- Axona* Stål, 1865 — see *Erga*
- Axona longitudinalis* (Westwood, 1837) — see *Erga longitudinalis*
- Chinatessa* Leston, 1955 — see *Peltocopta*
- Chinatessa natalicola* Leston, 1955 — see *Peltocopta crassiventris*
- Coptopelta* Bergroth, 1895 — see *Peltocopta*
- Coptopelta crassiventris* Bergroth, 1895 — see *Peltocopta crassiventris*
- Cumare* Blöte, 1945
- Type species: *Cumare pallida* Blöte, 1945, by original designation.
- 1945 *Cumare* Blöte, Zool. Meded. 25:285.
- 1955 *Cumare*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
- 1957 *Cumare*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442. (K)
- Cumare pallida* Blöte, 1945
- 1945 *Cumare pallida* Blöte, Zool. Meded. 25:285-286.
- 1957 *Cumare pallida*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441-447. (R)
- 1969 *Cumare pallida*: Kumar, Aust. J. Zool. 17:556, 569, 572, figs. 60-65, 90. (M)
- Distribution:** Australia (Queensland).
- Erga* Walker, 1868
- Type species: *Axona: Rhaphigaster longitudinalis* Westwood, 1837, by subsequent monotypy (Stål, 1870).
- Erga: Erga roseoflua* Walker, 1868 [= *Rhaphigaster longitudinalis* Westwood, 1837] by monotypy.
- 1865 *Axona* Stål, Hem. Afr. 1:224 (K) (preoccup. Walker, 1863)
- 1868 *Axona*: Walker, Cat. Het. 3:477 (L)
- 1868 *Erga* Walker, Cat. Het. 3:485-486.
- 1870 *Axona*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S)
- 1893 *Axona*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
- 1909 *Erga*: Horváth, Ann. Mus. Natn. Hung. 7:631. (N)
- 1909 *Axona*: Kirkaldy, Cat. Hem. 1:XXXVI. (Tsp)
- 1909 *Erga*: Kirkaldy, Cat. Hem. 1:345. (S)
- 1955 *Erga*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
- 1957 *Erga*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440-442. (S, K)
- 1975 *Erga*: Cross, Hem. S. Australia: pt. 1:78. (D)
- Erga longitudinalis* (Westwood, 1837)
- 1837 *Rhaphigaster longitudinalis* Westwood, Cat. Hope 1:31-32.
- 1867a *Axona longitudinalis*: Stål, Berl. Ent. Z. 10:157. (L)
- 1868 *Axona* (sic) *longitudinalis*: Walker, Cat. Het. 3:477. (S)
- 1868 *Erga roseoflua* Walker, Cat. Het. 3:486. (syn. by Stål, 1870)
- 1870 *Axona longitudinalis*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S, R)
- 1873 *Axona longitudinalis*: Walker, Cat. Het. Suppl. 25. (S)
- 1893 *Axona longitudinalis*: Lethierry & Severin, Cat. Gen.

Hem. 1:223. (S)

1900a *Axona longitudinalis*: Distant, Ann. Mag. Nat. Hist. (7)6:234. (S)1905 *Axona longitudinalis*: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211. (R)1909 *Erga longitudinalis*: Kirkaldy, Cat. Hem. 1:345. (S)1945 *Erga longitudinalis*: Blöte, Zool. Meded. 25:286. (L)1957 *Erga longitudinalis*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440. (S)1964 *Erga longitudinalis*: Kumar, Proc. R. Soc. Queensl. 75(8):63, text fig. 7b. (M)1969 *Erga longitudinalis*: Kumar, Aust. J. Zool. 17:555, 557, 560, 564, 569, 572, 585-589, figs. 1a, 1b, 13, 19, 43-45, 86, 96, 114-118. (M, H, E, N, B)1970 *Erga longitudinalis*: Woodward et al., Ins. Austral. 450. (Dn, H)1975 *Erga longitudinalis*: Gross, Hem. S. Australia pt. 1:78-79, figs. 16, 17A, 17B. (D, R, T)1987 *Erga longitudinalis*: Schaefer & Ahmad, Phytophaga 1:27. (H)**Distribution:** Australia.*Erga roseoflva* Walker, 1868 — *Erga longitudinalis***Garceus** Distant, 1893Type species: *Garceus fidelis* Distant, 1893, by monotypy.1893 *Garceus* Distant, Ann. Mag. Nat. Hist. (6)11:434-435.1893 *Garceus*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (L)1909 *Garceus*: Kirkaldy, Cat. Hem. 1:359. (L)1910 *Garceus*: Distant, Ann. Mag. Nat. Hist. (8)6:594-595. (D)1957 *Garceus*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442, 447. (K, moved to Oncomerinae)*Garceus fidelis* Distant, 18931893 *Garceus fidelis* Distant, Ann. Mag. Nat. Hist. (6)11:435.1893 *Garceus fidelis*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (L)1909 *Garceus fidelis*: Kirkaldy, Cat. Hem. 1:359. (L)1910 *Garceus fidelis*: Distant, Ann. Mag. Nat. Hist. (8)6:595. (Dn)1935 *Garceus fidelis*: Bequaert, Bull. Brooklyn Ent. Soc. 30:183. (maternal care)1957 *Garceus fidelis*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447, fig. 15. (R)1969 *Garceus fidelis*: Kumar, Aust. J. Zool. 17:601. (R)**Distribution:** Australia (Queensland).*Lynamorpha* Westwood, 1837Type species: *Lynamorpha rosea* Westwood, 1837, designated by Kirkaldy, 1909.1837 *Lynamorpha* Westwood, Cat. Hope 1:27-28.1846 *Lynamorpha*: Agassiz, Nomen. Zool. Hem. 12 (Ety)1851 *Lynamorpha*: Dallas, List. Hem. 1:318, 346. (K)1865 *Lynamorpha*: Stål, Hem. Afr. 1:224. (K)1868 *Lynamorpha*: Vollenhoven, Faune Ent. Indo-Neerl. 3:35. (D)1870 *Lynamorpha*: Stål, Sv. Vet. Akad. Handl. 9(1) 61. (S)1893 *Lynamorpha*: Lethierry & Severin, Cat. Gen. Hem. 1:223.1900a *Lynamorpha*: Horváth, Term. Füzet. 23:340, 341-344. (K, D, Ks)1909 *Lynamorpha*: Kirkaldy, Cat. Hem. 1:345. (S)1914 *Lynamorpha*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)1955 *Lynamorpha*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)1956 *Lynamorpha*: Miller, Biol. Het. ed. 1:45. (Dn)1957 *Lynamorpha*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 442, 447. (K, Ks)1970 *Lynamorpha*: Woodward et al., Ins. Austral. 450. (L)1971 *Lynamorpha*: Miller, Biol. Het. 54. (Dn)*Lynamorpha* subgenus *Diploxiphus* Horváth, 1900Type species: *Lynamorpha maculifer* Tryon, 1892, by monotypy.1900a *Lynamorpha* (*Diploxiphus*) Horváth, Term. Füzet. 23:344, 352. (K)1909 *Lynamorpha* (*Diploxiphus*) (sic): Kirkaldy, Cat. Hem. 1:345. (L)*Lynamorpha* (*Diploxiphus*) *brongersmai* Blöte, 19521952 *Lynamorpha* (*Diploxiphus*) *brongersmai* Blöte, Zool. Meded. 31(23):256, figs. 9-10.**Distribution:** New Guinea*Lynamorpha* (*Diploxiphus*) *horvathi* Blöte, 19521952 *Lynamorpha* (*Diploxiphus*) *horvathi* Blöte, Zool. Meded. 31(23):254-256, figs. 7-8.**Distribution:** New Guinea*Lynamorpha* (*Diploxiphus*) *maculifer* Tryon, 18921892 *Lynamorpha maculifer* Tryon, Ann. Queensl. Mus. 2:19.1893 *Lynamorpha maculifer*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)1900a *Lynamorpha* (*Diploxiphus*) *maculifera* (sic): Horváth, Term. Füzet. 23:344, 352, 353, pl. 9 fig. 8, pl. 10 fig. 8. (K, D)1909 *Lynamorpha* (*Diploxiphus*) (sic) *maculifera* (sic): Kirkaldy, Cat. Hem. 1:346. (S)1945 *Lynamorpha* (*Diploxiphus*) (sic) *maculifera* (sic): Blöte, Zool. Meded. 25:286. (R)1952 *Lynamorpha* (*Diploxiphus*) *maculifer*: Blöte, Zool. Meded. 31(23):254-255, figs. 5-6.**Distribution:** Moluccas (Salawati I.) New Guinea (Fakfak I., New Guinea, Yule I.)*Lynamorpha* subgenus *Lynamorpha* Westwood, 18371900a *Lynamorpha* (*Lynamorpha*) Horváth, Term. Füzet. 23:342, 344. (K, D)1909 *Lynamorpha* (*Lynamorpha*): Kirkaldy, Cat. Hem. 1:345. (L)*Lynamorpha pallida* Westwood, 1837 — see *Lynamorpha rosea**Lynamorpha* (*Lynamorpha*) *perelegans* Vollenhoven, 1868 — NOMEN DUBIUM1868 *Lynamorpha perelegans* Vollenhoven, Faune Ent. Indo-Neerl. 3:35.1907a *Lynamorpha perelegans*: Schouteden, Notes Leyden Mus. 30:44. (type not found)1945 *Lynamorpha perelegans*: Blöte, Zool. Meded. 25:286. (nomen dubium)*Lynamorpha ramifera* Walker, 1869 — see *Tanolis ramifera**Lynamorpha* (*Lynamorpha*) *rosea* Westwood, 18371837 *Lynamorpha rosea* Westwood, Cat. Hope 1:28.

- 1837 *Lynamorpha pallida* Westwood, Cat. Hope 1:28. (syn. by Dallas, 1851)
 1851 *Lynamorpha rosea*: Dallas, List. Hem. 1:346. (S, R)
 1863 *Lynamorpha rosea*: Stål, Trans. Ent. Soc. Lond. (3):1:598. (cf. *Lynamorpha diluta*)
 1859 *Lynamorpha rosea*: Dohrn, Cat. Hem. 21. (S)
 1868 *Lynamorpha rosea*: Walker, Cat. Het. 3:476. (R)
 1870 *Lynamorpha rosea*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S)
 1893 *Lynamorpha rosea*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900 *Lynamorpha rosea*: Breddin, Ent. Nachr. Berlin 26(2-3):38, figs. 9, 10. (D)
 1900a *Lynamorpha (Lynamorpha) rosea*: Horváth, Term. Füzet. 23:342, 344, pl. 9 figs. 1, 9. (K, D, S)
 1901c *Lynamorpha rosea*: Distant, Proc. Zool. Soc. Lond. 1900 (4):819, 823. (Ts, S)
 1905 *Lynamorpha rosea*: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211. (R)
 1908 *Lynamorpha rosea*: Schouteden, Notes Leyden Mus. 30:47, 48, 49, fig. 1. (cf. *Lynamorpha pallida*)
 1908 *Lynamorpha pallida*: Schouteden, Notes Leyden Mus. 30:47, 48, 49, fig. 2. (not syn.)
 1909 *Lynamorpha (Lynamorpha) rosea*: Kirkaldy, Cat. Hem. 1:345. (S)
 1945 *Lynamorpha (Lynamorpha) rosea*: Blöte, Zool. Meded. 25:286. (syn. with *Lynamorpha pallida* discussed; T)
 1945 *Lynamorpha (Lynamorpha) rosea* var. *pallida*: Blöte, Zool. Meded. 25:286.
 1957 *Lynamorpha rosea*: Leston & Scudder, Ann. Mag. Nat. Hist. (12):10:440, 447. (S, K, R)
 1962 *Lynamorpha rosea*: Kumar, Ent. Tidskr. 83(1-2):47, 54, figs 23, 65. (Ge)
 1969 *Lynamorpha rosea*: Kumar, Aust. J. Zool. 17:557, 559, 560, 562, 569, 589-594, figs. 3, 10, 12, 18, 32-35, 82, 97, 119-123. (M, H, B, E, N)
 1987 *Lynamorpha rosea*: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: Australia.

Lynamorpha subgenus *Lyrodes* Horváth, 1900

Type species: *Lynamorpha basalis* Horváth, 1900, designated by Kirkaldy, 1909.

- 1900a *Lynamorpha (Lyrodes)* Horváth, Term. Füzet. 23:342, 345.
 1909 *Lynamorpha (Lyrodes)*: Kirkaldy, Cat. Hem. 1:XXXVI, 345. (Tsp)

Lynamorpha (Lyrodes) ambigua Horváth, 1900

- 1868 *Lynamorpha vollenhovi* (sic): Vollenhoven, Faune Ent. Indo-Neerl. 3 pl. 4 fig. 3. 3a. (only, misdet. sec. Horváth, 1900a)
 1900a *Lynamorpha (Lyrodes) ambigua* Horváth, Term. Füzet. 23:342, 343, 349, pl. 9 fig. 4, pl. 10 fig. 4. (K)
 1907a *Lynamorpha ambigua*: Schouteden, Notes Leyden Mus. 30:44. (L)
 1908 *Lynamorpha ambigua*: Schouteden, Notes Leyden Mus. 30:50-51. (Dn, R)
 1909 *Lynamorpha (Lyrodes) ambigua*: Kirkaldy, Cat. Hem. 1:345-346. (S)
 1919 *Lynamorpha ambigua*: Horváth, Abh. Senckenb. Naturf. Ges. 35(3):308. (R; original description amended)
 1945 *Lynamorpha (Lyrodes) ambigua*: Blöte, Zool. Meded. 25:286. (R)

Distribution: Moluccas (Aru Is., Salawati I.), New Guinea.

Lynamorpha (Lyrodes) basalis Horváth, 1900

- 1900 *Lynamorpha basalis* Horváth, Zoolog. Forschungsreisen 5:633. (only; see also *Lynamorpha (Lyrodes) diluta*)
 1900a *Lynamorpha (Lyrodes) basalis*: Horváth, Term. Füzet. 23:343, 345, pl. 10 fig. 1. (K, D)
 1908 *Lynamorpha basalis*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha (Lyrodes) basalis*: Kirkaldy, Cat. Hem. 1:346. (S)

Distribution: New Guinea.

Lynamorpha (Lyrodes) breddini Horváth, 1900

- 1900 *Lynamorpha diluta*: Breddin, Ent. Nachr. Berlin 26(2-3):35, 36, fig. 5. (only sec. Horváth, 1900a)
 1900a *Lynamorpha (Lyrodes) breddini*: Horváth, Term. Füzet. 23:343, 347-348, pl. 9 fig. 10. (K, D)
 1908 *Lynamorpha breddini*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha (Lyrodes) breddini*: Kirkaldy, Cat. Hem. 1:346. (S)
 1945 *Lynamorpha (Lyrodes) breddini*: Blöte, Zool. Meded. 25:286. (R)
 1964 *Lynamorpha breddini*: Kumar, Proc. R. Soc. Queensl. 75(8):63, fig. 6c (conducting chamber)

Distribution: New Guinea

Lynamorpha (Lyrodes) diluta Stål, 1863

- 1863 *Lynamorpha diluta* Stål, Trans. Ent. Soc. Lond. (3):1:598.
 1868 *Lynamorpha diluta*: Vollenhoven, Faune Ent. Indo-Neerl. 3:36. (D)
 1868 *Lynamorpha diluta*: Walker, Cat. Het. 3:476. (R)
 1870 *Lynamorpha diluta*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1893 *Lynamorpha diluta*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
 1900 *Lynamorpha basalis*: Horváth, Zoolog. Forschungsreisen 5:633. (excl. sec. Horváth, 1900a)
 1900 *Lynamorpha diluta*: Breddin, Ent. Nachr. Berlin 26(2-3):35-36, fig. 4. (misdet.; see *Lynamorpha breddini*)
 1900b *Lynamorpha diluta*: Distant, Ann. Mag. Nat. Hist. (7):6:379. (part. Stål's type)
 1900a *Lynamorpha (Lyrodes) diluta*: Horváth, Term. Füzet. 23:342, 343, 348-349, pl. 9 figs. 3, 11. (K, D, S)
 1901 *Lynamorpha diluta*: Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
 1909 *Lynamorpha (Lyrodes) diluta*: Kirkaldy, Cat. Hem. 1:346. (S)
 1912 *Lynamorpha diluta*: Distant, Trans. Ent. Soc. Lond. 1911(3):594. (R)
 1914 *Lynamorpha diluta*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1969 *Lynamorpha diluta*: Kumar, Aust. J. Zool. 17:562, 569, 572, 595-597, figs. 36, 37, 83, 124-126. (M, N)
Distribution: Moluccas (Aru Is., Salawati I.), New Guinea, Sulawesi (Celebes).

Lynamorpha (Lyrodes) edulis Blöte, 1952

- 1952 *Lynamorpha (Lyrodes) edulis* Blöte, Zool. Meded. 31(23):251-253, figs. 1-2.

Distribution: New Guinea.

Lynamorpha (Lyrodes) impar Horváth, 1900

- 1900a *Lynamorpha (Lyrodes) impar* Horváth, Term. Füzet. 23:343, 346, pl. 10 fig. 2.
 1908 *Lynamorpha impar*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha (Lyrodes) impar*: Kirkaldy, Cat. Hem. 1:346.

Distribution: New Guinea.

Lynamorpha (Lyrodes) *parens* Breddin, 1900

- 1900 *Lynamorpha parens* Breddin, Ent. Nachr. Berlin 26(2-3):37-38, fig. 8.
 1900a *Lynamorpha* (Lyrodes) *parens* Horváth, Term. Füzet. 23:342, 343, 350, pl. 9 figs. 5, pl. 10 fig. 5. (K, D)
 1908 *Lynamorpha parens* Schouteden, Notes Leyden Mus. 30:50. (R)
 1908 *Lynamorpha parens* Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha* (Lyrodes) *parens* Kirkaldy, Cat. Hem. 1:346. (S)
 1945 *Lynamorpha* (Lyrodes) *parens* Blöte, Zool. Meded. 25:286. (R)
 1957 *Lynamorpha parens* Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447. (S, K, R)
 1969 *Lynamorpha parens* Kumar, Aust. J. Zool. 17:562, 569, 601, figs. 38, 39, 84. (M, R)
 1971 *Lynamorpha parens* Gaedike, Beitr. Ent. 21(1-2):95 (T)

Distribution: Australia (Queensland), Moluccas (Aru Is.).

Lynamorpha (Lyrodes) *persimilis* Horváth, 1900

- 1900a *Lynamorpha* (Lyrodes) *persimilis* Horváth, Term. Füzet. 23:342, 343, 346-347, pl. 9 fig. 2, pl. 10 fig. 3. (K)
 1908 *Lynamorpha persimilis* Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha* (Lyrodes) *persimilis* Kirkaldy, Cat. Hem. 1:346. (S)
 1919 *Lynamorpha persimilis* Horváth, Abh. Senckenb. Naturf. Ges. 35(3):308. (original description amended)
 1945 *Lynamorpha* (Lyrodes) *persimilis* Blöte, Zool. Meded. 25:286. (R)

Distribution: New Guinea

Lynamorpha (Lyrodes) *picta* Distant, 1893

- 1893 *Lynamorpha picta* Distant, Ann. Mag. Nat. Hist. (6)11:430.
 1893 *Lynamorpha picta* Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
 1900a *Lynamorpha picta* Horváth, Term. Füzet. 23:351. (as syn. of *Lynamorpha vollenhoveni*)
 1900b *Lynamorpha picta* Distant, Ann. Mag. Nat. Hist. (7)6:376-379. (cf. *Lynamorpha vollenhoveni*)
Distribution: Moluccas (Bachan Is.)

Lynamorpha (Lyrodes) *plagifer* Blöte, 1952

- 1952 *Lynamorpha* (Lyrodes) *plagifer* Blöte, Zool. Meded. 31(23):253-254, figs. 3-4

Distribution: New Guinea

Lynamorpha (Lyrodes) *soror* Breddin, 1900

- 1900 *Lynamorpha soror* Breddin, Ent. Nachr. Berlin 26(2-3):36-37, figs. 6, 7.
 1900a *Lynamorpha* (Lyrodes) *soror* Horváth, Term. Füzet. 23:343, 350-351, pl. 9 figs. 6, pl. 10 fig. 6. (K, D)
 1908 *Lynamorpha soror* Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha* (Lyrodes) *soror* Kirkaldy, Cat. Hem. 1:346. (S)
 1910a *Lynamorpha* (Lyrodes) *soror* Kirkaldy, Can. Ent. 42:62. (R)
 1919 *Lynamorpha soror* Horváth, Abh. Senckenb. Naturf. Ges. 35(3):309. (R)
 1971 *Lynamorpha soror* Gaedike, Beitr. Ent. 21(1-2):99. (T)
Distribution: New Guinea.

Lynamorpha (Lyrodes) *vollenhoveni* Stal, 1867

- 1867 *Lynamorpha vollenhoveni* Stal, Tijdschr. Ent. (2)2:124.
 1868 *Lynamorpha vollenhovii* (sic) Vollenhoven, Faune Ent. Indo-Neerl. 3:35-36, pl. 4, fig. 3 and fig. 3 (sec. Horváth, 1900a, figs. 3 and 3a misdet.; see *Lynamorpha ambigua*)
 1868 *Lynamorpha vollenhoveni* Walker, Cat. Het. 3:476. (S)
 1870 *Lynamorpha vollenhoveni* Stal, Sv. Vet. Akad. Handl. 9(1):62. (S, R)
 1893 *Lynamorpha picta* Distant, Ann. Mag. Nat. Hist. (6)11:430. (syn. by Horváth, 1900, disputed by Distant, 1900)
 1893 *Lynamorpha vollenhoveni* Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900 *Lynamorpha vollenhoveni* Breddin, Ent. Nachr. Berlin 26(2-3):34-35, fig. 3. (S, Dn, R)
 1900a *Lynamorpha* (Lyrodes) *vollenhovii* (sic) Horváth, Term. Füzet. 23:343, 351-352, pl. 9 fig. 7, pl. 10 fig. 7. (K, D, S)
 1908 *Lynamorpha vollenhoveni* Schouteden, Notes Leyden Mus. 30:49-50. (Vollenhoven's specimens)
 1909 *Lynamorpha* (Lyrodes) *vollenhoveni* Kirkaldy, Cat. Hem. 1:346. (S)
 1945 *Lynamorpha* (Lyrodes) *vollenhoveni* Blöte, Zool. Meded. 25:286. (R)

Distribution: Moluccas (Aru Is., Bachan Is., Halmahera I., Morotai I., Waigeo I.), New Guinea.

Merocoris Burmeister, 1834 — see *Plisthenes*

Merocoris merianae (Fabricius, 1775) — see *Plisthenes merianae*

Mesolea Breddin, 1902 — see *Neosalica*

Mesolea pedestris Breddin, 1902 — see *Neosalica pedestris*

Musgraveia Leston & Scudder, 1957

Type species. *Oncoscelis sulciventris* Stal, 1863, by original designation.

- 1957 *Musgraveia* Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 443, 445-447. (K, Ks)

Musgraveia antennatus (Distant, 1880)

- 1880 *Oncoscelis antennatus* Distant, Trans. Ent. Soc. Lond. 1880(3):150-151, pl. 5, fig. 6.
 1893 *Oncoscelis antennatus* Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
 1909 *Rhoecocoris antennatus* Kirkaldy, Cat. Hem. 1:345. (L)
 1957 *Musgraveia antennatus* Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 446, 447, fig. 4. (K)
 1969 *Musgraveia antennatus* Kumar, Aust. J. Zool. 17:562, 569, 601, figs. 29-31, 81. (M, R)
Distribution: Australia (Queensland, Torres Straits).

Musgraveia sulciventris (Stal, 1863)

- 1863 *Oncoscelis sulciventris* Stal, Trans. Ent. Soc. Lond. (3)1:598-599.
 1868 *Oncoscelis sulciventris* Walker, Cat. Het. 3:477. (R)
 1870 *Oncoscelis sulciventris* Stal, Sv. Vet. Akad. Handl. 9(1):61. (R)
 1892 *Oncoscelis sulciventris* Olliff, Agric. Gaz. N.S.W. 3:368-370, pl. 24A. (B)
 1893 *Oncoscelis sulciventris* Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)

- 1901 *Stilida indecora*: Froggatt, Agric. Gaz. N.S.W. 12(12):1596-1597, fig. 13. (misdet. sec. Froggatt, 1907; H, R, I)
- 1905 *Oncoscelis sulciventris*: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211. (R)
- 1907 *Rhoecocoris (Oncoscelis) sulciventris*: Froggatt, Australian Insects: 331, pl. 31 fig. 13. (H, Dn)
- 1909 *Rhoecocoris sulciventris*: Kirkaldy, Cat. Hem. 1:345. (S, H)
- 1924 *Oncoscelis sulciventris*: Girault, Bull. Div. Ent. Pl. Path. Od. 1:1-24. (B)
- 1935 *Rhoecocoris sulciventris*: Summerville, Queensl. Agric. J. 43:245-253, pl. 108 figs. 1-7. (R, H, E, I, D, B)
- 1938 *Rhoecocoris sulciventris*: Hely, Agric. Gaz. N.S.W. 49:378-379, 2 figs. (B)
- 1945 *Rhoecocoris sulciventris*: Blöte, Zool. Meded. 25:285. (L)
- 1957 *Musgraveia sulciventris*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 446, 447, figs. 1-3. (K)
- 1961 *Rhoecocoris sulciventris*: Waterhouse et al., J. Ins. Physiol. 6:116-118. (sgf)
- 1962 *Lyrarompha sulciventris*: Kumar, Ent. Tidskr. 83(1-2):47, figs 20-22. (Ge)
- 1962 *Rhoecocoris sulciventris*: Park & Sutherland, Aust. J. Chem. 15(2):172-174. (sgf)
- 1964 *Musgraveia sulciventris*: Kumar, Proc. R. Soc. Queensl. 75(8):63, fig. 7a. (M)
- 1967 *Musgraveia sulciventris*: Gilby & Waterhouse, Nature 216:91. (sgf)
- 1969 *Musgraveia sulciventris*: Kumar, Aust. J. Zool. 17:557, 559, 560, 569, 572-576, figs. 7, 11, 15, 25-28, 80, 94, 99-103. (M, H, E, N)
- 1969 *Musgraveia sulciventris*: McDonald, Aust. J. Zool. 17:817-820. (B)
- 1970 *Musgraveia sulciventris*: Woodward et al., Ins. Austral. 450, fig. 26.64A (Dn, H)
- 1975 *Musgraveia sulciventris*: Macleod et al., J. Ins. Physiol. 21:1219-1223. (sgf)
- 1979 *Musgraveia sulciventris*: Staddon, Adv. Ins. Physiol. 14:403. (scent gland)
- 1981 *Musgraveia sulciventris*: Blum, Chem. Def. Arths. 54, 58, 66, 113-114, 116. (sgf)
- 1987 *Musgraveia sulciventris*: Schaefer & Ahmad, Phytophaga 1:27. (H)
- Distribution: Australia: (Queensland, N.S. Wales).
- 1:64, fig. 300. (K)
- 1980 *Mesolea*: Chen, Ghizhou Agric. Sci. 1980(3):55. (S, D)
- Neosalica forbesi*: Distant, 1882
- 1882 *Neosalica forbesi*: Distant, Ent. Mo. Mag. 19(223): 157-158.
- 1893 *Neosalica forbesi*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1909 *Neosalica forbesi*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1955 *Neosalica forbesi*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):67. (L)
- 1969 *Neosalica forbesi*: Kumar, Aust. J. Zool. 17:569, 572, figs. 77, 78. (M)
- Distribution: Sumatra.
- Neosalica nigrovittata*: Distant, 1921 — see *Neosalica pedestris*
- Neosalica pedestris* (Breddin, 1902).
- 1902 *Mesolea pedestris*: Breddin, Wien. Ent. Ztg. 21(4):100-101.
- 1908 *Mesolea pedestris*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1908 *Mesolea pedestris*: Distant, Faun. Brit. India Rh. 4(2):457. (D, after Breddin)
- 1909 *Mesolea pedestris*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1921 *Neosalica nigrovittata*: Distant, Entomol. 54 (698):164-165. (syn. by Leston, 1955)
- 1932a *Neosalica nigrovittata*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
- 1935 *Neosalica nigrovittata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:129. (R)
- 1935 *Neosalica nigrovittata*: Tang, Cat. Ins. Sin. 2:362. (R)
- 1948 *Neosalica nigrovittata*: Hoffmann, Lingnan Sci. J. 22(1-4):28. (not in China)
- 1955 *Neosalica pedestris*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):67. (S, R)
- 1962 *Neosalica pedestris*: Yang, Econ. Ins. Fauna China 2:40, 43-44, pl. 4 fig. 31.
- 1971 *Neosalica pedestris*: Gaedike, Beitr. Ent. 21(1-2):95. (T)
- 1980 *Mesolea pedestris*: Chen, Ghizhou Agric. Sci. 1980(3):54, 55-56. (S, K)
- Distribution: Myanmar, China (Yunnan), India (North India, Sikkim), Vietnam.

Neosalica Distant, 1882

Type species: *Neosalica*: *Neosalica forbesi* Distant, 1882, by monotypy.

Mesolea: *Mesolea pedestris* Breddin, 1902, by monotypy.

- 1882 *Neosalica*: Distant, Ent. Mo. Mag. 19(223): 157
- 1893 *Neosalica*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1902 *Mesolea*: Breddin, Wien. Ent. Ztg. 21(4): 99-100. (syn. by Distant, 1921)
- 1908 *Mesolea*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1908 *Mesolea*: Distant, Faun. Brit. India Rh. 4(2):456-457. (D, after Breddin)
- 1909 *Mesolea*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1909 *Neosalica*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1921 *Neosalica*: Distant, Entomol. 54:(698):164. (S)
- 1935 *Neosalica*: Tang, Cat. Ins. Sin. 2:362. (R)
- 1955 *Neosalica*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63, 67, fig. 6. (K, S)
- 1977 *Mesolea*: Hsiao et al., Handb. Chinese Hem.-Het.

Oncomeris Laporte, 1833

Type species: *Tessaratomia flavicornis* Guérin-Ménéville, 1831, by monotypy.

- 1833 *Oncomeris*: Laporte, Mag. Zool. (Guérin-Ménéville). 2:55, 60. (K)
- 1835 *Oncomeris* (sic): Burmeister, Handb. Ent. 2:347, 352. (part: K, D)
- 1840 *Oncomeris*: Blanchard, Hist. Nat. Ins. 3:142. (part: D)
- 1843 *Oncomeris* (sic): Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 168-169. (K, D)
- 1844 *Oncomeris* (sic): Herrich-Schäffer, Wanz. Ins. 7:123. (D)
- 1846 *Oncomeris*: Agassiz, Nomen. Zool. 14. (Ety)
- 1846 *Oncomeris* (sic): Agassiz, Nomen. Zool. Hem. 14. (Ety)
- 1850 *Oncomeris*: Spinola, Gen. Ins. Attr. 31. (K)
- 1851 *Oncomeris*: Dallas, List. Hem. 1:318, 346. (K, S)
- 1851 *Oncomeris*: Herrich-Schäffer, Wanz. Ins. 9:383. (K)
- 1852 *Oncomeris*: Spinola, Mem. Soc. Ital. Modena 25(1):71. (reprint of 1850 paper)

- 1865 *Oncomeris*: Stål, Hem. Afr. 1:223. (K)
 1868 *Oncomeris*: Vollenhoven, Faune Ent. Indo-Neerl. 3:29. (D)
 1870 *Oncomeris*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1893 *Oncomeris*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a *Oncomeris*: Horváth, Term. Füzet. 23:341, 353-354. (K, Ks)
 1909 *Oncomeris*: Kirkaldy, Cat. Hem. 1:XXXVI, 347. (Tsp, S)
 1914 *Oncomeris*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1955 *Oncomeris*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
 1956 *Oncomeris*: Miller, Biol. Het. ed. 1:45. (Dn)
 1957 *Oncomeris*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442. (K)
 1970 *Oncomeris*: Woodward et al., Ins. Austral. pl. 3, fig. 5. (colored fig.)
 1971 *Oncomeris*: Miller, Biol. Het. 54. (Dn)

Oncomeris bernsteinii Vollenhoven, 1868

- 1868 *Oncomeris* (sic) *bernsteinii* Vollenhoven, Faune Ent. Indo-Neerl. 3:30-31, pl. 4 fig. 1.
 1868 *Oncomeris bernsteinii*: Walker, Cat. Het. 3:475. (L)
 1870 *Oncomeris bernsteinii*: Stål, Sv. Vet. Akad. Handl. 9(1):63. (R)
 1893 *Oncomeris bernsteinii*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (L)
 1900a *Oncomeris bernsteinii*: Breddin, Abh. Senckenb. Naturf. Ges. 25:147. (R)
 1900a *Oncomeris bernsteinii*: Horváth, Term. Füzet. 23:354-357. (K, D)
 1907a *Oncomeris bernsteinii*: Schouteden, Notes Leyden Mus. 30:44. (T, Dn)
 1909 *Oncomeris bernsteinii*: Kirkaldy, Cat. Hem. 1:347. (S)
 1945 *Oncomeris bernsteinii*: Blöte, Zool. Meded. 25:290. (R, T)

Distribution: Moluccas (Halmahera I., Morotai I.).

Oncomeris chrysoptera Vollenhoven, 1868

- 1868 *Oncomeris flavicornis* var. *chrysoptera* Vollenhoven, Faune Ent. Indo-Neerl. 3:30, pl. 4 fig. 2
 1900a *Oncomeris chrysoptera*: Horváth, Term. Füzet. 23:353, 355, figs. 1, 3, 5. (K, D, R)
 1909 *Oncomeris chrysoptera*: Kirkaldy, Cat. Hem. 1:347. (S)
 1945 *Oncomeris chrysoptera*: Blöte, Zool. Meded. 25:290. (R, T)

Distribution: New Guinea, Moluccas (Waigeo I.)

Oncomeris chrysoptera ramulosus Horváth, 1900

- 1900a *Oncomeris chrysoptera* var. *ramulosus* Horváth, Term. Füzet. 23:355.
 1909 *Oncomeris chrysoptera* var. *ramulosa*: Kirkaldy, Cat. Hem. 1:347. (L)
 1945 *Oncomeris chrysoptera* var. *ramulosa*: Blöte, Zool. Meded. 25:290. (R)

Distribution: Moluccas (Aru Is., Ternate I.), New Guinea.

Oncomeris dilatatus Vollenhoven, 1868 — see *Plisthenes confusus**Oncomeris flavicornis* (Guérin-Ménéville, 1831)

- 1831 *Tessaratomia flavicornis* Guérin-Ménéville, Voy. Coq. Ins. 2(2)1:pl. 12 fig. 2 (no text)
 1833 *Oncomeris flavicornis*: Laporte, Mag. Zool. (Guérin), 2:60. (Tsp)

- 1835 *Tessaratomia flavicornis*: Boisdual, Voy. Astrolabe Ent. 2:631-632, pl. 2 fig. 10.
 1835 *Oncomeris* (sic) *flavicornis*: Burmeister, Handb. Ent. 2:353. (Dn, R)
 1838 *Tessaratomia flavicornis*: Guérin-Ménéville, Voy. Coq. Ins. 2(2)1:171 (D)
 1840 *Oncomeris flavicornis*: Blanchard, Hist. Nat. Ins. 3:142. (S, D)
 1843 *Oncomeris* (sic) *flavicornis*: Amyot & Serville, Hist. Nat. Ins. Hem. 169. (S, Dn)
 1844 *Oncomeris* (sic) *flavicornis*: Herrich-Schäffer, Wanz. Ins. 7:123. (L)
 1851 *Oncomeris* (sic) *flavicornis*: Herrich-Schäffer, Wanz. Ins. 9:308. (L)
 1851 *Oncomeris flavicornis*: Dallas, List. Hem. 1:346. (S, R)
 1859 *Oncomeris flavicornis*: Dohrn, Cat. Hem. 21. (L)
 1868 *Oncomeris* (sic) *flavicornis*: Vollenhoven, Faune Ent. Indo-Neerl. 3:30. (S, D, R)
 1868 *Oncomeris flavicornis*: Walker, Cat. Het. 3:475. (R)
 1870 *Oncomeris flavicornis*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S, R)
 1893 *Oncomeris flavicornis*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a *Oncomeris flavicornis*: Horváth, Term. Füzet. 23:353, 356-357, figs. 4, 6. (K, D, S, R)
 1901 *Oncomeris flavicornis*: Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
 1907 *Oncomeris flavicornis*: Froggatt, Australian Insects:331. (Dn)
 1909 *Oncomeris flavicornis*: Kirkaldy, Cat. Hem. 1:347. (S)
 1914 *Oncomeris flavicornis*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1945 *Oncomeris flavicornis*: Blöte, Zool. Meded. 25:290. (R)
 1952 *Oncomeris flavicornis*: Dupuis, Bull. Soc. Zool. Fr. 77:449, 451. (N)
 1957 *Oncomeris flavicornis*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:442, 447-448. (S, R)
 1969 *Oncomeris flavicornis*: Kumar, Aust. J. Zool. 17:555, 557, 560, 565, 569, 601, figs. 9, 17, 46-49, 87. (M, R)
Distribution: Australia (Queensland), Lesser Sunda Is. (Timor I.), Moluccas (Aru Is., Buru I., Ternate I., Waigeo I.), New Guinea, Sulawesi (Celebes).

Oncomeris flavicornis chrysoptera Vollenhoven, 1868 — see *Oncomeris chrysoptera**Oncomeris flavicornis gigantea* Horváth, 1900

- 1900a *Oncomeris flavicornis* var. *gigantea* Horváth, Term. Füzet. 23:357, fig. 7.
 1909 *Oncomeris flavicornis* var. *gigantea*: Kirkaldy, Cat. Hem. 1:347. (L)
 1945 *Oncomeris flavicornis* var. *gigantea*: Blöte, Zool. Meded. 25:290. (R)
Distribution: New Guinea.

Oncomeris morioanae (Fabricius, 1775) — see *Plisthenes morioanae**Oncomeris ostraciopoda* (Montrouzier, 1855)

- 1855 *Tessaratomia ostraciopoda* Montrouzier, Ann. Soc. Agric. Lyon (2)7(1):99-100.
 1859 *Oncomeris socius* Stål, Eugénie Resa 232. (syn. by Stål, 1870)
 1868 *Oncomeris socius*: Walker, Cat. Het. 3:475. (R)
 1870 *Oncomeris ostraciopoda*: Stål, Sv. Vet. Akad. Handl. 3(1):62. (S, R)
 1873 *Oncomeris ostraciopoda*: Walker, Cat. Het. Suppl. 25. (S)

- 1893 *Oncomeris ostracioplerus* (sic): Lethierry & Severin, Cat. Gen. Hem. 1:224.
 1900a *Oncomeris ostracioplerus*: Horváth, Term. Fuzet. 23:354, 358. (K, D, S, R)
 1909 *Oncomeris ostracioplerus*: Kirkaldy, Cat. Hem. 1:347. (S)
 1921 *Oncomeris ostracioplerus*: Lehmann, Arch. Naturges. Berlin. 87A(6):36. (R, Dn, T)
Distribution: New Caledonia, New Guinea (Woodlark I.).

Oncomeris robustus (Lepelletier & Serville, 1828) — see *Eusthenes robustus*

Oncomeris socius Stål, 1859 — see *Oncomeris ostracioplerus*

Oncomeris vicina Horváth, 1900

- 1900a *Oncomeris vicina* Horváth, Term. Fuzet. 23:354, 358-359, fig. 2. (K)
 1908 *Oncomeris vicina*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Oncomeris vicina*: Kirkaldy, Cat. Hem. 1:347. (L)
 1968 *Oncomeris vicina*: Black, Ent. Medd. 36:561. (R)
Distribution: Bismarck Archipelago (New Britain I.).

Oncomeris Laporte, 1833 — misspelling of *Oncomeris*

Oncoscelis Westwood, 1836 — see *Rhoecus*

Oncoscelis antennatus Distant, 1880 — see *Musgraveia antennatus*

Oncoscelis australasiae Westwood, 1836 — see *Rhoecus australasiae*

Oncoscelis sulciventris Stål, 1863 — see *Musgraveia sulciventris*

Peltocopta Bergroth, 1904

Type species: *Coptopelta*: *Coptopelta crassiventris* Bergroth, 1895, by monotypy.

Chinatessa: *Chinatessa natalicoloides* Leston, 1955, by original designation.

- 1895 *Coptopelta* Bergroth, Proc. R. Soc. Vict. 7(1894):290-291. (preoccup. Heude, 1880)
 1904 *Peltocopta* Bergroth, Wien. Ent. Ztg. 23(2):40. (Nn for *Coptopelta* Bergroth, 1895)
 1908 *Peltocopta*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (S)
 1909 *Peltocopta*: Kirkaldy, Cat. Hem. 1:353. (syn)
 1955 *Chinatessa* Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63, 64-66. (syn. by Leston & Scudder, 1957)
 1957 *Peltocopta*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442, 447. (S, K)

Peltocopta crassiventris (Bergroth, 1895)

- 1895 *Coptopelta crassiventris* Bergroth, Proc. R. Soc. Vict. 7(1894):291.
 1908 *Peltocopta crassiventris* Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Peltocopta crassiventris*: Kirkaldy, Cat. Hem. 1:353. (L)
 1955 *Chinatessa natalicoloides* Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):66-67, figs. 1-5. (syn. by Leston & Scudder, 1957)
 1957 *Peltocopta crassiventris*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447. (S, R)
 1964 *Peltocopta crassiventris*: Kumar, Proc. R. Soc. Queensl. 75(8):63-64, fig. 7c. (M)
 1969 *Peltocopta crassiventris*: Kumar, Aust. J. Zool. 17:557, 562, 569, 572, 597-600, figs. 4, 6, 14, 40-42, 85, 98,

127-129. (M, H, E, N, B)

1970 *Peltocopta crassiventris*: Woodward et al., Ins. Austral. pl. 3, fig. 7. (colored fig.)

1987 *Peltocopta crassiventris*: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: Australia (N.S. Wales, Queensland)

Piezosternaria — see **ONCOMERINIAE**

PIEZOSTERNINI — see **ONCOMERINIAE**

Piezosternum Amyot & Serville, 1843

Type species: *Piezosternum*: *Piezosternum mucronatum* (Palisot de Beauvois, 1806) [= *Cimex subulatus* Thunberg, 1783], designated by Kirkaldy, 1903.

Salica: *Salica excellens* Walker, 1868 [= *Cimex subulatus* Thunberg, 1783] by monotypy.

- 1843 *Piezosternum* Amyot & Serville, Hist. Nat. Ins. Hem. XXVII, 162-163. (K)
 1846 *Piezosternum*: Agassiz, Nomen. Zool. Add. 10. (Ety)
 1851 *Piezosternum*: Dallas, List. Hem. 1:317, 338. (K)
 1851 *Piezosternum*: Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1865 *Piezosternum*: Stål, Hem. Afr. 1:224, 227-228.
 1868 *Salica* Walker, Cat. Het. 3:469. (syn. by Stål, 1870)
 1870 *Piezosternum*: Stål, Sv. Vet. Akad. Handl. 9(1):63. (S)
 1881 *Piezosternum*: Distant, Biol. Cent. Am. Rh. 1:101. (S, Dn)
 1889 *Piezosternum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):82. (D)
 1893 *Piezosternum*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
 1900 *Piezosternum*: Distant, Ann. Mag. Nat. Hist. (7)6:62. (S)
 1903 *Piezosternum*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1905 *Piezosternum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):214-215. (S, D, Ks, Tsp)
 1909 *Piezosternum*: Kirkaldy, Cat. Hem. 1:348. (S)
 1939 *Piezosternum*: Torre-Bueno, Ent. Am. 19(4):243. (D)
 1952a *Piezosternum*: Villiers, Init. Afr. 9:83. (D)
 1955 *Piezosternum*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63. (K)
 1956 *Piezosternum*: Miller, Biol. Het., ed. 1:45. (Dn)
 1964 *Piezosternum*: Schaefer, Ann. Ent. Soc. Am. 57(6):680. (cf. *Coreoidea*)
 1971 *Piezosternum*: Pirán, Acta Zool. Lill. 26:200, 202. (D, Ks of Am.)
 1971 *Piezosternum*: Miller, Biol. Het. 54. (Dn)
 1981 *Piezosternum*: Froeschner, Smithson. Contr. Zool. 322:95. (Tsp)
 1988 *Piezosternum*: Froeschner, Cat. Het. 695. (Tsp)

Piezosternum subgenus *Piezosternias* Kirkaldy, 1909

Type species: *Cimex calidus* Fabricius, 1787, by original designation.

1909 *Piezosternum* subgen. *Piezosternias* Kirkaldy, Cat. Hem. 1:348

Piezosternum calidum (Fabricius, 1787)

- 1787 *Cimex calidus* Fabricius, Mant. Ins. 2:292.
 1790 *Cimex calidus*: Gmelin, Syst. Nat. 1. 4:2153.
 1794 *Cimex papillosus*: Fabricius, Ent. Syst. 4:106-107. (misdet. sec. Stål, 1865)
 1803 *Cimex calidus*: Fabricius, Syst. Rh. 1:168. (Dn)
 1806 *Pentatoma tenebraria* Palisot de Beauvois, Ins. Afr.

- Am.:46, pl. 6 fig., 3, 4. (syn. by Stål, 1865)
- 1837 *Edessa vicina* Westwood, Cat. Hope 1:29. (syn. by Stål, 1865)
- 1843 *Piezosternum tenebraria*: Amyot & Serville, Hist. Nat. Ins. Hem.:162. (Dn, Ts)
- 1851 *Piezosternum tenebraria*: Herrich-Schäffer, Wanz. Ins. 9:310. (Africa in error)
- 1851 *Piezosternum mucronatum*: Dallas, List. Hem. 1:338. (misdet. sec. Stål, 1865)
- 1865 *Piezosternum calidum*: Stål, Hem. Afr. 1:228. (D, S)
- 1868 *Piezosternum calidum*: Stål, Sv. Vet. Akad. Handl. 7(11):40. (S, R, T)
- 1868 *Piezosternum mucronatum*: Walker, Cat. Het. 3:457. (R, misdet.)
- 1870 *Piezosternum calidum*: Stål, Sv. Vet. Akad. Handl. 9(1):63-64. (S, R)
- 1873 *Piezosternum calidum*: Walker, Cat. Het. Suppl.:24, 25. (S)
- 1879 *Piezosternum calidum*: Distant, Trans. Ent. Soc. Lond. 1879(2):211. (cf. *Piezosternum rubens*)
- 1884 *Piezosternum calidum*: Reuter, Öfv. Finska Vet.-Soc. Förh. 25(1882-1883):9. (R)
- 1890 *Piezosternum calidum*: Distant, Ann. Soc. Ent. Belg., 34 c.r. (ser. 4)(5):53. (R)
- 1890b *Piezosternum calidum*: Distant, Proc. Zool. Soc. Lond. 1890(3):477. (R)
- 1892 *Piezosternum calidum*: Gerstaecker, Jb. Hamb. Wiss. Anst. 9(2):5. (R)
- 1893 *Piezosternum calidum*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
- 1893 *Piezosternum calidum*: Bergroth, J. Sci. Math. Phys. Nat. (2)10:123. (R)
- 1894 *Piezosternum calidum*: Haglund, Öfv. Vet. Akad. Förh. 51(8):406. (R)
- 1894 *Piezosternum calidum*: Karsch, Stett. Ent. Ztg. 55:100. (R)
- 1898 *Piezosternum calidum*: Distant, Ann. Mag. Nat. Hist. (7)2:315. (R)
- 1901c *Piezosternum calidum*: Distant, Proc. Zool. Soc. Lond. 1900(4):823. (S)
- 1904 *Piezosternum calidum*: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:148, 150. (R)
- 1905 *Piezosternum calidum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215-217, figs. 65-67, pl. 5, fig. 1. (K, S, D, R)
- 1905a *Piezosternum calidum*: Schouteden, Ann. Soc. Ent. Belg. 49:15. (R)
- 1909 *Piezosternum calidum*: Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1, 1:67. (R)
- 1909 *Piezosternum (Piezosternias) calidum*: Kirkaldy, Cat. Hem. 1:348. (S)
- 1910 *Piezosternum calidum*: Schouteden, Ann. Soc. Ent. Belg. 54:405. (R)
- 1910a *Piezosternum calidum*: Schouteden, Sjöstedt's Klim. Meru Exp. 12(6):92. (R)
- 1911 *Piezosternum calidum*: Schouteden, Rev. Zool. Afr. 1:185. (R)
- 1913 *Piezosternum calidum*: Schouteden, Rev. Zool. Afr. 2(2):197. (R)
- 1913 *Piezosternum calidum*: Jeannel, Voy. Alluaud Hem. 1:109. (S, R)
- 1922 *Piezosternum calidum*: Courteaux, Anim. Art. 1:272. (R)
- 1929 *Piezosternum calidum*: Schouteden, Rev. Zool. Bot. Afr. 17(1):64. (R)
- 1934 *Piezosternum calidum*: Mayné & Ghesquiere, Ann. Gembloux 40(1):12. (R, H)
- 1945 *Piezosternum (Piezosternias) calidum*: Blöte, Zool. Meded. 25:291. (R)
- 1949 *Piezosternum calidum*: Villiers, I.F.A.N. Catalogues 5:89. (R)
- 1952 *Piezosternum calidum*: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
- 1952b *Piezosternum calidum*: Villiers, Mem. I.F.A.N. 19:307. (R)
- 1952a *Piezosternum calidum*: Villiers, Init. Afr. 9:84, figs. 106, 107. (Dn, R)
- 1954 *Piezosternum calidum*: Leston, Publ. Cult. Comp. Diam. Angola 24:13, figs. 1-3. (D, R)
- 1955 *Piezosternum calidum*: Leston, Ent. Mo. Mag. 91:33, figs. 3-5. (H, E)
- 1957a *Piezosternum calidum*: Schouteden, Ann. Mus. Congo Belge, Tervuren, Zool. 58:278. (R)
- 1959 *Piezosternum calidum*: Scudder, Trans. Ent. Soc. Lond. 111(14):413. (Ge)
- 1964 *Piezosternum calidum*: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
- 1967 *Piezosternum calidum*: Villiers, Bull. I.F.A.N. (ser. A) 29(4):1807. (R)
- 1969 *Piezosternum calidum*: Kumar, Aust. J. Zool. 17:557, 559, 560, 567, 569, 572, figs. 5, 20, 70a, 70b, 71-73, 92. (M)
- 1978 *Piezosternum calidum*: Goodchild, Ent. Exp. & Appl. 23:177-188. (symbionts)
- 1980 *Piezosternum calidum*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
- 1982a *Piezosternum calidum*: Linnavuori, Acta Zool. Fenn. 163:11. (R)
- 1982 *Piezosternum calidum*: Nuamah, Insect Sci. Application 3(1):11, 13, 25, fig. 8.95. (C)
- Distribution:** Angola, Cameroon, Cape Verde Islands, Congo, Gabon, Ghana, Guinea, Ivory Coast, Malawi, Nigeria, Ruanda, Sierra Leone, Zaire, Zanzibar.
- Piezosternum calidum breddini* Schouteden, 1905
- 1905 *Piezosternum (Piezosternum) calidum breddini*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215, 217-218, 275, figs. 68-70, 133. (K, I)
- 1909 *Piezosternum calidum breddini*: Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1, 1:68. (R)
- 1937 *Piezosternum calidum* var. *breddini*: Mancini, Boll. Soc. Ent. Ital. 69(1-2):43. (R)
- 1939 *Piezosternum calidum* var. *breddini*: Mancini, Ann. Mus. Civ. Storia Nat. Genova 58:305. (R)
- 1945 *Piezosternum (Piezosternias) calidum* var. *breddini*: Blöte, Zool. Meded. 25:291. (R)
- 1952 *Piezosternum calidum* var. *breddini*: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
- 1952a *Piezosternum breddini*: Villiers, Init. Afr. 9:83-84. (D, R)
- 1956 *Piezosternum breddini*: Villiers, Ent. Arb. Mus. Gg. Frey 7:213. (R)
- 1980 *Piezosternum breddini*: Medler, Mem. Am. Ent. Inst. no. 30:120. (R)
- 1982a *Piezosternum calidum breddini*: Linnavuori, Acta Zool. Fenn. 163:11. (R, Dn)
- 1982 *Piezosternum calidum breddini*: Linnavuori, Monit. Zool. Ital. (N.S.) Suppl. 16(1):16. (R)
- Distribution:** Congo, Guinea, Kenya, Nigeria, Somalia, Tanzania, Togo, Zaire, Zimbabwe.
- Piezosternum fallax* Breddin, 1898
- 1898 *Piezosternum fallax* Breddin, Ent. Nachr. Berlin 24(17):264-265.
- 1901 *Piezosternum calidum*: Distant, Ann. Soc. Ent. Belg. 45(1):28. (part. misdet. sec. Schouteden, 1905)

- 1904 *Piezosternum fallax*: Schouteden, Ann. Soc. Ent. Belg. 48:144. (R)
- 1904 *Piezosternum fallax*: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:148. (R)
- 1905 *Piezosternum fallax*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215, 218-219, figs. 71-73. (K, D, R)
- 1908 *Piezosternum fallax*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1909 *Piezosternum fallax*: Kirkaldy, Cat. Hem. 1:348. (S)
- 1909 *Piezosternum fallax*: Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1, 1:68. (R)
- 1929 *Piezosternum fallax*: Schouteden, Rev. Zool. Bot. Afr. 17(1):64. (R)
- 1934 *Piezosternum fallax*: Mayne & Ghesquiere, Ann. Gembloux 40(1):12. (H, R)
- 1945 *Piezosternum (Piezosternias) fallax*: Blöte, Zool. Meded. 25:291. (R)
- 1952 *Piezosternum fallax*: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
- 1952b *Piezosternum fallax*: Villiers, Mem. I.F.A.N. 19:307. (R)
- 1952a *Piezosternum fallax*: Villiers, Init. Afr. 9:84. (Dn, H)
- 1956 *Piezosternum fallax*: Leston, Bull. I.F.A.N. 18A(2):618. (R)
- 1969 *Piezosternum fallax*: Kumar, Aust. J. Zool. 17:567, 569, figs. 74-76. (M)
- 1971 *Piezosternum fallax*: Gaedike, Beitr. Ent. 21(1-2):85. (T)
- 1975 *Piezosternum fallax*: Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:8. (R)
- 1980 *Piezosternum fallax*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
- 1982a *Piezosternum fallax*: Linnavuori, Acta Zool. Fenn. 163:11, fig. 1a. (R)
- Distribution:** Cameroon, Central African Rep., Congo, Equatorial Guinea, Ghana, Guinea, Ivory Coast, Nigeria, Sierra Leone, Sudan, Tanzania, Togo, Zaire.

Piezosternum rubens Distant, 1879

- 1879 *Piezosternum rubens* Distant, Trans. Ent. Soc. Lond. 1879(2):210-211, pl. 5 fig. 8.
- 1893 *Piezosternum rubens*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1905 *Piezosternum rubens*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215, 219-220. (K, D)
- 1909 *Piezosternum (Piezosternias) rubens*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1945 *Piezosternum (Piezosternias) rubens*: Blöte, Zool. Meded. 25:291. (R)
- 1952 *Piezosternum rubens*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):289, figs. 136-139, pl. 8 fig. 3

Distribution: Madagascar.

Piezosternum subgenus *Piezosternum* Thunberg, 1783

- 1909 *Piezosternum* subgen. *Piezosternum* Kirkaldy, Cat. Hem. 1:348.

Piezosternum subulatum (Thunberg, 1783)

- 1783 *Cimex subulatus* Thunberg, Nov. Ins. Sp. 2:41, pl. 2, fig. 55.
- 1790 *Cimex subulatus*: Gmelin, Syst. Nat. 1, 4:2146
- 1794 *Cimex vacca* Fabricius, Ent. Syst. 4:92. (syn. by Burmeister, 1835)
- 1794 *Cimex gazella* Fabricius, Ent. Syst. 4:92-93. (syn. by Dallas, 1851)
- 1801 *Cimex vacca*: Coquebert, Icon. Ins. 2:81, pl. 19 fig. 2.

- 1803 *Edessa gazella*: Fabricius, Syst. Rh. 1:147. (Dn)
- 1803 *Edessa vacca*: Fabricius, Syst. Rh. 1:147. (Dn)
- 1806 *Pentatoma mucronata* Palisot de Beauvois, Ins. Afr. Am. 46, pl. 6 fig. 5, 6. (syn. by Stål, 1865)
- 1825 *Pentatoma mucronata*: Lepeletier & Serville Enc. Meth. 10:55. (D)
- 1834 *Edessa vacca*: Burmeister, Silb. Rev. Ent. 2:22, fig. 5. (antenna)
- 1835 *Edessa vacca*: Burmeister, Handb. Ent. 2:356. (S, Dn)
- 1843 *Piezosternum mucronatum*: Amyot & Serville, Hist. Nat. Ins. Hem. 1:162. (S, D)
- 1848 *Edessa vacca*: Erichson, Reise Guiana 3:610. (R)
- 1851 *Piezosternum mucronatum*: Herrich-Schäffer, Wanz. Ins. 9:310. (Africa in error)
- 1851 *Piezosternum mucronatum*: Dallas, List. Hem. 1:338. (misdet. see *Piezosternum calidum*)
- 1851 *Piezosternum subulatum*: Dallas, List. Hem. 1:338. (S)
- 1857 *Pentatoma (Edessa) vacca*: Guérin-Ménéville, Hist. Cuba Ins. 375. (Dn, S, R)
- 1859 *Piezosternum mucronatum*: Dohrn, Cat. Hem. 20. (S)
- 1859 *Piezosternum subulatum*: Dohrn, Cat. Hem. 20. (S)
- 1865 *Piezosternum subulatum*: Stål, Hem. Afr. 1:228. (S)
- 1868 *Piezosternum subulatum*: Stål, Sv. Vet. Akad. Handl. 7(11):40. (S, R, T)
- 1868 *Piezosternum mucronatum*: Walker, Cat. Het. 3:457. (misdet. see *Piezosternum calidum*)
- 1868 *Piezosternum subulatum*: Walker, Cat. Het. 3:457. (R)
- 1868 *Piezosternum retractum* Walker, Cat. Het. 3:457-458. (syn. by Distant, 1900)
- 1868 *Salica excellens* Walker, Cat. Het. 3:469. (syn. by Distant, 1900)
- 1870 *Piezosternum subulatum*: Stål, Sv. Vet. Akad. Handl. 9(1):64. (S, R)
- 1870 *Piezosternum excellens*: Stål, Sv. Vet. Akad. Handl. 9(1):64. (S, R)
- 1873 *Piezosternum excellens*: Walker, Cat. Het. Suppl. 25. (S)
- 1881 *Piezosternum subulatum*: Distant, Biol. Cent. Am. Rh. 1:102. (S, R)
- 1887 *Piezosternum subulatum*: Distant, Ann. Soc. Ent. Belg. 31 c.r. (ser. 3)(88):65. (L)
- 1890 *Piezosternum subulatum*: Sharp, Trans. Ent. Soc. Lond. 1890(3):404-406, pl. 13 fig. 10. (M)
- 1890 *Piezosternum subulatum*: Distant, Biol. Cent. Am. Rh. 1:351. (R)
- 1893 *Piezosternum retractum*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1893 *Piezosternum subulatum*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1900 *Piezosternum subulatum*: Distant, Ann. Mag. Nat. Hist. (7)6:60, 63. (S)
- 1901 *Piezosternum subulatum*: Van Duzee, Trans. Am. Ent. Soc. 27:346. (R)
- 1903 *Piezosternum subulatum*: Kirkaldy, Entomol. 36(484):231. (Tsp, S)
- 1904 *Piezosternum subulatum*: Osborn, Ohio Nat. 5(1):197. (R)
- 1909 *Piezosternum (Piezosternum) subulatum*: Kirkaldy, Cat. Hem. 1:248. (S)
- 1923 *Piezosternum subulatum*: Barber, Am. Mus. Novit. 75:12. (L)
- 1924 *Piezosternum subulatum*: Wolcott, J. Dept. Agr. P. R. 7:254.
- 1925 *Piezosternum subulatum*: Campos, Rev. Colegio Nac. Vicente Rocafuerte 7(19-20):52. (R)
- 1932 *Piezosternum subulatum*: Barber & Bruner, J. Dept. Agr. P. R. 16(3):218. (R, Dn)
- 1936 *Piezosternum subulatum*: Wolcott, J. Agric. Univ. P. R.

- 20(1):180. (R, H)
 1939 Piezosternum subulatum: Torre-Bueno, Ent. Am. 19(4):243. (Dn)
 1939 Piezosternum subulatum: Barber, Sci. Sur. P. R. & V. I. 14(3):306-307. (S, Dn, R, H)
 1941 Piezosternum subulatum: Wolcott, J. Agric. Univ. Puerto Rico 25(2):79. (R)
 1945 Piezosternum (Piezosternum) subulatum: Blöte, Zool. Meded. 25:291. (R)
 1947 Piezosternum subulatum: Fennah, Ins. Pests Lesser Antilles 58, 166. (H)
 1949 Piezosternum subulatum: Brunner & Barber, Mem. Soc. Cubana Hist. Nat. 19(2):164. (R)
 1958 Piezosternum subulatum: Leston, Proc. 10th Int. Congr. Ent. Montreal 2:911. (C)
 1966 Piezosternum subulatum: McDonald, Quaes. Ent. 2:38, 54, figs. 367-372, 501, 502. (Ge)
 1971 Piezosternum subulatum: Pirán, Acta Zool. Lill. 26:201, 202. (R, K)
 1971 Piezosternum subulatum: Becker & Grazia-Vieira, Iheringia (Zool.) 40:10. (R)
 1976 Piezosternum subulatum: Martorell, Food Plant Cat. 63, 76, 161, 174, 193, 206, 269.
 1981 Piezosternum subulatum: Froeschner, Smithson. Contr. Zool. 322:95. (R)
 1982 Piezosternum subulatum: Nuamah, Insect Sci. Application 3(1):15, 25.
 1984 Piezosternum subulatum: King & Saunders, Inv. Pests Crops C. Am. 124. (H)
 1988 Piezosternum subulatum: Froeschner, Cat. Het. 695. (S, R)
Distribution: Lesser Antilles (Guadeloupe I., Martinique I.) Brazil, Colombia, Cuba, Ecuador, Fr. Guiana, Guyana, Hispaniola, Mexico, Panama, Puerto Rico, Suriname, Venezuela.

Piezosternum thunbergi Stål, 1860

- 1860 Piezosternum thunbergi Stål, Sv. Vet. Akad. Handl. 2(7):28-29.
 1868 Piezosternum thunbergi: Walker, Cat. Het. 3:457. (L)
 1870 Piezosternum thunbergi: Stål, Sv. Vet. Akad. Handl. 9(1):64. (R)
 1909 Piezosternum thunbergi: Kirkaldy, Cat. Hem. 1:348. (L)
 1939 Piezosternum thunbergi: Torre-Bueno, Ent. Am. 19(4):244. (R)
 1961 Piezosternum (Piezosternum) thunbergi: Buckup, Iheringia (Zool.) 16:9. (R)
 1962 Piezosternum thunbergi: Pirán, Acta Zool. Lill. 18:10, fig. 9. (R)
 1966 Piezosternum thunbergi: Pirán, Rev. Soc. Ent. Argent. 28(1965)(1-4):87. (R)
 1971 Piezosternum thunbergi: Pirán, Acta Zool. Lill. 26:201-202. (R, K)
Distribution: Argentina, Bolivia, Brazil, Paraguay, Uruguay

Piezosternum venezolanum Pirán, 1971

- 1971 Piezosternum venezolanum: Pirán, Acta Zool. Lill. 26:202, 204-205, fig. 1.
Distribution: Venezuela

Piezosternum bredtini Schouteden, 1905 — see Piezosternum calidum bredtiniPiezosternum cribratum Walker, 1868 — see Pygoplatys cribratusPiezosternum excelens (Walker, 1868) — see Piezosternum subulatumPiezosternum firmatum Walker, 1868 — see Pygoplatys firmatusPiezosternum ingenuum Walker, 1868 — see Pygoplatys ingenuusPiezosternum mucronatum (Palisot de Beauvois, 1806) see Piezosternum subulatumPiezosternum retractum Walker, 1868 see Piezosternum subulatumPiezosternum tenebraria (Palisot de Beauvois, 1806) see Piezosternum calidumPlisthenes Stål, 1865

Type species: Plisthenes tessarotoma dilatata Montrouzier, 1855, by subsequent monotypy (Stål, 1867)

Merocoris: Edessa merianae (Fabricius, 1781), = [Cimex meriani Fabricius, 1781] by original designation.

- 1834 Merocoris Burmeister, Silb. Rev. Ent. 2:18, 19, 20. (K) (preoccup. Perty, 1833)
 1846 Merocoris: Agassiz, Nomen. Zool. Hem.:12. (L)
 1865 Plisthenes Stål, Hem. Afr. 1:224. (K)
 1868 Plisthenes: Walker, Cat. Het. 3:475. (L)
 1870 Plisthenes: Stål, Sv. Vet. Akad. Handl. 9(1):63. (S)
 1893 Plisthenes: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a Plisthenes: Horváth, Term. Füzet. 23:341, 359-360. (K, D, Ks)
 1909 Plisthenes: Kirkaldy, Cat. Hem. 1:XXXVI, 347. (Tsp, S)
 1914 Plisthenes: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1955 Plisthenes: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
 1956 Plisthenes: Miller, Biol. Het., ed. 1:45. (Dn)
 1957 Plisthenes: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:442. (S, K)
 1971 Plisthenes: Miller, Biol. Het. 54. (Dn)

Plisthenes australis Horváth, 1900

- 1880 Plisthenes merianae: Distant, Trans. Ent. Soc. Lond. 1880(3) 151. (part sec. Horváth, 1900)
 1889 Plisthenes merianae: Distant, Ann. Mag. Nat. Hist. (6)3 272. (part sec. Horváth, 1900)
 1900a Plisthenes australis: Horváth, Term. Füzet. 23:360-362-363.
 1908 Plisthenes australis: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 Plisthenes australis: Kirkaldy, Cat. Hem. 1:347. (L)
 1957 Plisthenes australis: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:442, 448. (T, R)
 1969 Plisthenes australis: Kumar, Aust. J. Zool. 17:565, 569, fig. 55. (M, R)

Distribution: Australia (Queensland, Torres Straits).

Plisthenes buruensis Breddin, 1904

- 1904 Plisthenes buruensis: Breddin, Wien. Ent. Ztg. 23(1):179-180, fig. 1.
 1908 Plisthenes buruensis: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 Plisthenes buruensis: Kirkaldy, Cat. Hem. 1:347.
Distribution: Moluccas (Buru I.)

Plisthenes confusus Horváth, 1900

- 1868 Oncomerus dilatatus: Vollenhoven, Faune Ent. Indo-Neerl. 3:32 (misdet. sec. Horváth, 1900)
 1880 Plisthenes merianae: Distant, Trans. Ent. Soc. Lond.

- 1880(3):151. (part sec. Horváth, 1900)
 1889 *Plisthenes merianae*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (part sec. Horváth, 1900)
 1900 *Plisthenes confusus*: Breddin, Abh. Senckenb. Naturf. Ges. 25:147. (Dn, R)
 1900a *Plisthenes confusus*: Horváth, Term. Fuzet. 23:360, 361-362. (K, D, S)
 1904 *Plisthenes confusus*: Breddin, Wien. Ent. Ztg. 23(1):180, 181, fig. 2. (cf. *Plisthenes buruensis*)
 1908 *Plisthenes confusus*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Plisthenes confusus*: Kirkaldy, Cat. Hem. 1:347. (S)
 1945 *Plisthenes confusus*: Blöte, Zool. Meded. 25:290-291 (R)
Distribution: Java, Moluccas (Bachan Is., Ceram I., Halmahera I., Morotai I., Salawati I., Waigeo I.), Solomons (Obi I.).

***Plisthenes dilatatus* (Montrouzier, 1855)**

- 1855 *Tessaratoma dilatatum* Montrouzier, Ann. Soc. Agron. Lyon (2)7(1):100.
 1867a *Plisthenes dilatatus*: Stål, Berl. Ent. Z. 10:157. (L)
 1868 *Oncomerus dilatatus*: Vollenhoven, Faune Ent. Indo-Neerl. 3:32. (misdet. see *Plisthenes confusus*)
 1868 *Plisthenes dilatatus*: Walker, Cat. Het. 3:475. (S)
 1880 *Plisthenes dilatatus*: Distant, Trans. Ent. Soc. Lond. 1880(3):151.
 1889 *Plisthenes dilatatus*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (K, R)
 1893 *Plisthenes dilatatus*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a *Plisthenes dilatatus*: Horváth, Term. Fuzet. 23:360, 363. (K, D, R)
 1900 *Plisthenes ventralis*: Horváth, Term. Fuzet. 23:360, 364. (syn. by Distant, 1900)
 1900b *Plisthenes dilatatus*: Distant, Ann. Mag. Nat. Hist. (7)6:379-380. (S)
 1907 *Plisthenes dilatatus*: Schouteden, Ann. Soc. Ent. Belg. 51:112. (T)
 1908 *Plisthenes ventralis*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Plisthenes dilatatus*: Kirkaldy, Cat. Hem. 1:347. (S)
 1914 *Plisthenes dilatatus*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1945 *Plisthenes dilatatus*: Blöte, Zool. Meded. 25:291 (R)
Distribution: New Guinea (Goodenough I., Woodlark I.), Solomons, Sulawesi (Celebes), Tokelau (Atafu I.).

***Plisthenes merianae* (Fabricius, 1775)**

- 1775 *Cimex meriani* Fabricius, Syst. Ent. 707-708.
 1778 *Cimex meriani*: Goeze, Ent. Beytr. 2:240.
 1781 *Cimex merianae*: Fabricius, Spec. Ins. 2:350 (emendation)
 1787 *Cimex merianae*: Fabricius, Mant. Ins. 2:287. (Dn)
 1790 *Cimex merianae*: Gmelin, Syst. Nat. 1. 4:2138
 1794 *Lygaeus merianae*: Fabricius, Ent. Syst. 4:134.
 1803 *Edessa merianae*: Fabricius, Syst. Rh. 149. (Dn)
 1834 *Merocoris merianae*: Burmeister, Silb. Rev. Ent. 2:21, fig. 5. (Tsp, Dn)
 1835 *Oncomerus* (sic) *merianae*: Burmeister, Handb. Ent. 2:353. (Dn, R)
 1838 *Oncomerus* (sic) *merianae*: Herrich-Schäffer, Wanz. Ins. 4:81-82, fig. 411.
 1840 *Oncomeris merianae*: Blanchard, Hist. Nat. Ins. 3:142 (S, D)
 1843 *Oncomerus* (sic) *merianae*: Amyot & Serville, Hist. Nat. Ins. Hem.:169. (S)
 1851 *Oncomerus* (sic) *merianae*: Herrich-Schäffer, Wanz.

Ins. 9:308. (L)

- 1859 *Oncomeris merianae*: Dohrn, Cat. Hem. 21 (L)
 1866 *Oncomeris merianae* (sic): Dohrn, Stett. Ent. Ztg. 27:323, 330, pl. 4, fig. 3.
 1868 *Oncomeris merianae*: Vollenhoven, Faune Ent. Indo-Neerl. 3:31. (S, D, R)
 1868 *Oncomeris merianae*: Walker, Cat. Het. 3:475. (S, R)
 1870 *Plisthenes merianae*: Stål, Sv. Vet. Akad. Handl. 9(1):63. (S, R)
 1873 *Plisthenes merianae*: Walker, Cat. Het. Suppl. 25. (S)
 1880 *Plisthenes merianae*: Distant, Trans. Ent. Soc. Lond. 1880(3):151. (misdet. see *Plisthenes australis* and *Plisthenes confusus*)
 1889 *Plisthenes merianae*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (misdet. see *Plisthenes australis* and *Plisthenes confusus*)
 1893 *Plisthenes merianae*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a *Plisthenes meriani* (sic): Horváth, Term. Fuzet. 23:359, 360-361. (K, D, S, R)
 1900 *Plisthenes meriani* (sic): Horváth, Zoolog. Forschungsreisen 5:633. (S, R)
 1901 *Plisthenes meriani* (sic): Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
 1904 *Plisthenes merianae*: Breddin, Wien. Ent. Ztg. 23(1):181. (R)
 1905 *Plisthenes merianae*: Van Duzee, Bull. Am. Mus. Nat. Hist. 21:211. (R)
 1945 *Plisthenes meriani* (sic): Blöte, Zool. Meded. 25:291. (R)
 1957 *Plisthenes meriani* (sic): Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:448. (Australian records queried)
 1969 *Plisthenes meriani* (sic): Kumar, Aust. J. Zool. 17:565, figs. 50-54, 88.
Distribution: Australia (Queensland), Borneo, Java, Lesser Sunda Is. (Timor I.), Malay Peninsula (Malaya), Moluccas (Amboina I., Aru Is., Bachan Is., Buru I., Ceram I., Halmahera I., Misool I., Morotai I., Waigeo I.), New Guinea, Solomons (Obi I., Harukut I.), Sulawesi (Celebes), Sumatra.

***Plisthenes moluccanus* Horváth, 1900**

- 1900a *Plisthenes moluccanus*: Horváth, Term. Fuzet. 23:360, 362.
 1908 *Plisthenes moluccanus*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Plisthenes moluccanus*: Kirkaldy, Cat. Hem. 1:348. (L)
Distribution: Moluccas (Halmahera I.).

***Plisthenes scutellatus* Distant, 1889**

- 1889 *Plisthenes scutellatus*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (K)
 1893 *Plisthenes scutellatus*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
 1900a *Plisthenes scutellatus*: Horváth, Term. Fuzet. 23:360, 364-365. (K, D, R)
 1909 *Plisthenes scutellatus*: Kirkaldy, Cat. Hem. 1:348. (S)
 1945 *Plisthenes scutellatus*: Blöte, Zool. Meded. 25:291 (R)
Distribution: New Guinea, Solomons (Bougainville).

Plisthenes ventralis Horváth, 1900 — see *Plisthenes dilatatus*

Rhoecocoris Bergroth, 1897 — see *Rhoecus*

Rhoecocoris antennatus (Distant, 1880) — see *Musgraveia antennatus*

Rhoecocoris australasiae (Westwood, 1836) — see *Rhoecus australasiae*

Rhoecocoris sulciventris (Stål, 1863) — see *Musgraveia sulciventris*

***Rhoecus* Bergroth, 1891**

Type species: *Oncoscelis australasiae* Westwood, 1838, by original designation.

- 1838 *Oncoscelis* Westwood, Trans. Ent. Soc. Lond. 2(1):19-20. (preoccupied, Dejean, 1835, emended from *Onchoscelis* by Agassiz, 1846)
 1846 *Oncoscelis*: Agassiz, Nom. Zool. Hem.:14. (Ety)
 1851 *Oncoscelis*: Dallas, List. Hem. 1:318, 346 (K)
 1865 *Oncoscelis*: Stål, Hem. Afr. 1:223. (K)
 1866 *Oncoscelis*: Vollenhoven, Tijdschr. Ent. (2)1:217. (cf. *Dalcintha*)
 1870 *Oncoscelis*: Stål, Sv. Vet. Akad. Handl. 9(1):60. (S)
 1891 *Rhoecus* Bergroth, Rev. Ent. 10:214. (Nn. for *Oncoscelis* Westwood, 1837)
 1893 *Oncoscelis*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
 1895 *Rhoecocoris* Bergroth, Proc. R. Soc. Vict. 7(1894):291. (Nn. for *Rhoecus* Bergroth, 1891)
 1909 *Rhoecocoris*: Kirkaldy, Cat. Hem. 1:345. (S)
 1955 *Rhoecocoris*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
 1957 *Rhoecocoris*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:439, 443. (S, K)

Note. Bergroth (1895) considered *Rhoecus* Bergroth, 1891, to be preoccupied by *Roccus* Clark, 1860. The names are similar but not identical and therefore not homonyms.

***Rhoecus australasiae* (Westwood, 1837) NEW COMBINATION**

- 1837 *Oncoscelis australasiae* Westwood, Trans. Ent. Soc. Lond. 2:120, pl. 2 fig. 5.
 1851 *Oncoscelis australasiae*: Dallas, List. Hem. 1:346. (R)
 1859 *Oncoscelis australasiae*: Dohrn, Cat. Hem. 21. (L)
 1863 *Oncoscelis australasiae*: Stål, Trans. Ent. Soc. Lond. (3)1:599. (cf. *Musgraveia sulciventris*)
 1868 *Oncoscelis australasiae*: Walker, Cat. Het. 3:477. (R)
 1870 *Oncoscelis australasiae*: Stål, Sv. Vet. Akad. Handl. 9(1):60. (S)
 1893 *Oncoscelis australasiae*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
 1909 *Rhoecocoris australasiae*: Kirkaldy, Cat. Hem. 1:345. (S)
 1957 *Rhoecocoris australasiae*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:439, 443-445, figs. 4-6, 10-12. (D, T)
 1969 *Rhoecocoris australasiae*: Kumar, Aust. J. Zool. 17:565, 569, 601, figs. 56-59, 89. (M, R)

Distribution: Australia.

Salica* Walker, 1868 — see *Piezosternum

Salica excellens* Walker, 1868 — see *Piezosternum subulatum

***Stilida* Stål, 1863**

Type species: *Stilida indecora* Stål, 1863 by monotypy

- 1863 *Stilida* Stål, Trans. Ent. Soc. Lond. (3)1:599.
 1865 *Stilida*: Stål, Hem. Afr. 1:223. (K)
 1868 *Stilida*: Walker, Cat. Het. 3:477. (S)
 1870 *Stilida*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S)
 1893 *Stilida*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
 1909 *Stilida*: Kirkaldy, Cat. Hem. 1:345. (S)
 1955 *Stilida*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63.

(K)

- 1957 *Stilida*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 442, 445. (K, Ks)
 1962 *Stilida*: Kumar, Ent. Tidskr. 83(1-2): 47-48, fig. 24. (Ge)

***Stilida indecora* Stål, 1863**

- 1863 *Stilida indecora* Stål, Trans. Ent. Soc. Lond. (3)1:599.
 1868 *Stilida indecora*: Walker, Cat. Het. 3:477. (R)
 1870 *Stilida indecora*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (Dn, R)
 1890 *Stilida indecora*: Sharp, Trans. Ent. Soc. Lond. 1890(3):409, pl. 12 figs. 5, 5a, 5b. (M)
 1893 *Stilida indecora*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
 1901 *Stilida indecora*: Froggatt, Agric. Gaz. N.S.W. 12(12):1596-1597, fig. 13. (misdet. see *Musgraveia sulciventris*)
 1905 *Stilida indecora*: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211.
 1907 *Stilida indecora*: Froggatt, Austral. Ins. 331. (S, Dn, H)
 1909 *Stilida indecora*: Kirkaldy, Cat. Hem. 1:345. (S)
 1945 *Stilida indecora*: Blöte, Zool. Meded. 25:286. (L)
 1957 *Stilida indecora*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:445, figs. 7-9. (K)
 1969 *Stilida indecora*: Kumar, Aust. J. Zool. 17:557, 559, 560, 569, 572, 576-581, figs. 8, 21-24, 79, 95, 104-108. (M, H, B, E, I, R)
 1970 *Stilida indecora*: Woodward et al., Ins. Austral. 450. (Dn)

Distribution: Australia (Queensland, N. S. Wales).

***Stilida sinuata* Stål, 1870**

- 1870 *Stilida sinuata* Stål, Sv. Vet. Akad. Handl. 9(1):61.
 1873 *Stilida sinuata*: Walker, Cat. Het. Suppl. 25. (S)
 1893 *Stilida sinuata*: Lethierry & Severin, Cat. Gen. Hem. 1:223.
 1900 *Stilida sinuata*: Horváth, Zoolog. Forschungsreisen 5:632. (R)
 1909 *Stilida sinuata*: Kirkaldy, Cat. Hem. 1:345. (L)
 1957 *Stilida sinuata*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:445. (K)
 1969 *Stilida sinuata*: Kumar, Aust. J. Zool. 17:601. (R)
 Distribution: Australia (Queensland, N. S. Wales, Thursday I.)

***Tamolia* Horváth, 1900**

Type species: *Tamolia ramifera* (Walker, 1868) by monotypy
 (= *Tamolia horvathi* Distant, 1900, misdet. of *Lyramorpha ramifera* Walker, 1868, sec. Distant, 1900)

- 1900a *Tamolia* Horváth, Term. Füzet. 23:341, 365. (K)
 1908 *Tamolia*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Tamolia*: Kirkaldy, Cat. Hem. 1:346. (L)

***Tamolia ramifera* (Walker, 1868)**

- 1868 *Lyramorpha ramifera* Walker, Cat. Het. 3:376.
 1893 *Lyramorpha ramifera*: Distant, Ann. Mag. Nat. Hist. (6)11:430. (cf. *Lyramorpha picta*)
 1893 *Lyramorpha? ramifera*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
 1900 *Lyramorpha ramifera*: Distant, Ann. Mag. Nat. Hist. (7)6:62. (Ts)
 1900a *Tamolia ramifera*: Horváth, Term. Füzet. 23:365-366. (misdet. of *Lyramorpha ramifera* Walker, 1868, sec. Distant, 1900)
 1900b *Tamolia horvathi* Distant, Ann. Mag. Nat. Hist. (7)6:379. (Nn. for *Tamolia ramifera* Horváth, 1900; type of

Lynamorpha ramifer Walker, 1868; syn. by Kirkaldy, 1910)

1908 Tamolia ramifera Bergroth, Mem. Soc. Ent. Belg. 15:184. (misdet. by Horváth, 1900)

1909 Tamolia horváthi: Kirkaldy, Cat. Hem. 1:346. (S)

1910a Tamolia ramifera: Kirkaldy, Can. Ent. 42:62-63 (D. accepts Horváth's 1900 det.)

Distribution: New Guinea.

Tamolia horváthi Distant, 1900 — Tamolia ramifera

TESSARATOMINAE

Stål, 1865a: 33.

Type genus: Tessaratomia Lepeletier & Serville, 1825

1865 Tessaratomia Stål, Hem. Afr. 1:33. (K, Kg)

1870 Tessaratomina: Stål, Sv. Vet. Akad. Handl. 9(1):65. (as div. of subfamily)

1889 Tessaratomaria: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):52. (L as division)

1900a Tessaratomaria: Horváth, Term. Füzet. 23:339. (K)

1905 Tessaratomaria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):209, 220. (K, S)

1935 Tessaratomini: Tang, Cat. Ins. Sin. 2:362. (L)

1955 Tessaratomini: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (K)

PRIONOGASTRINI

Stål, 1870a

Type genus: Prionogaster Stål, 1853a

1870 Prionogastrina Stål, Sv. Vet. Akad. Handl. 9(1):60. (K as division)

1937 Prionogastrini: Beier, Handb. Zool. 4(2) Ins. 2:2186 (D)

1955 Prionogastrina: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Ts)

1969a Prionogastrini: Kumar, Ann. Ent. Soc. Am. 62(4):689-691. (Ts, E, M)

Prionogaster Stål, 1853

Type species: Prionogaster westwoodi Stål, 1853 [= Amaurus serratus Germar, 1837] by monotypy.

1853 Prionogaster Stål, Öfv. Vet. Akad. Förh. 10(9):224

1865 Prionogaster: Stål, Hem. Afr. 1:225, 231. (K, D)

1868 Prionogaster: Walker, Cat. Het. 3:484. (S)

1870 Prionogaster: Stål, Sv. Vet. Akad. Handl. 9(1):77 (S)

1893 Prionogaster: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)

1905 Prionogaster: Schouteden, Ann. Mus. Congo Zool. ser. 3, 1(2):230, 238. (K, S, D)

1909 Prionogaster: Kirkaldy, Cat. Hem. 1:358. (S)

Prionogaster serratus (Germar, 1837)

1838 Amaurus serratus Germar, Silb. Rev. Ent. 5:158

1844 Amaurus serratus: Herrich-Schäffer, Wanz. Ins. 7:75, fig. 748. (D)

1853 Prionogaster westwoodi Stål, Öfv. Vet. Akad. Förh. 10(9):224. (syn. by Stål, 1865)

1859 Prionogaster westwoodi (sic): Dohrn, Cat. Hem. 22. (R)

1865 Prionogaster serratus: Stål, Hem. Afr. 1:231. (D, S)

1868 Prionogaster serratus: Walker, Cat. Het. 3:484. (S)

1870 Prionogaster serratus: Stål, Sv. Vet. Akad. Handl.

9(1):77. (S, R)

1893 Prionogaster serratus: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)

1905 Prionogaster serratus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):238-240, figs. 109-110, pl. 5 fig. 12. (S, D)

1909 Prionogaster serratus: Kirkaldy, Cat. Hem. 1:358. (S)

1969a Prionogaster serratus: Kumar, Ann. Ent. Soc. Am. 62(4):689-690, figs. 31-35. (D, E)

Distribution: South Africa

Prionogaster westwoodi Stål, 1853 -- misspelling, see Prionogaster serratus

Prionogaster westwoodi Stål, 1853 -- see Prionogaster serratus

SEPININI

Horváth, 1900a

Type genus: Sepina Signoret, 1861a

1900a Sepinaria Horváth, Term. Füzet. 23:340, 366-367 (K, Kg; as division of Tessaratominae, family Pentatomidae)

1905 Sepinaria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 255-256. (K, Kg; as division of Tessaratominae, family Pentatomidae)

1955a Sepinaria: Schouteden, Mem. Soc. Ent. Belg. 27:417. (as tribe, gen. & spp. listed; as tribe of Tessaratominae, family Pentatomidae)

1955 Sepinaria: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (L, as subtribe of Tessaratomini in subfamily Tessaratominae, family Pentatomidae)

1969 Sepinaria: Kumar, Aust. J. Zool. 17:604. (classification: subtribe of Sepinini)

PLATYTATARIA

Horváth, 1900

Type genus: Platytatus Bergroth, 1892

1900a Platytataria Horváth, Term. Füzet. 23:340 (K)

1905 Platytataria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 271. (K)

1937 Platytatini: Beier, Handb. Zool. 4(2) Ins. 2:2186 (D)

1955 Platytataria: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (L, as subtribe of Tessaratomini)

Platytatus Bergroth, 1892

Type species: Platytatus ambiguus Bergroth, 1892, by monotypy

1892 Platytatus Bergroth, Ent. Mo. Mag. 28:158.

1893 Platytatus: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)

1905 Platytatus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):271-272. (S, D)

1907 Platytatus: Bergroth, Dt. Ent. Z. 1907:499 (resembles Aradidae)

1909 Platytatus: Kirkaldy, Cat. Hem. 1:361. (S)

1925 Platytatus: Bergroth, Bull. Brooklyn Ent. Soc. 20:161. (tarsal segments)

Platytatus ambiguus Bergroth, 1892

1892 Platytatus ambiguus Bergroth, Ent. Mo. Mag. 28:159.

1893 Platytatus ambiguus: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)

- 1900a *Platytatus ambiguus*: Horváth, Term. Füzet. 23:374. (Dn)
 1905 *Platytatus ambiguus*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):272-274, figs. 131, 132. (S)
 1909 *Platytatus ambiguus*: Kirkaldy, Cat. Hem. 1:361. (S)
 1945 *Platytatus ambiguus*: Blöte, Zool. Meded. 25:308. (R)
 1952 *Platytatus ambiguus*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):293-394, figs. 147-149, pl. 8 fig. 2. (S. D. R)
 1969a *Platytatus ambiguus*: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 53-57.

Distribution: Madagascar.

SEPINARIA

Horváth, 1900

Type genus: *Sepina* Signoret, 1861a

- 1900a *Sepinaria* Horváth, Term. Füzet. 23:340, 366-367 (K, Kg); as division of Tesseractominae, family Pentatomidae)
 1937 *Sepina*: Beier, Handb. Zool. 4(2)Ins. 2:2186. (D)
 1969 *Sepinaria*: Kumar, Aust. J. Zool. 17:604. (classification; subtribe of *Sepinini*)

Ipanu Schouteden, 1955

Type species: *Ipanu vanderysi* Schouteden, 1955, by original designation.

- 1955 *Ipanu* Schouteden, Mem. Soc. Ent. Belg. 27:414, 417.

Ipanu massarti Schouteden, 1955

- 1955 *Ipanu massarti* Schouteden, Mem. Soc. Ent. Belg. 27:415-416, 417.

Distribution: Zaïre.

Ipanu schoutedeni Villiers, 1967

- 1967 *Ipanu schoutedeni* Villiers, Bull. I.F.A.N. (ser. A) 29(4):1807-1808, figs. 14-15

Distribution: Zaïre.

Ipanu vanderysi Schouteden, 1955

- 1955 *Ipanu vanderysi* Schouteden, Mem. Soc. Ent. Belg. 27:414-415, 417 (spelled *vanderijsti* on p. 417)

Distribution: Zaïre.

Malgassus Horváth, 1900

Type species: *Malgassus hypoleucus* Horváth, 1900, by monotypy.

- 1900a *Malgassus* Horváth, Term. Füzet. 23:367-368 (K)
 1905 *Malgassus*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256-257. (K, Ks)
 1908 *Malgassus*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 *Malgassus*: Kirkaldy, Cat. Hem. 1:360. (S)
 1955 *Malgassus*: Schouteden, Mem. Soc. Ent. Belg. 27:417 (in tribe *Sepinaria*)

Malgassus exiguus Horváth, 1904

- 1904 *Malgassus exiguus* Horváth, Ann. Mus. Natn. Hung. 2:269.
 1905 *Malgassus exiguus*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):257, 258-259, figs. 122-123 (K, D)
 1908 *Malgassus exiguus*: Bergroth, Mem. Soc. Ent. Belg.

15:185. (L)

- 1909 *Malgassus exiguus*: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 *Malgassus exiguus*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):290, figs. 140-142, pl. 7 fig. 12. (D)
 1955 *Malgassus exiguus*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)
 1969a *Malgassus exiguus*: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 49-52. (M)

Distribution: Madagascar.

Malgassus hypoleucus Horváth, 1900

- 1900a *Malgassus hypoleucus* Horváth, Term. Füzet. 23:368.
 1905 *Malgassus hypoleucus*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):257-258. (K, D)
 1908 *Malgassus hypoleucus*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 *Malgassus hypoleucus*: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 *Malgassus hypoleucus*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):290. (S)
 1955 *Malgassus hypoleucus*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

Pisena Horváth, 1900 — see *Sepina*

Pisena aberrans Schouteden, 1905 — see *Sepina aberrans*

Pisena horvathi Schouteden, 1905 — see *Sepina horvathi*

Pisena longirostris Horváth, 1900 see *Sepina longirostris*

Rhynchotmetus Horváth, 1900

Type species: *Rhynchotmetus typicus* Horváth, 1900, by indication.

- 1900a *Rhynchotmetus* Horváth, Term. Füzet. 23:367, 368-369. (K)
 1905 *Rhynchotmetus*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256, 259-260 (K, D)
 1908 *Rhynchotmetus*: Bergroth, Mem. Soc. Ent. Belg. 15:185 (L)
 1909 *Rhynchotmetus*: Kirkaldy, Cat. Hem. 1:360 (L)
 1955 *Rhynchotmetus*: Schouteden, Mem. Soc. Ent. Belg. 27:417 (in tribe *Sepinaria*)

Rhynchotmetus typicus Horváth, 1900

- 1900a *Rhynchotmetus typicus* Horváth, Term. Füzet. 23:369
 1905 *Rhynchotmetus typicus*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):260-261. (D)
 1908 *Rhynchotmetus typicus*: Bergroth, Mem. Soc. Ent. Belg. 15:185 (L)
 1909 *Rhynchotmetus typicus*: Kirkaldy, Cat. Hem. 1:360 (S)
 1952 *Rhynchotmetus typicus*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):290 (S)
 1955 *Rhynchotmetus typicus*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

Sepina Signoret, 1861

Type species: *Sepina*, *Sepina urolabooides* Signoret, 1861, by monotypy.

Pisena: *Pisena longirostris* Horváth, 1900, by monotypy.

- 1861 *Sepina* Signoret, Ann. Soc. Ent. Fr. (3)8:930.
 1865 *Sepina*: Stål, Hem. Afr. 1:223, 226. (K, D)
 1868 *Sepina*: Walker, Cat. Het. 3:484. (S)
 1893 *Sepina*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
 1900a *Sepina*: Horváth, Term. Füzet. 23:367, 369-370. (K, D, Ks)
 1900a *Pisena* Horváth, Term. Füzet. 23:367, 372-373. (syn. by Bergroth, 1908)
 1905 *Sepina*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256, 261-262. (K, Ks, D)
 1905 *Pisena*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256, 266-267. (K, Ks, D)
 1908 *Sepina*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 *Sepina*: Kirkaldy, Cat. Hem. 1:360. (S)
 1909 *Pisena*: Kirkaldy, Cat. Hem. 1:360. (S)

***Sepina aberrans* (Schouteden, 1905)**

- 1905 *Pisena aberrans* Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):267, 270-271.
 1908 *Sepina aberrans*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 *Pisena aberrans*: Kirkaldy, Cat. Hem. 1:360. (L)
 1952 *Pisena aberrans*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):293. (S)
 1955 *Sepina aberrans*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (Ts)

Distribution: Madagascar.

***Sepina antennata* Distant, 1913**

- 1913 *Sepina antennata* Distant, Trans. Linn. Soc. Lond. (ser. 2) (Zoology) 16(2):145-146.

Distribution: Seychelles.

***Sepina cachani* Schouteden, 1955**

- 1955 *Sepina cachani* Schouteden, Mem. Soc. Ent. Belg. 27:416-417.

Distribution: Madagascar.

***Sepina conjungens* Bergroth, 1906**

- 1906 *Sepina conjungens* Bergroth, Ann. Soc. Ent. Belg. 50:197-198.
 1908 *Sepina conjungens*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 *Sepina conjungens*: Kirkaldy, Cat. Hem. 1:360. (L)
 1952 *Sepina conjungens*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292. (S)
 1955 *Sepina conjungens*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Comoros I., Madagascar.

***Sepina flaviceps* Horváth, 1900**

- 1900a *Sepina flaviceps* Horváth, Term. Füzet. 23:370-371 (K)
 1905 *Sepina flaviceps*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):262, 264-265, fig. 126 (K, D)
 1908 *Sepina flaviceps*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 *Sepina flaviceps*: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 *Sepina flaviceps*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292. (S)
 1955 *Sepina flaviceps*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

***Sepina gularis* Horváth, 1900**

- 1900a *Sepina gularis* Horváth, Term. Füzet. 23:370, 371 (K)
 1905 *Sepina gularis*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):262, 265-266. (K, D)

- 1908 *Sepina gularis*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)

- 1909 *Sepina gularis*: Kirkaldy, Cat. Hem. 1:360. (S)

- 1952 *Sepina gularis*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292. (S)

- 1955 *Sepina gularis*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

***Sepina horvathi* (Schouteden, 1905)**

- 1905 *Pisena horvathi* Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):267, 268-270, fig. 128, 129. (K)
 1908 *Sepina horvathi*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 *Pisena horvathi*: Kirkaldy, Cat. Hem. 1:360. (L)
 1952 *Pisena horvathi*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):293. (S)
 1955 *Sepina horvathi*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (Ts)

Distribution: Madagascar.

***Sepina longirostris* (Horváth, 1900)**

- 1900a *Pisena longirostris* Horváth, Term. Füzet. 23:373
 1905 *Pisena longirostris*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):267-268, fig. 127. (K, D)
 1908 *Sepina longirostris*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 *Pisena longirostris*: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 *Pisena longirostris*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292-293, figs. 143-146, pl. 8 fig. 2. (S, D)
 1955 *Sepina longirostris*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (Ts)
 1969a *Sepina longirostris*: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 43, 44. (M)

Distribution: Madagascar.

Sepina seicheless* Distant, 1909 — lapsus, see *Sepina seychellensis

***Sepina seychellensis* Distant, 1909**

- 1909b *Sepina seychellensis* Distant, Trans. Linn. Soc. Lond. ser. 2, (Zoology), 13(1):31-32, pl. 4 figs. 3, 3a.
 1913 *Sepina seychellensis*: Distant, Trans. Linn. Soc. Lond. ser. 2, (Zoology) 16(2):145. (R)
 1925 *Sepina seychellensis*: Singh-Pruthi, Trans. Ent. Soc. Lond. 1925(1-2):149, pl. 9 fig. 31. (Ge)
 1955 *Sepina seychellensis*: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)
 1969a *Sepina seicheless* (sic): Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 47, 48. (M. lapsus)

Distribution: Seychelles.

***Sepina urolaboides* Signoret, 1861**

- 1861 *Sepina urolaboides* Signoret, Ann. Soc. Ent. Fr. (3)8:930, 931, pl. 13 fig. 4.
 1865 *Sepina urolaboides* (sic): Stål, Hem. Afr. 1:226-227 (D)
 1868 *Sepina urolaboides*: Walker, Cat. Het. 3:484. (S)
 1893 *Sepina urolaboides* (sic): Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
 1900a *Sepina urolaboides* (sic): Horváth, Term. Füzet. 23:370, 371-372. (K, D, S)
 1905 *Sepina urolaboides* (sic): Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):262-263, figs. 124, 125. (K, S, D)
 1909 *Sepina urolaboides*: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 *Sepina urolaboides*: Cachan, Mem. Inst. Sci.

- Madagascar (E) 1(2):290. (S)
 1955 *Sepina urolaboides* (sic): Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)
 1969a *Sepina urolaboides*: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 45, 46. (M)
Distribution: Madagascar.

TESSARATOMINI

Stål, 1865: 33.

Type genus: *Tessaratomia* Lepeletier & Serville, 1825

- 1865 *Tessaratomia* Stål, Hem. Afr. 1:33. (K, Kg)
 1955 *Tessaratomia*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Ts)
 1970 *Tessaratomini*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):2-4. (Ts, D, K subtribes)

EUSTHENARIA

Stål, 1870a

Type genus: *Eusthenes* Laporte, 1832

- 1870 *Eusthenina* Stål, Sv. Vet. Akad. Handl. 9(1):60. (K as section)
 1889 *Eusthenaria*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):52. (D)
 1900a *Eusthenaria*: Horváth, Term. Füzet. 23:340. (K)
 1902 *Eusthenaria*: Distant, Fauna Brit. India, Rh. 1:263. (S, D, Kg)
 1905 *Eusthenaria*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 230. (K, Kg)
 1935 *Eusthenini*: Tang, Cat. Ins. Sin. 2:364. (S)
 1937 *Eusthenini*: Beier, Handb. Zool. 4(2) Ins. 2:2186. (D)
 1955 *Eusthenaria*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Ts)
 1970 *Eusthenaria*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4, 15-17. (K, Kg)

Anacanthopus Montandon, 1894

Type species: *Anacanthopus flavolimbatus* Montandon, 1894, by monotypy.

- 1894 *Anacanthopus* Montandon, Ann. Soc. Ent. Belg. 38(1893):639.
 1908 *Anacanthopus*: Bergroth, Mem. Soc. Ent. Belg. 15:166. (L)
 1909 *Anacanthopus*: Kirkaldy, Cat. Hem. 1:353. (L)
 1969 *Anacanthopus*: Kumar, Ann. Ent. Soc. Am. 62(4):694. (Ge)

Anacanthopus flavolimbatus Montandon, 1894

- 1894 *Anacanthopus flavolimbatus* Montandon, Ann. Soc. Ent. Belg. 38(1893):640.
 1908 *Anacanthopus flavolimbatus*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Anacanthopus flavolimbatus*: Kirkaldy, Cat. Hem. 1:353. (L)

Distribution: Philippines.

Asarcha Stål, 1870 — misspelling of *Asiarcha*

Asiarcha Stål, 1870

Type species: *Matiphys nigridorsis* Stål, 1863, by monotypy.

- 1870 *Asiarcha* Stål, Sv. Vet. Akad. Handl. 9(1):70, 73. (K)
 1889 *Asiarcha*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):72. (D)
 1893 *Asiarcha*: Distant, Ann. Mag. Nat. Hist. (6)11:433. (cf. *Origanaus*)
 1893 *Asiarcha*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1894 *Asiarcha*: Montandon, Ann. Soc. Ent. Belg. 38:639. (cf. *Anacanthopus*)
 1902 *Asiarcha*: Distant, Fauna Brit. India, Rh. 1:263, 271. (K, D)
 1909 *Asiarcha*: Kirkaldy, Cat. Hem. 1:355. (L)
 1935 *Asiarcha*: Tang, Cat. Ins. Sin. 2:367. (S)
 1957 *Asiarcha*: Zia, Acta Ent. Sin. 7:425, 440. (K, S, D, Ks)
 1970 *Asiarcha*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19, 30. (K, D)
 1977 *Asiarcha*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 66. (K)

Asiarcha angulosa Zia, 1957

- 1957 *Asiarcha angulosa* Zia, Acta Ent. Sin. 7:440-441, 448, figs. 33, 34, 37, 39.
 1962 *Asiarcha angulosa*: Yang, Econ. Ins. Fauna China 2:40, 43, pl. 4 fig. 29.
 1977 *Asiarcha angulosa*: Hsiao et al., Handb. Chinese Hem.-Het. 1:66, figs. 303, 304, 316, pl. 7 fig. 111. (D)
 1980 *Asiarcha angulosa*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K; syn. of *A. nigridorsis*?)
Distribution: China (Giangxi, Ghizhou, Yunnan).

Asiarcha nigridorsis (Stål, 1863)

- 1863 *Matiphys nigridorsis* Stål, Trans. Ent. Soc. Lond. 3(1):600.
 1868 *Matiphys nigridorsis*: Walker, Cat. Het. 3:469. (R)
 1870 *Asiarcha nigridorsis*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (R)
 1873 *Asiarcha nigridorsis*: Walker, Cat. Het. Suppl. 26. (L)
 1889 *Asiarcha nigridorsis*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):72-73. (D)
 1893 *Asiarcha nigridorsis*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1902 *Asiarcha nigridorsis*: Distant, Fauna Brit. India, Rh. 1:272-273, fig. 172
 1909 *Asiarcha nigridorsis*: Kirkaldy, Cat. Hem. 1:355. (S)
 1921 *Asiarcha nigridorsis*: Distant, Entomol. 54(698):164. (R)
 1923 *Asiarcha nigridorsis*: Lehmann, Zool. Anz. 57(7/8):181.
 1932 *Asarcha* (sic) *nigridorsis*: Wu, Mar. Biol. Assoc. China. 1st. Ann. Rep. 82
 1935 *Asiarcha nigridorsis*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (S, R)
 1935 *Asiarcha nigridorsis*: Tang, Cat. Ins. Sin. 2:367. (S, R)
 1945 *Asiarcha nigridorsis*: Blöte, Zool. Meded. 25:304. (R)
 1948 *Asiarcha nigridorsis*: Hoffmann, Lingnan Univ. Sci. J. 22(1-4):38.
 1957 *Asiarcha nigridorsis*: Zia, Acta Ent. Sin. 7:440 figs. 35, 36, 38. (K, S, D, R)
 1970 *Asiarcha nigridorsis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, 27, figs. 59-61, 196. (K & Ge)
 1980 *Asiarcha nigridorsis*: Ahmad, Proc. 1st Pakistan Congr. Zool.:135.
 1980 *Asiarcha nigridorsis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)
Distribution: China (Fujian, Guangxi, Ghizhou, Yunnan), India (Assam, Punjab), Indo-China, Vietnam.

Asiarcha oblonga (Dallas, 1851)

- 1851 *Matiphys oblongus* Dallas, List. Hem. 1:344.

- 1859 *Mattiphus oblongus*: Dohrn, Cat. Hem. 21. (L)
 1863 *Mattiphus oblongus*: Stål, Trans. Ent. Soc. Lond. (3)1:600 (cf. *M. nigridorsis*)
 1868 *Mattiphus oblongus*: Walker, Cat. Het. 3:468. (R)
 1868 *Pycnanum pallipes* Walker, Cat. Het. 3:473. (syn. by Distant, 1893)
 1870 *Mattiphus oblongus*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (L)
 1889 *Mattiphus oblongus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):71. (S, D)
 1889 *Pycnanum? pallipes*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):79. (D)
 1893 *Mattiphus oblongus*: Distant, Ann. Mag. Nat. Hist. (6)11:434. (S)
 1893 *Mattiphus oblongus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 *Mattiphus oblongus*: Distant, Ann. Mag. Nat. Hist. (7)6:64. (S)
 1902 *Mattiphus oblongus*: Distant, Fauna Brit. India, Rh. 1:270-271, fig. 170. (S, D, T)
 1909 *Mattiphus oblongus*: Kirkaldy, Cat. Hem. 1:355. (S)
 1935 *Mattiphus oblongus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):124-125, pl. 5 figs. 68-71. (K, S, D, R)
 1935 *Mattiphus oblongus*: Tang, Cat. Ins. Sin. 2:368. (S, R)
 1948 *Mattiphus oblongus*: Hoffmann, Lingnan Sci. J. 22(1-4):37-38. (S)
 1970 *Asiarcha oblongus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 30. (Ge)
 1980 *Mattiphus oblongus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 55, 57. (R, S, D, K)

Distribution: China (Fujian, Guizhou), India (Assam).

Aurungabada Distant, 1906

Type species: *Aurungabada singularis* Distant, 1906, by monotypy.

- 1906 *Aurungabada* Distant, Ann. Soc. Ent. Belg. 50(12):408.
 1908 *Aurungabada*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1908 *Aurungabada*: Distant, Faun. Brit. India Rh. 4(2)458-459. (D)
 1909 *Aurungabada*: Kirkaldy, Cat. Hem. 1:361. (S)
 1969 *Aurungabada*: Kumar, Ann. Ent. Soc. Am. 62(4):689, 693-694. (placed in *Eusthenaria*)

Aurungabada singularis Distant, 1906

- 1906 *Aurungabada singularis* Distant, Ann. Soc. Ent. Belg. 50(12):408-409.
 1908 *Aurungabada singularis*: Bergroth, Mem. Soc. Ent. Belg. 15:187.
 1908 *Aurungabada singularis*: Distant, Faun. Brit. India Rh. 4(2)459, fig. 270. (D)
 1909 *Aurungabada singularis*: Kirkaldy, Cat. Hem. 1:361
 1969 *Aurungabada singularis*: Kumar, Ann. Ent. Soc. Am. 62(4):689, figs. 24, 25. (T, D)

Distribution: India (Bombay).

Candace Stål, 1870

Type species: *Pentatoma platygaster* Westwood, 1837, by monotypy.

- 1870 *Candace* Stål, Sv. Vet. Akad. Handl. 9(1):71, 76-77. (not *Candace* Dana, 1852, in error for *Candacia* Dana, 1846)
 1891 *Ectmetocara* Bergroth, Rev. Ent. 10:214. (Nn for *Candace* Stål, 1870)
 1893 *Candace*: Lethierry & Severin, Cat. Gen. Hem. 1:233.

(S)

- 1905 *Ectmetocara*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):230-231. (K, D)
 1909 *Ectmetocara*: Kirkaldy, Cat. Hem. 1:357. (S)
 1928 *Candace* Strand, Arch. Naturg. Berlin 92(1926) A 8:47. (Nn for *Candace* Stål, 1870)
 1952a *Ectmetocara*: Villiers, Init. Afr. 9:84. (D)
 1970 *Ectmetocara*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 17, 22-23, 29-30. (K, D)

NOTE: *Candace* Dana, 1852, a misspelling, does not compete in homonymy: *Candace* Stål, 1870, is therefore the valid generic name.

Candace intermedia (Schouteden, 1905) NEW COMBINATION

- 1905 *Ectmetocara intermedia* Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):233, figs. 96-98.
 1908 *Ectmetocara intermedia*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Ectmetocara intermedia*: Kirkaldy, Cat. Hem. 1:357. (L)
 1945 *Ectmetocara intermedia*: Blöte, Zool. Meded. 25:307 (R)
 1982a *Ectmetocara intermedia*: Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Ivory Coast.

Candace platygaster (Westwood, 1837)

- 1837 *Pentatoma platygaster* Westwood, Cat. Hope 1:43.
 1865 *Dalcantha platygaster*: Stål, Hem. Afr. 1:230-231. (D)
 1868 *Dalcantha platygaster*: Walker, Cat. Het. 3:474. (S)
 1870 *Candace platygaster*: Stål, Sv. Vet. Akad. Handl. 9(1):77. (S, R)
 1873 *Dalcantha platygaster*: Walker, Cat. Het. Suppl. 27. (L)
 1890 *Candace platygaster*: Distant, Ann. Soc. Ent. Belg., 34 c.r. (ser. 4)(5):54. (R)
 1893 *Candace platygaster*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1901c *Candace platygaster*: Distant, Proc. Zool. Soc. Lond. 1900(4):821. (S)
 1905 *Ectmetocara platygaster*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):231-232, figs. 94-95. (S, D, R)
 1909 *Ectmetocara platygaster*: Schouteden, Ann. Mus. Congo. Belge Zool. (3) 2, 1, 1:69. (R)
 1909 *Ectmetocara platygaster*: Kirkaldy, Cat. Hem. 1:357 (S)
 1912 *Candace platygaster*: Schouteden, Rev. Zool. Afr. 2(1):72. (R)
 1945 *Ectmetocara platygaster*: Blöte, Zool. Meded. 25:307. (R)
 1949 *Ectmetocara* (sic) *platygaster*: Villiers, I.F.A.N. catalogues 5:89. (R)
 1950 *Ectmetocara platygaster*? Villiers, Bull. I.F.A.N. 12(4):938. (R)
 1952 *Ectmetocara platygaster*: Villiers, Mem. I.F.A.N. 14(4):1211. (R)
 1952 *Ectmetocara platygaster*: Villiers, Bull. I.F.A.N. 19:307
 1952a *Ectmetocara platygaster*: Villiers, Init. Afr. 9:84-85, fig. 108. (Dn)
 1964 *Ectmetocara platygaster*: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
 1970 *Ectmetocara platygaster*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):26-27, fig. 113. (Ge)
 1980 *Ectmetocara platygaster*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Congo, Guinea, Ivory Coast, Liberia, Nigeria, Sierra Leone, Togo, Zaire.

Candace virescens (Distant, 1903) **NEW COMBINATION**

- 1903 *Ectmetocara virescens* Distant, Ann. Mag. Nat. Hist. (7)12:470-471.
 1905 *Ectmetocara virescens*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):233, figs. 99-100.
 1908 *Ectmetocara virescens*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Ectmetocara virescens*: Kirkaldy, Cat. Hem. 1:357. (S)
 1970 *Ectmetocara virescens*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22-23, fig. 84-85. (Ge)
 1980 *Ectmetocara virescens*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Ectmetocara virescens*: Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Congo, Gabon, Guinea, Ivory Coast, Nigeria.

Candacus Strand, 1928 — see **Candace****Carpona** Dohrn, 1863

Type species: *Carpona funesta* Dohrn, 1863, by monotypy.

Virbius: *Virbius imperiale* [= *Pycanum imperiale* Dohrn, 1863] designated by Kirkaldy, 1909.

- 1863 *Carpona* Dohrn, Stett. Ent. Ztg. 24:351.
 1865 *Virbius* Stål, Hem. Afr. 1:225. (K) (syn. by Stål, 1870)
 1868 *Carpona*: Walker, Cat. Het. 3:474. (L)
 1870 *Carpona*: Stål, Sv. Vet. Akad. Handl. 9(1):70, 74. (K, S)
 1889 *Carpona*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):73. (S, D)
 1893 *Carpona*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1902 *Carpona*: Distant, Fauna Brit. India, Rh. 1:263, 273. (K, S, D)
 1909 *Carpona*: Kirkaldy, Cat. Hem. 1:XXXVI, 355. (Tsp. S)
 1956 *Carpona*: Miller, Biol. Het. ed. 1:45. (Dn)
 1957 *Carpona*: Zia, Acta Ent. Sin. 7:425, 444. (K, S, D)
 1970 *Carpona*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19, 30. (K, D)
 1971 *Carpona*: Miller, Biol. Het. 54. (Dn)
 1977 *Carpona*: Hsiao et al., Handb. Chinese Hem. -Het. 1:64, 66-67. (K, Ks)

Carpona amplicollis (Stål, 1863)

- 1863 *Pycanum amplicolle* Stål, Trans. Ent. Soc. Lond. (3)1:600-601.
 1868 *Pycanum amplicolle*: Walker, Cat. Het. 3:370. (R)
 1870 *Carpona amplicollis*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (L)
 1873 *Carpona amplicollis*: Walker, Cat. Het. Suppl. 27. (L)
 1889 *Carpona amplicollis*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):74. (S, D)
 1893 *Carpona amplicollis*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1902 *Carpona amplicollis*: Distant, Fauna Brit. India, Rh. 1:273, fig. 173. (D, R)
 1909 *Carpona amplicollis*: Kirkaldy, Cat. Hem. 1:355. (S)
 1921 *Carpona amplicollis*: Distant, Entomol. 54:(698)164. (R)
 1935 *Carpona amplicollis*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (S)
 1957 *Carpona amplicollis*: Zia, Acta Ent. Sin. 7:444-445, fig. 42. (S, D, R)
 1970 *Carpona amplicollis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, fig. 64. (& Ge)
 1977 *Carpona amplicollis*: Hsiao et al., Handb. Chinese Hem. -Het. 1:66, figs. 306, 314, pl. 7 fig. 112. (K)

1980 *Carpona amplicollis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)

Distribution: China (Guangxi, Yunnan), India (Assam), Indo-China.

Carpona amyoti (Vollenhoven, 1866)

- 1866 *Dalcantha amyoti* Vollenhoven, Tijdschr. Ent. (2)1:219, pl. 11 fig. 7.
 1868 *Pycanum amyoti*: Vollenhoven, Faune Ent. Indo-Neerl. 3:34, pl. 3 figs. 8, 8a. (misdet., see *Carpona vollenhoveni*)
 1868 *Pycanum amyoti*: Walker, Cat. Het. 3:471. (L)
 1870 *Carpona amyoti*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (S)
 1873 *Carpona amyoti*: Walker, Cat. Het. Suppl. 27. (possibly var. of *C. amplicollis*)
 1889 *Carpona amyoti*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):74-75. (S, D)
 1893 *Carpona amyoti*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1909 *Carpona amyoti*: Kirkaldy, Cat. Hem. 1:356, 374. (S)
 1907a *Carpona amyoti*: Schouteden, Notes Leyden Mus. 30:44. (Ts)
 1945 *Carpona amyoti*: Blöte, Zool. Meded. 25:304. (T; possibly syn. of *C. amplicollis*)

Distribution: Sumatra, India?

Carpona angulata (Stål, 1863)

- 1863 *Pycanum angulatum* Stål, Trans. Ent. Soc. Lond. (3)1:601.
 1867a *Virbius angulatus*: Stål, Berl. Ent. Z. 10:158.
 1868 *Pycanum angulatum*: Walker, Cat. Het. 3:471. (L)
 1868 *Pycanum smaragdiferum* Walker, Cat. Het. 3:472-473. (syn. by Stål, 1870)
 1870 *Carpona angulata*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (S)
 1873 *Carpona angulata*: Walker, Cat. Het. Suppl. 27. (S)
 1889 *Carpona angulata*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):73. (S, D)
 1893 *Carpona angulata*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 *Carpona angulata*: Distant, Ann. Mag. Nat. Hist. (7)6:64. (R)
 1909 *Carpona angulata*: Kirkaldy, Cat. Hem. 1:356. (S)
 1921 *Carpona angulata*: Distant, Entomol. 54:(698)164. (R)
 1935 *Carpona angulata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S)
 1945 *Carpona angulata*: Blöte, Zool. Meded. 25:304. (R)
Distribution: Indo-China, Laos, Thailand

Carpona funesta Dohrn, 1863

- 1863 *Carpona funesta* Dohrn, Stett. Ent. Ztg. 24:351-352.
 1868 *Carpona funesta*: Walker, Cat. Het. 3:474. (L)
 1870 *Carpona funesta*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (D)
 1889 *Carpona funesta*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):73-74. (S, D)
 1893 *Carpona funesta*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1909 *Carpona funesta*: Kirkaldy, Cat. Hem. 1:356. (S)
 1935 *Carpona funesta*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S)

Distribution: Cambodia, Indo-China

Carpona imperialis (Dohrn, 1863)

- 1863 *Pycanum ? imperiale* Dohrn, Stett. Ent. Ztg. 24:352-353.
 1867a *Virbius imperialis*: Stål, Berl. Ent. Z. 10:158. (Ts)

- 1868 *Pycnanum imperiale*: Walker, Cat. Het. 3:471. (L)
 1870 *Carpona imperialis*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (K, R)
 1871 *Carpona imperialis*: Stål, Öfv. Vet. Akad. Förh. 27(7):644. (Dn)
 1873 *Carpona imperialis*: Walker, Cat. Het. Suppl. 27. (L)
 1893 *Carpona imperialis*: Lethierry & Severin, Cat. Gen. Hem. 1:231.
 1909 *Carpona imperialis*: Kirkaldy, Cat. Hem. 1:356. (S)
 1945 *Carpona imperialis*: Blöte, Zool. Meded. 25:304. (R)
 1956 *Carpona imperialis*: Miller, Biol. Het. ed. 1: pl. 1, fig. 13. (fig. only)
 1970 *Carpona imperialis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, 27, figs. 62-63, 107. (& Ge)
 1971 *Carpona imperialis*: Miller, Biol. Het. ed. 1: pl. 1, fig. 13. (figure only)

Distribution: Philippines (Luzon).

Carpona stabilis (Walker, 1868)

- 1868 *Pycnanum stabile*: Walker, Cat. Het. 3:472.
 1889 *Pycnanum? stabile*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):77-79. (D)
 1893 *Carpona stabilis*: Distant, Ann. Mag. Nat. Hist. (6):11:434. (Ts, T)
 1893 *Carpona stabilis*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 *Carpona stabilis*: Distant, Ann. Mag. Nat. Hist. (7):6:63. (Ts)
 1902 *Carpona stabilis*: Distant, Fauna Brit. India, Rh. 1:274. (S, D)
 1909 *Carpona stabilis*: Kirkaldy, Cat. Hem. 1:356. (S)
 1977 *Carpona stabilis*: Hsiao et al., Handb. Chinese Hem.-Het. 1:67, fig. 307, 313, pl. 7 fig. 113.
 1980 *Carpona stabilis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)

Distribution: China (Yunnan), India.

Carpona vollenhoveni Blöte, 1945

- 1868 *Pycnanum amyoti*: Vollenhoven, Faune Ent. Indo-Neerl. 3:34, pl. 3, figs. 8, 8a. (misdet., see Blöte, 1945)
 1945 *Carpona vollenhoveni*: Blöte, Zool. Meded. 25:304-305.

Distribution: Sumatra?

Dalcantha Amyot & Serville, 1843

Type species: *Dalcantha dilatata* Amyot & Serville, 1843a, by monotypy.

- 1843 *Dalcantha*: Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 170-171.
 1846 *Dalcantha*: Agassiz, Nomen. Zool. Hem. Add. 4. (Ety)
 1851 *Dalcantha*: Dallas, List. Hem. 1:318, 345. (K)
 1851 *Dalcantha*: Herrich-Schäffer, Wanz. Ins. 9:283, 308. (K, L)
 1865 *Dalcantha*: Stål, Hem. Afr. 1:225, 230. (K, D)
 1866 *Dalcantha*: Vollenhoven, Tijdschr. Ent. (2):1:215, 217. (D)
 1868 *Dalcantha*: Walker, Cat. Het. 3:473. (L)
 1870 *Dalcantha*: Stål, Sv. Vet. Akad. Handl. 9(1):71, 76. (K, S)
 1889 *Dalcantha*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):80. (S, D)
 1893 *Dalcantha*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1902 *Dalcantha*: Distant, Fauna Brit. India, Rh. 1:263, 275-276. (K, S, D)
 1903 *Dalcantha*: Kirkaldy, Entomol. 36(484):231. (Tsp)

- 1909 *Dalcantha*: Kirkaldy, Cat. Hem. 1:357. (L)
 1935 *Dalcantha*: Tang, Cat. Ins. Sin. 2:368. (S)
 1970 *Dalcantha*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 17-18, 29. (K, D)

Dalcantha alata Breddin, 1904

- 1904 *Dalcantha alata*: Breddin, Wien. Ent. Ztg. 23(8):18.
 1908 *Dalcantha alata*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Dalcantha alata*: Kirkaldy, Cat. Hem. 1:357. (L)
 1921 *Dalcantha alata*: Distant, Entomol. 54(698):164. (R)
 1932 *Dalcantha alata*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 *Dalcantha alata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S)
 1935 *Dalcantha alata*: Tang, Cat. Ins. Sin. 2:368. (S)
 1945 *Dalcantha alata*: Blöte, Zool. Meded. 25:307. (R)
 1971 *Dalcantha alata*: Gaedike, Beitr. Ent. 21(1-2):79. (T)

Distribution: Indo-China, Laos, Vietnam

Dalcantha amyoti Vollenhoven, 1866 — see *Carpona amyoti*

Dalcantha angularis Breddin, 1904

- 1904 *Dalcantha angularis*: Breddin, Wien. Ent. Ztg. 23(8):18.
 1908 *Dalcantha angularis*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Dalcantha angularis*: Kirkaldy, Cat. Hem. 1:357. (L)
 1915 *Dalcantha angularis*: Distant, Sarawak Mus. J. 2(pt.2)(6):179-180. (D)
 1928 *Dalcantha angularis*: China, J.F.M.S. Mus. 8:193. (R)
 1945 *Dalcantha angularis*: Blöte, Zool. Meded. 25:307. (R)
 1971 *Dalcantha angularis*: Gaedike, Beitr. Ent. 21(1-2):79. (T)

Distribution: Borneo, Sumatra.

Dalcantha dilatata Amyot & Serville, 1843

- 1843 *Dalcantha dilatata*: Amyot & Serville, Hist. Nat. Ins. Hem.:171.
 1851 *Dalcantha dilatata*: Dallas, List. Hem. 1:345. (R)
 1859 *Dalcantha dilatata*: Dohrn, Cat. Hem. :21. (L)
 1863 *Dalcantha dilatata*: Stål, Trans. Ent. Soc. Lond. (3):1:600. (cf. *D. inermipes*)
 1868 *Dalcantha dilatata*: Walker, Cat. Het. 3:473. (R)
 1868 *Dalcantha regia*: Walker, Cat. Het. 3:474. (syn. with *D. stali* by Stål, 1870; disputed by Distant, 1900)
 1870 *Dalcantha dilatata*: Stål, Sv. Vet. Akad. Handl. 9(1):76. (S)
 1889 *Dalcantha dilatata*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):81. (S, D)
 1893 *Dalcantha dilatata*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1900 *Dalcantha dilatata*: Distant, Ann. Mag. Nat. Hist. (7):6:61-62, 63. (S)
 1902 *Dalcantha dilatata*: Distant, Fauna Brit. India, Rh. 1:276, fig. 175. (S, D)
 1903 *Dalcantha dilatata*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 *Dalcantha dilatata*: Kirkaldy, Cat. Hem. 1:357.
 1919 *Dalcantha dilatata*: Paiva, Rec. Indian Mus. 16:354. (R)
 1970 *Dalcantha dilatata*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):17-18, 29, figs. 56-58. (& Ge)
 1990 *Dalcantha dilatata*: Zheng & Jin, Contr. Shanghai Inst. Ent. 9:142. (R)

Distribution: India (Assam).

Dalcantha inermipes Stål, 1863

- 1863 *Dalcantha inermipes*: Stål, Trans. Ent. Soc. Lond. (3):1:599-600.

- 1868 *Dalcantha inermipes*: Walker, Cat. Het. 3:473. (R)
 1870 *Dalcantha inermipes*: Stål, Sv. Vet. Akad. Handl. 9(1):76. (L)
 1889 *Dalcantha inermipes*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):81-82.
 1893 *Dalcantha inermipes*: Lethierry & Severin, Cat. Gen. Hem. 1:233.
 1902 *Dalcantha inermipes*: Distant, Fauna Brit. India, Rh. 1:276. (S, D)
 1909 *Dalcantha inermipes*: Kirkaldy, Cat. Hem. 1:357. (S)
 1980 *Dalcantha inermipes* (sic): Ahmad, Proc. 1st Pakistan Congr. Zool.:135.

Distribution: India (Assam, Punjab).

Dalcantha platygaster Westwood, 1837 — see *Candace platygaster*

Dalcantha regia Walker, 1868 — see *Dalcantha dilatata* & *D. stali*

Dalcantha sanctifargavii Vollenhoven, 1866 — see *Pycnanum ponderosum*

Dalcantha servillei Vollenhoven, 1866 — see *Pseudopycnanum nigromarginatum*

Dalcantha stali Vollenhoven, 1866

- 1866 *Dalcantha stali* Vollenhoven, Tijdschr. Ent. (2)1:220-221, pl. 11 fig. 8.
 1868 *Dalcantha regia* Walker, Cat. Het. 3:474. (syn. by Stål, 1870 disputed by Distant, 1900)
 1870 *Dalcantha stali*: Stål, Sv. Vet. Akad. Handl. 9(1):76. (S, R)
 1873 *Dalcantha stali*: Walker, Cat. Het. Suppl. 27. (S)
 1889 *Dalcantha stali*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):81. (S, D)
 1893 *Dalcantha stali* (sic): Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1902 *Dalcantha stali*: Distant, Fauna Brit. India, Rh. 1:276. (Ts?)
 1909 *Dalcantha stali*: Kirkaldy, Cat. Hem. 1:357. (S)
 1945 *Dalcantha stali*: Blöte, Zool. Meded. 25:307. (R, T)
 1970 *Dalcantha stali*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):26, 27, 29, fig. 104. (& Ge)

Distribution: India (Assam)

Dalcantha westwoodi Vollenhoven, 1866 — see *Sanganus westwoodi*

Ecmecocera Bergroth, 1891 — see *Candace*

Ecmecocera (sic) *platygaster* (Westwood, 1837) — see *Candace platygaster*

Ecmecocera Bergroth, 1891 — see *Candace*

Ecmecocera intermedia Schouteden, 1905 — see *Candace intermedia*

Ecmecocera platygaster (Westwood, 1837) — see *Candace platygaster*

Ecmecocera virescens Distant, 1903 — see *Candace virescens*

Eurostus Dallas, 1851

Type species: *Eurostus validus* Dallas, 1851, designated by Distant, 1902.

- 1851 *Eurostus* Dallas, List. Hem. 1:318, 342-343. (K)

- 1865 *Eurostus*: Stål, Hem. Afr. 1:225. (K)
 1866 *Eurostus*: Vollenhoven, Tijdschr. Ent. (2)1:217. (cf. *Dalcantha*)
 1868 *Eurostus*: Walker, Cat. Het. 3:468. (L)
 1870 *Eurostus*: Stål, Sv. Vet. Akad. Handl. 9(1):70, 72. (K, S)
 1889 *Eurostus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):69. (S, D)
 1893 *Eurostus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1894 *Eurostus*: Montandon, Ann. Soc. Ent. Belg. 38(1893):636. (Dn)
 1902 *Eurostus*: Distant, Fauna Brit. India, Rh. 1:263, 268. (K, S, D, Tsp)
 1906 *Eurostus*: Oshanin, Verz. Pal. Hem. 1:163. (S)
 1909 *Eurostus*: Kirkaldy, Cat. Hem. 1:XXXVI, 354. (Tsp, S)
 1912 *Eurostus*: Oshanin, Kat. Pal. Hem. 20. (Tsp)
 1935 *Eurostus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 119-120. (K, D, Ksp)
 1935 *Eurostus*: Tang, Cat. Ins. Sin. 2:366. (S)
 1957 *Eurostus*: Zia, Acta Ent. Sin. 7:425, 441, 442. (K, S, D, Ks)
 1970 *Eurostus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):17, 23-24, 29. (K, M)
 1977a *Eurostus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 67-68. (K, Ks)

Eurostus grossipes Dallas, 1851

- 1851 *Eurostus grossipes* Dallas, List. Hem. 1:343.
 1859 *Eurostus grossipes*: Dohrn, Cat. Hem. 21. (L)
 1868 *Eurostus grossipes*: Walker, Cat. Het. 3:468. (R)
 1870 *Eurostus grossipes*: Stål, Sv. Vet. Akad. Handl. 9(1):72. (R)
 1879 *Eurostus grossipes*: Distant, Ann. Mag. Nat. Hist. (5)3:45. (R)
 1889 *Eurostus grossipes*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):70. (S, D)
 1890 *Eurostus grossipes*: Sharp, Trans. Ent. Soc. Lond. 1890(3):404. (M)
 1893 *Eurostus grossipes*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1902 *Eurostus grossipes*: Distant, Fauna Brit. India, Rh. 1:268-269, fig. 169. (D, R)
 1909 *Eurostus grossipes*: Kirkaldy, Cat. Hem. 1:354. (S)
 1935 *Eurostus grossipes*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120, 122, pl. 4 fig. 66. (K, S, D, R)
 1935 *Eurostus grossipes*: Tang, Cat. Ins. Sin. 2:366. (S, R)
 1945 *Eurostus grossipes*: Blöte, Zool. Meded. 25:302. (R)
 1948 *Eurostus grossipes*: Hofmann, Lingnan Sci. J. 22(1-4):36. (S, R)
 1957 *Eurostus grossipes*: Zia, Acta Ent. Sin. 7:442, 443-444, fig. 41. (K, S, D, R)
 1962 *Eurostus grossipes*: Stichel, Verz. Pal. Hem. Het. 4:205. (R)
 1964 *Eurostus grossipes*: Stenkwicz, Cat. Montandon Coll. 112. (R)
 1970 *Eurostus grossipes*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):23-24, fig. 88. (Ge)
 1980 *Eurostus grossipes*: Chen, Ghizhou Agric. Sci. 1980(3):54, 55. (R, K)

Distribution: Bhutan, China (Guangdong, Guangxi, Guizhou), India (Assam, Bengal, Hindustan, Tamil Nadu (Madras), Sikkim)

Eurostus heros Breddin, 1904

- 1904 *Eurostus heros* Breddin, Wien. Ent. Ztg. 23(1):16-17.
 1908 *Eurostus heros* Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)

- 1909 *Eurostus heros*: Kirkaldy, Cat. Hem. 1:354. (L)
 1921 *Eurostus heros*: Distant, Entomol. 54:(698)164. (R)
 1932a *Eurostus heros*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 *Eurostus heros*: Hoffmann, Lingnan Univ. Sci. Bull. 7:135. (S)
 1935 *Eurostus heros*: Tang, Cat. Ins. Sin. 2:366. (S)
 1945 *Eurostus heros*: Blöte, Zool. Meded. 25:302. (R)
 1948 *Eurostus heros*: Hoffmann, Lingnan Sci. J. 22(1-4):36. (S, R)
 1962 *Eurostus heros*: Stichel, Verz. Pal. Hem. Het. 4:205. (L)
 1970 *Eurostus heros*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):24, 26, 27, 29, fig. 89, 90, 111. (& Ge)
 1971 *Eurostus heros*: Gaedike, Beitr. Ent. 21(1-2):87. (T)
Distribution: Indo-China, Laos, Vietnam.

Eurostus moutoni Montandon, 1894

- 1894 *Eurostus moutoni* Montandon, Ann. Soc. Ent. Belg. 38(1893):636-637. (syn. with *E. validus* Dallas, 1851, by Yang, 1935)
 1906 *Eurostus moutoni*: Oshanin, Verz. Pal. Hem. 1:163. (L)
 1908 *Eurostus moutoni*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Eurostus moutoni*: Kirkaldy, Cat. Hem. 1:354. (L)
 1912 *Eurostus moutoni*: Oshanin, Kat. Pal. Hem. :20. (R)
 1932a *Eurostus moutoni*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1934 *Eurostus moutoni*: Lindberg, Ark. Zool. 27A (28):14. (R)
 1935 *Eurostus moutoni*: Hoffmann, Lingnan Univ. Sci. Bull. 7:135. (S)
 1939 *Eurostus moutoni*: Lindberg, Notulae Ent. 18:120. (R)
 1962 *Eurostus moutoni*: Stichel, Verz. Pal. Hem. Het. 4:205 (as syn. of *Eurostus validus*)
 1964 *Eurostus moutoni*: Sienkiewicz, Cat. Montandon Coll. :112. (as syn. of *Eurostus validus*; T)
Distribution: China (Anhui, Jiangxi, Sichuan).

Eurostus ochraceus Montandon, 1894

- 1894 *Eurostus ochraceus* Montandon, Ann. Soc. Ent. Belg. 38(1893):638.
 1901a *Eurostus ochraceus*: Distant, Trans. Ent. Soc. Lond. 1901(1):103. (R)
 1902 *Eurostus ochraceus*: Distant, Fauna Brit. India, Rh. 1:269. (S, D, R)
 1908 *Eurostus ochraceus*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Eurostus ochraceus*: Kirkaldy, Cat. Hem. 1:355. (S)
 1932a *Eurostus ochraceus*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 *Eurostus ochraceus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:135. (S)
 1935 *Eurostus ochraceus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120-121. (K, S, D)
 1935 *Eurostus ochraceus*: Tang, Cat. Ins. Sin. 2:367. (S, R)
 1945 *Eurostus ochraceus*: Blöte, Zool. Meded. 25:302. (R)
 1945 *Eurostus ochraceus* var. *obscurus*: Blöte, Zool. Meded. 25:302-303. (syn. by Stichel, 1962)
 1948 *Eurostus ochraceus* var. *obscurus*: Hoffmann, Lingnan Sci. J. 22(1-4):36. (L)
 1948 *Eurostus ochraceus*: Hoffmann, Lingnan Sci. J. 22(1-4):36. (S)
 1957 *Eurostus ochraceus*: Zia, Acta Ent. Sin. 7:442, 443. (K, S, D, R)
 1962 *Eurostus ochraceus*: Stichel, Verz. Pal. Hem. Het. 4:205. (S, R)
 1964 *Eurostus ochraceus*: Sienkiewicz, Cat. Montandon

Coll. :112. (T, R)

- 1977 *Eurostus ochraceus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:68, figs. 318, 321, pl. 7 fig. 116.
 1980 *Eurostus ochraceus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)
 1988 *Eurostus ochraceus*: Zhang & Lin, Ins. Mt. Namjagbarwa :84. (R)
 1989 *Eurostus ochraceus*: Hua, List Ins. Zhongshan Univ. :44. (L)
 1990 *Eurostus ochraceus*: Zheng & Jin, Contr. Shanghai Inst. Ent. 9:142. (R)
Distribution: Borneo, Burma, China (Anhui, Ghizhou, Xizang, Yunnan).

Eurostus validus Dallas, 1851

- 1851 *Eurostus validus* Dallas, List. Hem. 1:343, pl. 11 figs. 2a-c.
 1859 *Eurostus validus*: Dohrn, Cat. Hem. :21. (L)
 1868 *Eurostus validus*: Walker, Cat. Het. 3:468. (R)
 1870 *Eurostus validus*: Stål, Sv. Vet. Akad. Handl. 9(1):72. (L)
 1879 *Eurostus validus*: Horváth, Term. Füzet. 3(2/3):145. (R)
 1889 *Eurostus validus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):69-70. (S, D)
 1893 *Eurostus validus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1906 *Eurostus validus*: Oshanin, Verz. Pal. Hem. 1:163. (S)
 1909 *Eurostus validus*: Kirkaldy, Cat. Hem. 1:355. (L)
 1910a *Eurostus validus*: Kirkaldy, Can. Ent. 42:62. (R, Dn)
 1912 *Eurostus validus*: Oshanin, Kat. Pal. Hem. :20. (R)
 1913 *Eurostus validus*: Matsumura, Thous. Ins. Jap., Addit. 1:119, pl. 12 fig. 24.
 1920 *Eurostus validus*: Sonan, Trans. Nat. Hist. Soc. Taiwan 10:126-128. (D, stridulation by only)
 1926 *Eurostus validus*: Esaki, Ann. Hist. Nat. Hung. 24:153. (S, R)
 1930 *Eurostus validus*: Matsumura, Ill. Thous. Ins. Japan 1:112, pl. 11 fig. 24. (Dn)
 1931 *Eurostus validus*: Matsumura, Ill. Ins. Jap. :1182, fig.
 1932a *Eurostus validus*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1934 *Eurostus validus*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52, 54-56, fig. 4A-B. (K, D)
 1935 *Eurostus validus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:135, 177. (S, R)
 1935 *Eurostus validus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120-121, pl. 4, fig. 61-65. (K, S, D, R)
 1935 *Eurostus validus*: Tang, Cat. Ins. Sin. 2:367. (S, R)
 1945 *Eurostus validus*: Blöte, Zool. Meded. 25:303. (R)
 1948 *Eurostus validus*: Hoffmann, Lingnan Sci. J. 22(1-4):36-37. (S, R)
 1956 *Eurostus validus*: Miller, Biol. Het. ed. 1:28-29. (stridulation)
 1957 *Eurostus validus*: Zia, Acta Ent. Sin. 7:442-443, fig. 40. (K, S, D, R)
 1962 *Eurostus validus*: Yang, Econ. Ins. Fauna China 2:40, 42, pl. 3 fig. 24.
 1962 *Eurostus validus*: Stichel, Verz. Pal. Hem. Het. 4:205. (S)
 1965 *Eurostus validus*: Miyamoto, Spec. Bull. Lep. Soc. Jap. 1:229. (R)
 1970a *Eurostus validus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):23-24, fig. 86-87. (& Ge)
 1974 *Eurostus validus*: Chang, Acta Ent. Sin. 17(3):357.
 1977 *Eurostus validus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:67, figs. 317, 320, pl. 7 fig. 115. (K)

- 1980 *Eurostus validus*: Chang et al., Acta Ent. Sin. 23(2):228-231.
 1980 *Eurostus validus* (sic): Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)
 1985 *Eurostus validus*: Zhang, Econ. Ins. China 31:50-51, pl. 2, figs. 3.1-3.5. (D)
 1989 *Eurostus validus*: Hua, List. Ins. Zhongshan Univ. 44. (L)

Distribution: China (Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shandong, Shanxi, Sichuan, Yunnan, Zhejiang), India, Hong Kong, Laos, Taiwan, Vietnam.

Eurostus validus Dallas, 1851 -- misspelling, see *Eurostus validus*

Euryleura Amyot & Serville, 1843

Type species: *Tessaratomya bicornis* Lepelletier & Serville, 1825, by monotypy.

- 1843 *Euryleura*: Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 169-170.
 1846 *Euryleura*: Agassiz, Nomen. Zool. Hem. Add. 6 (Ety)
 1851 *Euryleura*: Dallas, List. Hem. 1:318, 345. (K)
 1851 *Euryleura*: Herrich-Schäffer, Wanz. Ins. 9:283, 308 (K, L)
 1866 *Euryleura*: Vollenhoven, Tijdschr. Ent. (2)1:217. (cf. *Dalcantha*)
 1868 *Euryleura*: Vollenhoven, Faune Ent. Indo-Neerl. 3:34. (D)
 1870 *Euryleura*: Stål, Sv. Vet. Akad. Handl. 9(1):70, 74 (K)
 1893 *Euryleura*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1903 *Euryleura*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 *Euryleura*: Kirkaldy, Cat. Hem. 1:355. (L)
 1970 *Euryleura*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 18-19, 29 (K, D)

Euryleura bicornis (Lepelletier & Serville, 1825)

- 1825 *Tessaratomya bicornis* Lepelletier & Serville, Enc. Meth. 10:592.
 1837 *Tessaratomya bicornis*: Spinola, Essai: 304 (Ts)
 1843 *Euryleura bicorne*: Amyot & Serville, Hist. Nat. Ins. Hem.:170. (Dn)
 1851 *Euryleura bicornis*: Dallas, List. Hem. 1:345. (S, R)
 1859 *Euryleura bicornis*: Dohrn, Cat. Hem. 21. (L)
 1868 *Euryleura bicornis*: Vollenhoven, Faune Ent. Indo-Neerl. 3:34-35. (S, D, R)
 1868 *Euryleura bicornis*: Walker, Cat. Hem. 3:476 (R)
 1870 *Euryleura bicornis*: Stål, Sv. Vet. Akad. Handl. 9(1):74 (S)
 1893 *Euryleura bicornis*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 *Euryleura bicornis*: Horváth, Zoolog. Forschungsreisen 5:634 (S, R)
 1903 *Euryleura bicornis*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 *Euryleura bicornis*: Kirkaldy, Cat. Hem. 1:355. (L)
 1945 *Euryleura bicornis*: Blöte, Zool. Meded. 25:304 (R)
 1970 *Euryleura bicornis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, 27, 28, 29, fig. 105. (& Ge)

Distribution: Java, Sumatra.

Eusthenes Laporte, 1833

Type species: *Tessaratomya robusta* Lepelletier & Severin, 1828, by monotypy.

- 1833 *Dinidor* subgen. *Eusthenes* Laporte, Mag. Zool. (Guérin-Ménéville), 2:64.
 1837 *Dinidor* subgen. *Eusthenes* Spinola, Essai: 303. (part)
 1843 *Eusthenes*: Amyot & Serville, Hist. Nat. Ins. Hem.: XXVIII, 167. (K, D)
 1846 *Eusthenes*: Agassiz, Nomen. Zool. Hem. 8. (Ety)
 1851 *Eusthenes*: Dallas, List. Hem. 1:317, 342. (K)
 1851 *Eusthenes*: Herrich-Schäffer, Wanz. Ins. 9:283-284. (K)
 1865 *Eusthenes*: Stål, Hem. Afr. 1:225. (K)
 1868 *Eusthenes*: Vollenhoven, Faune Ent. Indo-Neerl. 3:27 (D)
 1868 *Eusthenes*: Walker, Cat. Hem. 3:467. (L)
 1870 *Eusthenes*: Stål, Sv. Vet. Akad. Handl. 9(1) 71, 230. (K, S)
 1889 *Eusthenes*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):63-64. (S, D, Ks)
 1893 *Eusthenes*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1894 *Eusthenes*: Montandon, Ann. Soc. Ent. Belge 38:639. (cf. *Anacanthopus*)
 1902 *Eusthenes*: Distant, Fauna Brit. India Rh. 1:263, 264. (K, D)
 1906 *Eusthenes*: Oshanin, Verz. Pat. Hem. 1:163. (S)
 1909 *Eusthenes*: Kirkaldy, Cat. Hem. 1:353, 374. (S)
 1912 *Eusthenes*: Oshanin, Kat. Pat. Hem.:20. (Tsp)
 1935 *Eusthenes*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105-107. (K, S, D, Ks)
 1935 *Eusthenes*: Tang, Cat. Ins. Sin. 2:364 (S)
 1957 *Eusthenes*: Zia, Acta Ent. Sin. 7:425, 430-431. (K, S, D, Ks)
 1970 *Eusthenes*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 21-22, 29. (K, D)
 1977 *Eusthenes*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 68 (K, Ks)

Eusthenes antennatus Distant, 1887 — see *Eusthenes scutellaris*

Eusthenes brinae Yang, 1935

- 1935 *Eusthenes brinae* Yang, Bull. Fan Mem. Inst. Biol. 6(3):117-118, pl. 5 figs. 80-83
 1945 *Eusthenes brinae*: Blöte, Zool. Meded. 25:299 (R)
 1948 *Eusthenes brinae*: Hoffmann, Lignan Sci. J. 22(1-4):32. (S, T)

Distribution: Laos, Malay Peninsula, Vietnam

Eusthenes cupreus (Westwood, 1837)

- 1837 *Tessaratomya* (sic) *cuprea* Westwood, Cat. Hope 1:27
 1851 *Eusthenes cupreus*: Dallas, List. Hem. 1:342. (R)
 1859 *Tessaratomya cuprea*: Dohrn, Cat. Hem. 21. (L)
 1859 *Eusthenes cuprea*: Dohrn, Cat. Hem. 21. (L)
 1860 *Tessaratomya cuprea*: Dohrn, Stett. Ent. Ztg. 21(7-9):401. (R)
 1863 *Eusthenes cupreus*: Stål, Trans. Ent. Soc. Lond. (3)1:598 (cf. *E. saevus*)
 1868 *Eusthenes cupreus*: Walker, Cat. Hem. 3:467. (R)
 1870 *Eusthenes cupreus*: Stål, Sv. Vet. Akad. Handl. 9(1) 71, 231. (S, K, D)
 1879 *Eusthenes cupreus*: Distant, Ann. Mag. Nat. Hist. (5)3:45. (R)
 1889 *Eusthenes cupreus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 67. (S, D, R)
 1892 *Eusthenes cupreus*: Kirby, Linn. J. Zool. 24:87. (R)
 1893 *Eusthenes cupreus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1901c *Eusthenes cupreus*: Distant, Proc. Zool. Soc. Lond. 1900(4):820. (S)
 1902 *Eusthenes cupreus*: Distant, Fauna Brit. India, Rh.

- 1:266. (S, D)
 1909 *Eusthenes cupreus*: Kirkaldy, Cat. Hem. 1:353. (S)
 1925 *Eusthenes cupreus*: China, Ann. Mag. Nat. Hist. 9(16):456-457. (R)
 1935 *Eusthenes cupreus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:132. (S, R)
 1935 *Eusthenes cupreus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 107-111, pl. 1 fig. 1, pl. 2 fig. 24. (K, S, D, R)
 1935 *Eusthenes cupreus*: Tang, Cat. Ins. Sin. 2:364. (S)
 1945 *Eusthenes cupreus*: Blöte, Zool. Meded. 25:299-300. (R, T)
 1948 *Eusthenes cupreus*: Hoffmann, Lingnan Sci. J. 22(1-4):32. (S, R)
 1957 *Eusthenes cupreus*: Zia, Acta Ent. Sin. 7:431, 435, fig. 24. (K, S, D, R)
 1962 *Eusthenes cupreus*: Yang, Econ. Ins. Fauna China 2:40, 45-46.
 1962 *Eusthenes cuprea*: Stichel, Verz. Pal. Hem. Het. 4:204. (S, R)
 1964 *Eusthenes cuprea*: Sienkiewicz, Cat. Montandon Coll. :112. (R)
 1970 *Eusthenes cupreus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 27, 28, 30, figs. 77-79. (& Ge)
 1974 *Eusthenes cupreus*: Chang, Acta Ent. Sin. 17(3):356.
 1977 *Eusthenes cupreus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:69, figs. 323, 327, pl. 8 fig. 119. (K)
 1980 *Eusthenes cupreus*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1985 *Eusthenes cupreus*: Zhang, Econ. Ins. China 31:51-52, figs. 116, 117, pl. 46 fig. 157.
 1987 *Eusthenes cupreus*: Zhang & Lin, Agric. Ins. Xizang 1:76. (R)
 1988 *Eusthenes cupreus*: Zhang & Lin, Ins. Mt. Namjagbarwa 84. (R)
 1989 *Eusthenes cupreus*: Hua, List Ins. Zhongshan Univ. 44. (L)
 1990 *Eusthenes cupreus*: Zheng & Jin, Contr. Shanghai Inst. Ent. 9:142. (R)
Distribution: Bhutan, Burma, China (Anhui, Fujian, Guangdong, Guangxi, Guizhou, Jiangxi, Sichuan, Xizang, Yunnan, Zhejiang), India (Assam, Sikkim), Laos, Malay Peninsula, Malaysia, Nepal, Sri Lanka, Taiwan, Thailand

Eusthenes diomedes Breddin, 1904 — see *Eusthenes rubefactus*

Eusthenes elephas Dohrn, 1863 — see *Eusthenes robustus*

Eusthenes eurytus Distant, 1887

- 1887a *Eusthenes eurytus* Distant, Trans. Ent. Soc. Lond. 1887(3):358.
 1889 *Eusthenes eurytus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 67. (Dn)
 1890 *Eusthenes eurytus*: Sharp, Trans. Ent. Soc. Lond. 1890(3):402-403. (M)
 1893 *Eusthenes eurytus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1901a *Eusthenes eurytus*: Distant, Trans. Ent. Soc. Lond. 1901(1):103. (R)
 1902 *Eusthenes eurytus*: Distant, Fauna Brit. India, Rh. 1:265. (D)
 1903a *Eusthenes eurytus*: Distant, Fasc. Malay. Zool. 1(2):237. (R, S)
 1909 *Eusthenes eurytus*: Kirkaldy, Cat. Hem. 1:353. (S)
 1934 *Eusthenes eurytus*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52, 59. (K) (misdet. see *Eusthenes variegatus*)
 1935 *Eusthenes eurytus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:153-154. (S, R)

- 1935 *Eusthenes eurytus*: Tang, Cat. Ins. Sin. 2:364. (as syn. of *Eusthenes cupreus*)
 1945 *Eusthenes eurytus*: Blöte, Zool. Meded. 25:300. (R)
 1962 *Eusthenes eurytus*: Stichel, Verz. Pal. Hem. Het. 4:204. (as syn. of *Eusthenes cupreus*)
 1980 *Eusthenes eurpeus* (sic): Ahmad, Proc. 1st Pakistan Congr. Zool. :135.
 1987 *Eusthenes eurytus*: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: Burma, India (Assam, Sikkim), Malay peninsula (Malaya).

Eusthenes femoralis Zia, 1957

- 1957 *Eusthenes femoralis* Zia, Acta Ent. Sin. 7:430, 431-432, 447, figs. 12, 13. (K, D, R)
 1962 *Eusthenes femoralis*: Yang, Econ. Ins. Fauna China 2:40, 44-45, pl. 3 fig. 25.
 1974 *Eusthenes femoralis*: Chang, Acta Ent. Sin. 17(3):356.
 1977 *Eusthenes femoralis*: Hsiao et al., Handb. Chinese Hem.-Het. 1:69, pl. 8, fig. 120. (K)
 1980 *Eusthenes femoralis*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1985 *Eusthenes femoralis*: Zhang, Econ. Ins. China 31:52, pl. 47 fig. 158.
 1989 *Eusthenes femoralis*: Hua, List Ins. Zhongshan Univ. :44.

Distribution: China (Fujian, Guangdong, Guangxi, Guizhou, Yunnan)

Eusthenes hercules Stål, 1870

- 1870 *Eusthenes hercules* Stål, Sv. Vet. Akad. Handl. 9(1):231.
 1873 *Eusthenes hercules*: Walker, Cat. Het. Suppl. 27. (L)
 1889 *Eusthenes hercules*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 66. (D)
 1893 *Eusthenes hercules*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1902 *Eusthenes hercules*: Distant, Fauna Brit. India, Rh. 1:264-265. (D)
 1909 *Eusthenes hercules*: Kirkaldy, Cat. Hem. 1:353. (S)
 1945 *Eusthenes hercules*: Blöte, Zool. Meded. 25:300. (R)
 1970 *Eusthenes hercules*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 30. (& Ge)
 1985 *Eusthenes hercules*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985 22, fig. 53. (Dn, R)

Distribution: India (Assam), Java.

Eusthenes humeralis Distant, 1921

- 1921 *Eusthenes humeralis* Distant, Entomol. 54:(698)165.
 1932a *Eusthenes humeralis*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 *Eusthenes humeralis*: Hoffmann, Lingnan Univ. Sci. Bull. 7:132. (L)
 1948 *Eusthenes humeralis*: Hoffmann, Lingnan Sci. J. 22(1-4):33

Distribution: Vietnam

Eusthenes jason Stål, 1870

- 1868 *Eusthenes scutellaris* Vollenhoven, Faune Ent. Indo-Néerl. 3:28, pl. 3 fig. 5. (preoccup. Herrich-Schäffer, 1838)
 1870 *Eusthenes jason* Stål, Sv. Vet. Akad. Handl. 9(1):232 (Nn for *Eusthenes scutellaris* Vollenhoven, 1868)
 1873 *Eusthenes jason*: Walker, Cat. Het. Suppl. 27. (S)
 1893 *Eusthenes jason*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1907a *Eusthenes jason*: Schouteden, Notes Leyden Mus. 30:44. (S)

- 1909 *Eusthenes jason*: Kirkaldy, Cat. Hem. 1:353. (S)
 1945 *Eusthenes jason*: Blöte, Zool. Meded. 25:300. (R, T)
Distribution: N. India, Java.

Eusthenes laticollis Westwood, 1837 — see *Mattiphus laticollis*

Eusthenes minor Vollenhoven, 1868 — see *Eusthenes scutellaris*

Eusthenes paris Breddin, 1899

- 1899 *Eusthenes paris* Breddin, Beih. Jb. Hamb. Wiss. Anst. 16(2):167-168, fig. 4.
 1899 *Eusthenes paris*: Breddin, Hem. Insulae Lombok: 13-14, fig. 4. (separate)
 1908 *Eusthenes paris*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Eusthenes paris*: Kirkaldy, Cat. Hem. 1:354. (L)
 1971 *Eusthenes paris*: Gaedike, Beitr. Ent. 21(1-2):95. (T)
Distribution: Lesser Sunda Is. (Lombok I.).

Eusthenes philoctelus China, 1925 — see *Eusthenes saevus*

Eusthenes polyphemus Stål, 1863

- 1863 *Eusthenes polyphemus* Stål, Trans. Ent. Soc. Lond. (3):1:598.
 1868 *Eusthenes polyphemus*: Walker, Cat. Het. 3:468. (R)
 1870 *Eusthenes polyphemus*: Stål, Sv. Vet. Akad. Handl. 9(1):72, 232. (K, Dn)
 1889 *Eusthenes polyphemus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 68. (S, D)
 1893 *Eusthenes polyphemus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1901a *Eusthenes polyphemus*: Distant, Trans. Ent. Soc. Lond. 1901(1):103. (R)
 1902 *Eusthenes polyphemus*: Distant, Fauna Brit. India, Rh. 1:265-266. (S, D, R)
 1909 *Eusthenes polyphemus*: Kirkaldy, Cat. Hem. 1:354. (S)
 1945 *Eusthenes polyphemus*: Blöte, Zool. Meded. 25:300. (R)

Distribution: Burma, India (Assam, Sikkim), Vietnam.

Eusthenes pratti Distant, 1890

- 1890a *Eusthenes pratti* Distant, Entomol. 23(324):160 (syn. with *Eusthenes validus* Dallas, 1851, by Yang, 1935)
 1890 *Eusthenes pratti*: Sharp, Trans. Ent. Soc. Lond. 1890(3):403-404, pl. 12 fig. 4. (M)
 1893 *Eusthenes pratti*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1899 *Eusthenes pratti*: Sharp, Cambridge Nat. Hist. 6:533, fig. 255 A, B. (figs. only)
 1909 *Eusthenes pratti*: Kirkaldy, Cat. Hem. 1:354. (S)
 1925 *Eusthenes pratti*: Singh-Pruthi, Trans. Ent. Soc. Lond. 1925(1-2):149, pl. 9 fig. 30. (Ge)
 1932a *Eusthenes pratti*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 *Eusthenes pratti*: Hoffmann, Lingnan Univ. Sci. Bull. 7:133. (S)
 1935 *Eusthenes pratti*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120. (as syn. of *Eurostus validus* Dallas, 1851)
 1962 *Eusthenes pratti*: Stichel, Verz. Pal. Hem. Het. 4:205. (as syn. of *Eurostus validus*)

Distribution: China (Jiangxi).

Eusthenes reflexus Dallas, 1857 — see *Mattiphus reflexus*

Eusthenes robustus (Lepelletier & Serville, 1825)

- 1825 *Tassarotoma robusta* Lepelletier & Serville Enc. Meth. 10:591

- 1833 *Dinidor* (*Eusthenes*) *robustus*: Laporte, Mag. Zool. (Guérin), 2:64. (Tsp)
 1837 *Dinidor robustus*: Spinola, Essai:304. (Ts)
 1840 *Eusthenes robustus*: Blanchard, Hist. Nat. Ins. 3:142. (D)
 1843 *Eusthenes robustus*: Amyot & Serville, Hist. Nat. Ins. Hem. 167. (S, D)
 1851 *Eusthenes robustus*: Herrich-Schäffer, Wanz. Ins. 9:309. (cf. *E. scutellaris*)
 1851 *Eusthenes robustus*: Dallas, List. Hem. 1:342. (S, R)
 1859 *Eusthenes robustus*: Dohrn, Cat. Hem. 21. (L)
 1863 *Eusthenes elephas* Dohrn, Stett. Ent. Ztg. 24:351 (syn. by Vollenhoven, 1868)
 1863 *Eusthenes robustus*: Stål, Trans. Ent. Soc. Lond. (3):1:598. (cf. *Eusthenes saevus*)
 1868 *Eusthenes robustus*: Vollenhoven, Faune Ent. Indo-Neerl. 3:27-28. (S, D)
 1868 *Eusthenes robustus*: Walker, Cat. Het. 3:468. (R)
 1868 *Eusthenes elephas*: Walker, Cat. Het. 3:468. (R)
 1870 *Eusthenes robustus*: Stål, Sv. Vet. Akad. Handl. 9(1):71, 230. (S, K, D)
 1873 *Eusthenes robustus*: Walker, Cat. Het. Suppl. 26. (S)
 1879 *Eusthenes robustus*: Distant, Ann. Mag. Nat. Hist. (5):3:45. (R)
 1889 *Eusthenes robustus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64-65. (S, D)
 1893 *Eusthenes robustus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1900a *Eusthenes robustus*: Breddin, Abh. Senckenb. Naturf. Ges. 25:148. (R)
 1900 *Eusthenes robustus*: Horváth, Zoolog. Forschungsreisen 5:633. (S, R)
 1901 *Eusthenes robustus*: Breddin, Abh. Naturf. Ges. Halle 24:14, 63. (Dn, R)
 1902 *Eusthenes robustus*: Distant, Fauna Brit. India, Rh. 1:264, fig. 168. (S, D, R)
 1905 *Eusthenes robustus*: Breddin, Mitt. Nat. Mus. Hamb. 22:115. (R)
 1909 *Eusthenes robustus*: Kirkaldy, Cat. Hem. 1:354. (S)
 1910 *Eusthenes robustus*: Kirkaldy, Ann. Soc. Ent. Belg. 54(4):111. (R)
 1921 *Eusthenes robustus*: Distant, Entomol. 54:(698):164 (R)
 1928 *Eusthenes robustus*: China, J. F. M. S. Mus. 8:193 (R)
 1932a *Eusthenes robustus*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1932 *Eusthenes robustus*: Wu, Mar. Biol. Assoc. China, 1st. Ann. Rep. 82. (R; authorship attributed to Distant in error)
 1933 *Eusthenes robustus*: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51. (R)
 1934 *Eusthenes robustus*: Miller, J. F. M. S. Mus. 17(3):514-515, figs. 11, 30. (E, N)
 1935 *Eusthenes robustus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:133. (S, R)
 1935 *Eusthenes robustus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 115-117, pl. 3 figs. 34-44. (part)
 1935 *Eusthenes robustus*: Tang, Cat. Ins. Sin. 2:364-365. (S, part)
 1945 *Eusthenes robustus*: Blöte, Zool. Meded. 25:300. (R)
 1948 *Eusthenes robustus*: Hoffmann, Lingnan Univ. Sci. J. 22:33. (S, R)
 1956 *Eusthenes robustus*: Miller, Biol. Het. ed. 1:32, fig. 9.3 (P, I)
 1957 *Eusthenes robustus*: Zia, Acta Ent. Sin. 7:431, 433-434, figs. 14, 20. (K, S, D, R)
 1959 *Eusthenes robustus*: Scudder, Trans. Ent. Soc. Lond. 111(14):413. (Ge)

- 1962 *Eusthenes robustus*: Yang, Econ. Ins. Fauna China 2:40, 45.
 1962 *Eusthenes robustus*: Stichel, Verz. Pal. Hem. Het. 4:204. (S, R)
 1964 *Eusthenes robustus*: Sienkiewicz, Cat. Montandon Coll. :112. (R)
 1968 *Eusthenes robustus*: Cobben, Evol. Trends Het. Eggs: 114-115. (E)
 1970 *Eusthenes robustus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):21-22, figs. 74-76. (Ge)
 1974 *Eusthenes robustus*: Chang, Acta Ent. Sin. 17(3):356. (R)
 1977 *Eusthenes robustus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:68-69, figs. 326, pl. 8 fig. 118.
 1980 *Eusthenes robustus*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1981 *Eusthenes robustus*: Hinton, Biol. Ins. Eggs. 1:594. (E)
 1985 *Eusthenes robustus*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:22, fig. 54. (Dn, R)
 1985 *Eusthenes robustus*: Zhang, Econ. Ins. China 31:53, figs. 114, 115, pl. 41 fig. 116. (D)
 1989 *Eusthenes robustus*: Hua, List Ins. Zhongshan Univ. 44. (L)

Distribution: Bhutan, Borneo, China (Fujian, Guangdong, Guangxi, Guizhou, Hainan), Jiangxi, Sichuan, Yunnan) E. Indies, India (Assam, Bengal, Sikkim), Indo-China, Java, Macao, Malay Peninsula, Sumatra, Suwalesi (Celebes), Thailand, Vietnam.

Note: Yang (1935) synonymized *Eusthenes jason* Stal, 1870: *Eusthenes polyphemus* Stal, 1863; and *Eusthenes touchet* Fallou, 1887; and tentatively synonymized *Eusthenes hercules* Stal, 1870: *Eusthenes humeralis* Distant, 1921; *Eusthenes rubefactus* Distant, 1901; and *Eusthenes thoracicus* Distant, 1900 with *Eusthenes robustus* (Lepelletier & Serville, 1828). Only Tang (1935), as a cataloger, has followed this synonymy.

***Eusthenes rubefactus* Distant, 1901**

- 1901a *Eusthenes rubefactus* Distant, Trans. Ent. Soc. Lond. 1901(1):111.
 1902 *Eusthenes rubefactus*: Distant, Fauna Brit. India, Rh. 1:267. (D)
 1904 *Eusthenes diomedes* Breddin, Wien. Ent. Ztg. 23(1):15-16. (syn. by Distant, 1921)
 1908 *Eusthenes diomedes*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1908 *Eusthenes rubefactus*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Eusthenes diomedes*: Kirkaldy, Cat. Hem. 1:353. (L)
 1909 *Eusthenes rubefactus*: Kirkaldy, Cat. Hem. 1:354. (S)
 1919 *Eusthenes rubefactus*: Paiva, Rec. Indian Mus. 16(5):354. (R)
 1921 *Eusthenes rubefactus*: Distant, Entomol. 54 (698):165. (S, R)
 1926 *Eusthenes rubefactus*: Esaki, Ann. Hist. Nat. Hung. 24:153. (S, R)
 1932 *Eusthenes diomedes*: Hoffmann, J. Pan-Pac. Res. Inst. 7:10. (L)
 1935 *Eusthenes rubefactus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:133-134. (S, R)
 1935 *Eusthenes rubefactus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):116. (as syn. of *Eusthenes robustus*)
 1945 *Eusthenes rubefactus*: Blöte, Zool. Meded. 25:300. (R)
 1948 *Eusthenes rubefactus*: Hoffmann, Lingnan Sci. J. 22(1-4):33-34.
 1971 *Eusthenes diomedes*: Gaedike, Beitr. Ent. 21(1-2):84.

(T)

- 1980 *Eusthenes diomedes*: Chen, Ghizhou Agric. Sci. 1980(3):53, 56, 57. (R, D, K)

Distribution: Myanmar, India (Assam), Indo-China, Taiwan, Vietnam.

***Eusthenes saevus* Stal, 1863**

- 1863 *Eusthenes saevus* Stal, Trans. Ent. Soc. Lond. (3)1:597-598.
 1868 *Eusthenes saevus*: Walker, Cat. Hem. 3:468. (R)
 1870 *Eusthenes saevus*: Stal, Sv. Vet. Akad. Handl. 9(1):72
 1879 *Eusthenes saevus*: Horváth, Term. Füzet. 3(2/3):145. (R)
 1889 *Eusthenes saevus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 68. (S, D, R)
 1893 *Eusthenes saevus*: Lethierry & Severin, Cat. Gen. Hem. 1:230.
 1902 *Eusthenes saevus*: Distant, Fauna Brit. India, Rh. 1:265. (D, R)
 1903a *Eusthenes saevus*: Distant, Fasc. Malay. Zool. 1(2):237. (S, R)
 1906 *Eusthenes saevus*: Oshanin, Verz. Pal. Hem. 1:163. (S)
 1909 *Eusthenes saevus*: Kirkaldy, Cat. Hem. 1:354. (S)
 1912 *Eusthenes saevus*: Oshanin, Kat. Pal. Hem. :20. (R)
 1921 *Eusthenes saevus*: Distant, Entomol. 54:(698)164. (R)
 1925 *Eusthenes philoctetes* China, Ann. Mag. Nat. Hist. (9)16:455-456, fig. 1B. (syn. by Yang, 1935)
 1932a *Eusthenes saevus*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1934 *Eusthenes saevus*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52, 56-59, fig. 5. (K, D)
 1935 *Eusthenes philoctetes*: Hoffmann, Lingnan Univ. Sci. Bull. 7:133. (L)
 1935 *Eusthenes saevus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:134, 177. (S, R)
 1935 *Eusthenes saevus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 113-114, pl. 2 fig. 25, pl. 3 fig. 33, text figs a-f, A-C. (K, S, D, R)
 1935 *Eusthenes saevus* var. *obsoletus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):114-115. (misspelled *obsoletus* on p. 114; syn. by Yang, 1935, p. 131)
 1935 *Eusthenes philoctetes*: Tang, Cat. Ins. Sin. 2:364. (L)
 1935 *Eusthenes saevus*: Tang, Cat. Ins. Sin. 2:365. (S, R)
 1945 *Eusthenes saevus*: Blöte, Zool. Meded. 25:300. (R)
 1948 *Eusthenes saevus*: Hoffmann, Lingnan Sci. J. 22(1-4):34. (S, R)
 1957 *Eusthenes saevus*: Zia, Acta Ent. Sin. 7:431, 432-433, figs. 16-19. (K, S, D, R)
 1962 *Eusthenes saevus*: Yang, Econ. Ins. Fauna China 2:40, 45.
 1962 *Eusthenes philoctetes*: Stichel, Verz. Pal. Hem. Het. 4:204. (S)
 1974 *Eusthenes saevus*: Chang, Acta Ent. Sin. 17(3):356. (R)
 1977 *Eusthenes saevus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:68, figs. 319, 322, pl. 7 fig. 117. (K)
 1980 *Eusthenes saevus*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1982 *Eusthenes saevus*: Nuamah, Insect. Sci. Application 3(1):15, 25. (C)
 1985 *Eusthenes saevus*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:23, fig. 55. (Dn, R)
 1989 *Eusthenes saevus*: Hua, List Ins. Zhongshan Univ. :44.

Distribution: Bhutan, Borneo, China (Anhui, Guangdong, Guizhou, Jiangxi, Shanxi, Sichuan, Yangtze, Yunnan, Zhejiang) India (Assam, Sikkim), Indo-China, Malay

Penninsula.

Eusthenes saevus *obsoletus* Yang, 1935 — see *Eusthenes saevus*

Eusthenes scutellaris (Herrich-Schäffer, 1838)

- 1838 *Tesseratoma* (sic) *scutellaris* Herrich-Schäffer, Wanz. Ins. 4:81, fig. 410.
- 1868 *Eusthenes minor* Vollenhoven, Faune Ent. Indo-Neerl. 3:29. (syn. by Schouteden, 1907)
- 1868 *Tesseratoma* (sic) *scutellaris* Walker, Cat. Het. 3:463. (R)
- 1870 *Eusthenes scutellaris* Stål, Sv. Vet. Akad. Handl. 9(1):71, 231. (S, K, D)
- 1873 *Eusthenes scutellaris* Walker, Cat. Het. Suppl. 26. (S)
- 1879 *Eusthenes scutellaris* Distant, Ann. Mag. Nat. Hist. 5(3):45. (R)
- 1887a *Eusthenes antennatus* Distant, Trans. Ent. Soc. Lond. 1887(3):357-358. (syn. by Distant, 1902)
- 1889 *Eusthenes scutellaris* Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 65-66. (S, D, R)
- 1889 *Eusthenes antennatus* Atkinson, J. Asiatic Soc. Bengal 58(pt.2):68-69. (D)
- 1890a *Eusthenes antennatus* Distant, Entomol. 23(324):160. (original description emended)
- 1893 *Eusthenes antennatus* Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
- 1893 *Eusthenes scutellaris* Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
- 1900 *Eusthenes scutellaris* Horváth, Zoolog. Forschungsreisen 5:634. (S, R)
- 1902 *Eusthenes scutellaris* Distant, Fauna Brit. India, Rh. 1:267. (S)
- 1905 *Eusthenes minor* Breddin, Mitt. Nat. Mus. Hamb. 22:116. (R)
- 1905 *Eusthenes teucer* Breddin, Mitt. Nat. Mus. Hamb. 22:116-117. (syn. by Blöte, 1945)
- 1907a *Eusthenes scutellaris* Schouteden, Notes Leyden Mus. 30:44. (S)
- 1908 *Eusthenes teucer* Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 *Eusthenes scutellaris* Kirkaldy, Cat. Hem. 1:354. (S)
- 1909 *Eusthenes teucer* Kirkaldy, Cat. Hem. 1:354. (S)
- 1921 *Eusthenes scutellaris* Distant, Entomol. 54 (598):164. (R)
- 1935 *Eusthenes scutellaris* Hoffmann, Lingnan Univ. Sci. Bull. 7:134.
- 1945 *Eusthenes scutellaris* Blöte, Zool. Meded. 25:300-301. (S, R, T)
- 1948 *Eusthenes scutellaris* Hoffmann, Lingnan Sci. J. 22(1-4):34. (S)
- 1962 *Eusthenes scutellaris* Stichel, Verz. Pal. Hem. Het. 4:204. (as syn. of *Eusthenes robustus*)
- 1971 *Eusthenes teucer* Gaedike, Beitr. Ent. 21(1-2):101. (T)
- 1985 *Eusthenes scutellaris* Datia et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:23, fig. 56
- 1987 *Eusthenes scutellaris* Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: India (Assam), Indo-China, Java, Nepal, Sri Lanka, Sumatra.

Eusthenes scutellaris Vollenhoven, 1868 — see *Eusthenes saevus*

Eusthenes teucer Breddin, 1905 — see *Eusthenes scutellaris*

Eusthenes theseus Stål, 1870

- 1870 *Eusthenes theseus* Stål, Sv. Vet. Akad. Handl. 9(1):231
- 1889 *Eusthenes theseus* Atkinson, J. Asiatic Soc. Bengal 58(pt.2):67. (cf. *Eusthenes cupreus*)
- 1893 *Eusthenes theseus* Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
- 1902 *Eusthenes theseus* Distant, Fauna Brit. India, Rh. 1:266. (cf. *Eusthenes cupreus*)
- 1909 *Eusthenes theseus* Kirkaldy, Cat. Hem. 1:354. (S)
- 1935 *Eusthenes theseus* Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 112-113, pl. 4 fig. 52-55. ((K, S, D, R)
- 1935 *Eusthenes theseus* (sic) Tang, Cat. Ins. Sin. 2:365. (S, R)
- 1945 *Eusthenes theseus* Blöte, Zool. Meded. 25:301. (R)
- 1948 *Eusthenes theseus* Hoffmann, Lingnan Sci. J. 22(1-4):34-35. (S, R)
- 1957 *Eusthenes theseus* Zia, Acta Ent. Sin. 7:431, 434-435, figs. 21-23. (K, S, D, R)
- 1962 *Eusthenes theseus* Stichel, Verz. Pal. Hem. Het. 4:204. (R)
- 1964 *Eusthenes theseus* Sienkiewicz, Cat. Montandon Coll. :112. (R)
- 1980 *Eusthenes theseus* Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
- 1989 *Eusthenes theseus* Hua, List Ins. Zhongshan Univ. :44. (L)

Distribution: China (Fujian, Guizhou, Sichuan, Xizang, Yunnan, Zhejiang) India (Sikkim, W. Bengal), Indo-China, Laos, Nepal, Taiwan, Vietnam.

Eusthenes thoracicus Distant, 1900

- 1900 *Eusthenes thoracicus* Distant, Ann. Mag. Nat. Hist. (7):6:61.
- 1902 *Eusthenes thoracicus* Distant, Fauna Brit. India, Rh. 1:266.
- 1908 *Eusthenes thoracicus* Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 *Eusthenes thoracicus* Kirkaldy, Cat. Hem. 1:354. (S)
- 1962 *Eusthenes thoracicus* Stichel, Verz. Pal. Hem. Het. 4:204. (as syn. of *Eusthenes robustus*)

Distribution: India (Assam).

Eusthenes touchei Fallou, 1885

- 1885 *Eusthenes touchei* Fallou, Le Nat. 7:413
- 1893 *Eusthenes touchei* Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
- 1892a *Eusthenes touchei* Bergroth, Rev. Ent. 11:263. (Ts)
- 1894 *Eusthenes touchei* Bergroth, Rev. Ent. 13:152-153. (D)
- 1909 *Eusthenes touchei* Kirkaldy, Cat. Hem. 1:354. (S)
- 1923 *Eusthenes touchei* Lehmann, Zool. Anz. 57(7/8):181. (R)
- 1932a *Eusthenes touchei* Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10.
- 1935 *Eusthenes touchei* Hoffmann, Lingnan Univ. Sci. Bull. 7:134. (S)
- 1935 *Eusthenes touchei* Tang, Cat. Ins. Sin. 2:365. (S)
- 1962 *Eusthenes touchei* Stichel, Verz. Pal. Hem. Het. 4:204. (L)

Distribution: China (Fukien).

Eusthenes ulixes Breddin, 1899

- 1899 *Eusthenes ulixes* Breddin, Beih. Jb. Hamb. Wiss. Anst. 16(2):167-168, figs. 12, 12a.
- 1908 *Eusthenes ulixes* Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 *Eusthenes ulixes* Kirkaldy, Cat. Hem. 1:354. (L)
- 1928 *Eusthenes ulixes* China, J.F.M.S. Mus. 8:193.
- 1932a *Eusthenes ulixes* Hoffmann, J. Pan-Pac. Res. Inst.

7(1):10. (L)

1935 *Eusthenes ulixes*: Tang, Cat. Ins. Sin. 2:365. (S, R)1945 *Eusthenes ulixus* (sic): Blöte, Zool. Meded. 25:301. (R, T)1948 *Eusthenes ulixes*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (R)1962 *Eusthenes ulixes*: Stichel, Verz. Pal. Hem. Het. 4:204. (L)1971 *Eusthenes ulixes*: Gaedike, Beitr. Ent. 21(1-2):102. (T)**Distribution:** Borneo, China, Java, Sumatra.*Eusthenes variegatus* Yang, 19341934 *Eusthenes eurytus*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):59. (Dn; misdet. sec. Yang, 1935)1935 *Eusthenes variegatus* Yang, Bull. Fan Mem. Inst. Biol. 6(3):107, 111-112, pl. 3 fig. 45-47. (K)1935 *Eusthenes variegatus*: Tang, Cat. Ins. Sin. 2:366. (S, R)1945 *Eusthenes variegatus*: Blöte, Zool. Meded. 25:301-302.1948 *Eusthenes variegatus*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (S, R)1957 *Eusthenes variegatus*: Zia, Acta Ent. Sin. 7:431, 435-436, fig. 25. (K, S, D, R)1962 *Eusthenes variegatus*: Stichel, Verz. Pal. Hem. Het. 4:204. (R)1980 *Eusthenes variegatus*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)1989 *Eusthenes variegatus*: Hua, List Ins. Zhongshan Univ. 44. (L)**Distribution:** Burma, China (Fujian, Guangxi, Guizhou, Jiangxi, Sichuan, Yunnan), India (Assam), Indo-China, Laos, Vietnam.*Eusthenes viridis* Blöte, 19451945 *Eusthenes viridis* Blöte, Zool. Meded. 25:302, fig. 4a.1948 *Eusthenes viridis*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (L)**Distribution:** China.*Eusthenimorpha* Yang, 1935Type species: *Eusthenimorpha junci* Yang, 1935, by original designation.1935 *Eusthenimorpha* Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 118. (K)1935 *Eusthenimorpha*: Tang, Cat. Ins. Sin. 2:366. (L)1948 *Eusthenimorpha*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (S)1957 *Eusthenimorpha*: Zia, Acta Ent. Sin. 7:425, 429. (K, R)1977 *Eusthenimorpha*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, figs. 301, 302. (K)*Eusthenimorpha junci* Yang, 19351935 *Eusthenimorpha junci* Yang, Bull. Fan Mem. Inst. Biol. 6(3):118-119, pl. 4 figs. 56-60.1935 *Eusthenimorpha junci*: Tang, Cat. Ins. Sin. 2:366. (L)1948 *Eusthenimorpha junci*: Hoffmann, Lingnan Sci. J. 22(1-4):36. (S)1957 *Eusthenimorpha junci*: Zia, Acta Ent. Sin. 7:429-430, figs. 9-11. (D)1962 *Eusthenimorpha junci*: Stichel, Verz. Pal. Hem. Het. 4:204. (L)1980 *Eusthenimorpha junci*: Chen, Ghizhou Agric. Sci. 1980(3):53. (L)1989 *Eusthenimorpha junci*: Hua, List Ins. Zhongshan Univ. 44. (L)**Distribution:** China (Zhejiang).*Mattiphus* Amyot & Serville, 1843Type species: *Mattiphus carrenoi* Amyot & Serville [= *Eusthenes laticollis* Westwood, 1837], by monotypy.1843 *Mattiphus* Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 168. (K)1846 *Mattiphus*: Agassiz, Nomen. Zool. Add. 8. (Ety)1850 *Mattiphus*: Spinola, Gen. Ins. Artr. 32. (K)1851 *Mattiphus*: Dallas, List. Hem. 1:317, 344. (K)1851 *Mattiphus*: Herrich-Schäffer, Wanz. Ins. 9:284. (K)1852 *Mattiphus*: Spinola, Mem. Soc. Ital. Modena 25(1):75. (reprint of 1850 paper)1865 *Mattiphus*: Stål, Hem. Afr. 1:225. (K)1868 *Mattiphus*: Walker, Cat. Het. 3:468.1870 *Mattiphus*: Stål, Sv. Vet. Akad. Handl. 9(1):70, 72. (K, S)1889 *Mattiphus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):70. (S, D)1893 *Mattiphus*: Distant, Ann. Mag. Nat. Hist. (6)11:433. (cf. *Origanaus*)1893 *Mattiphus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)1894 *Mattiphus*: Montandon, Ann. Soc. Ent. Belg. 38:639. (cf. *Anacanthopus*)1902 *Mattiphus*: Distant, Fauna Brit. India, Rh. 1:263, 269. (K, D)1903 *Mattiphus*: Kirkaldy, Entomol. 36(484):231. (Tsp)1909 *Mattiphus*: Kirkaldy, Cat. Hem. 1:355. (L)1935 *Mattiphus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 124. (K, D, Ksp)1935 *Mattiphus*: Tang, Cat. Ins. Sin. 2:367. (S)1956 *Mattiphus*: Miller, Biol. Het. ed. 1:45. (Dn)1957 *Mattiphus*: Zia, Acta Ent. Sin. 7:425, 436. (K, D, Ks)1970 *Mattiphus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 20-21, 30. (K, D)1971 *Mattiphus*: Miller, Biol. Het. 54. (Dn)1977 *Mattiphus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 65. (K)*Mattiphus aeruginosus* Stål, 18631863 *Mattiphus aeruginosus* Stål, Trans. Ent. Soc. Lond. (3)1:6001868 *Mattiphus aeruginosus*: Walker, Cat. Het. 3:469. (R)1870 *Mattiphus aeruginosus*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (L)1889 *Mattiphus aeruginosus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):71-72. (S, D)1892 *Mattiphus aeruginosus*: Kirby, Linn. J. Zool. 24:87. (S, R)1893 *Mattiphus aeruginosus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)1902 *Mattiphus aeruginosus*: Distant, Fauna Brit. India, Rh. 1:270. (D)1909 *Mattiphus aeruginosus*: Kirkaldy, Cat. Hem. 1:355. (S)**Distribution:** Sri Lanka*Mattiphus aurifer* Stål, 18701870 *Mattiphus aurifer* Stål, Sv. Vet. Akad. Handl. 9(1):72-731871 *Mattiphus aurifer*: Stål, Öfv. Vet. Akad. Förh. 27(7):644. (Dn)1873 *Mattiphus aurifer*: Walker, Cat. Het. Suppl. 26. (L)1893 *Mattiphus aurifer*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (L)1909 *Mattiphus aurifer*: Kirkaldy, Cat. Hem. 1:355. (L)

1923 *Mattiphus aurifer*: Lehmann, Zool. Anz. 57(7/8):181 (R)

1945 *Mattiphus aurifer*: Blöte, Zool. Meded. 25:303. (R)

Distribution: Philippines.

Mattiphus carrenoi Amyot & Serville, 1843 — see *Mattiphus laticollis*

Mattiphus celebensis Blöte, 1945

1945 *Mattiphus celebensis* Blöte, Zool. Meded. 25:303, fig. 5.

Distribution: Sulawesi (Celebes).

Mattiphus hians Stål, 1871

1871 *Mattiphus hians* Stål, Öfv. Vet. Akad. Förh. 27(7):644.

1873 *Mattiphus hians* Walker, Cat. Het. Suppl. 26. (L)

1893 *Mattiphus hians*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (L)

1909 *Mattiphus hians*: Kirkaldy, Cat. Hem. 1:355. (L)

1945 *Mattiphus hians*: Blöte, Zool. Meded. 25:303. (R)

1969 *Mattiphus hians*: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):12. (T)

Distribution: Philippines.

Mattiphus jaspideus (Herrich-Schäffer, 1851)

1851 *Pycnum jaspideum* Herrich-Schäffer, Wanz. Ins. 9:308, fig. 1009.

1859 *Pycnum jaspideum*: Dohrn, Cat. Hem. 21. (S)

1868 *Pycnum jaspideum*: Walker, Cat. Het. 3:470. (L)

1870 *Pycnum jaspideum*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (Ts)

1889 *Mattiphus jaspideus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):78. (S, D)

1893 *Mattiphus jaspideus*: Distant, Ann. Mag. Nat. Hist. (6)11:432. (S)

1893 *Mattiphus jaspideus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)

1902 *Mattiphus jaspideus*: Distant, Fauna Brit. India, Rh. 1:270. (S, D)

1909 *Mattiphus jaspideus*: Kirkaldy, Cat. Hem. 1:355. (S)

1921 *Mattiphus jaspideus*: Distant, Entomol. 54:(698)164. (R)

1935 *Mattiphus jaspideus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (S)

1935 *Mattiphus jaspideus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):124, 125-126. (K, S, D, R)

1935 *Mattiphus jaspideus*: Tang, Cat. Ins. Sin. 2:367. (S, R)

1948 *Mattiphus jaspideus*: Hoffmann, Lingnan Sci. J. 22(1-4):37. (S, R)

1957 *Mattiphus jaspideus*: Zia, Acta Ent. Sin. 7:436, 437-439, fig. 29. (K, S, D, R)

1980 *Mattiphus jaspideus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)

Distribution: China (Guangxi, Guizhou), N.W. Himalayas, India (Assam), Indo-China, Malay Peninsula, Vietnam.

Mattiphus laticollis (Westwood, 1837)

1837 *Eusthenes laticollis* Westwood, Cat. Hops 1:27.

1843 *Mattiphus carrenoi* Amyot & Serville, Hist. Nat. Ins. Hem.:168. (syn. by Dallas, 1851)

1851 *Mattiphus carrenoi*: Herrich-Schäffer, Wanz. Ins. 9:309. (L)

1851 *Mattiphus laticollis*: Dallas, List. Hem. 1:344.

1859 *Mattiphus laticollis*: Dohrn, Cat. Hem. 21. (S)

1868 *Mattiphus laticollis*: Walker, Cat. Het. 3:468. (R)

1870 *Mattiphus laticollis*: Stål, Sv. Vet. Akad. Handl. 9(1):72 (S, R)

1889 *Mattiphus laticollis*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):71. (S, D)

1893 *Mattiphus laticollis*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)

1901c *Mattiphus laticollis*: Distant, Proc. Zool. Soc. Lond. 1900(4):820. (S)

1902 *Mattiphus laticollis*: Distant, Fauna Brit. India, Rh. 1:269, fig. 170. (S, D)

1903 *Mattiphus laticollis*: Kirkaldy, Entomol. 36(484):231. (Tsp, S)

1909 *Mattiphus laticollis*: Kirkaldy, Cat. Hem. 1:355. (S)

1934 *Mattiphus laticollis*: Miller, J. F. M. S. Mus. 17(3):515-516, fig. 12. (I)

1945 *Mattiphus laticollis*: Blöte, Zool. Meded. 25:303. (R)

1970 *Mattiphus laticollis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):20-21, 27, 29, 30, figs. 71-73, 109. (Ge)

Distribution: India (Bengal), Java, Malay peninsula (Malaya), Sumatra.

Mattiphus minutus Blöte, 1945

1945 *Mattiphus minutus* Blöte, Zool. Meded. 25:303-304, fig. 4b.

1948 *Mattiphus minutus*: Hoffmann, Lingnan Sci. J. 22(1-4):37. (L)

1957 *Mattiphus minutus*: Zia, Acta Ent. Sin. 7:436-437, fig. 28. (K, D, R)

1977 *Mattiphus minutus*: Hsiao et al., Handb. Chinese Hem. - Het. 1:65, fig. 310, pl. 7 fig. 107. (K, R)

1980 *Mattiphus minutus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)

Distribution: China (Yunnan, Zhejiang).

Mattiphus nigricornis **NOMEN DUBIUM**

1970 *Mattiphus nigricornis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):26, fig. 110. (Ge)

Mattiphus nigridorsis Stål, 1863 — see *Asiarcha nigridorsis*

Mattiphus oblongus Dallas, 1851 — see *Asiarcha oblonga*

Mattiphus reflexus (Dallas, 1851)

1851 *Eusthenes reflexus* Dallas, List. Hem. 1:344-345.

1859 *Mattiphus reflexus*: Dohrn, Cat. Hem. 21. (L)

1868 *Mattiphus reflexus*: Walker, Cat. Het. 3:468. (R)

1870 *Mattiphus reflexus*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (L)

1893 *Mattiphus reflexus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)

1909 *Mattiphus reflexus*: Kirkaldy, Cat. Hem. 1:355.

1923 *Mattiphus reflexus*: Lehmann, Zool. Anz. 57(7/8):181 (R)

1945 *Mattiphus reflexus*: Blöte, Zool. Meded. 25:304

Distribution: Philippines

Mattiphus splendidus Distant, 1921

1921 *Mattiphus splendidus* Distant, Entomol. 54:(698)166

1932a *Mattiphus splendidus*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)

1935 *Mattiphus splendidus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (L)

1935 *Mattiphus splendidus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):124, 126, pl. 5 figs. 72-75. (K, D, R)

1935 *Mattiphus splendidus*: Tang, Cat. Ins. Sin. 2:368. (S, R)

1945 *Mattiphus splendidus*: Blöte, Zool. Meded. 25:304. (R)

1948 *Mattiphus splendidus*: Hoffmann, Lingnan Sci. J. 22(1-4):38. (S, R)

1957 *Mattiphus splendidus*: Zia, Acta Ent. Sin. 7:436, 438-439, fig. 26, 30, 31. (K, S, D, R)

- 1962 *Mattiphus splendidus*: Yang, Econ. Ins. Fauna China 2:40, 44, pl. 3 fig. 22.
 1977 *Mattiphus splendidus*: Hsiao et al, Handb. Chinese Hem. Het. 1:65, fig. 311, pl. 7 fig. 106.
 1980 *Mattiphus splendidus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)
 1989 *Mattiphus splendidus*: Hua, List Ins. Zhongshan Univ. 44.

Distribution: China (Fujian, Guangxi, Guizhou, Sichuan, Yunnan), Indo-China, Laos.

Mattiphus yunnanensis Zia, 1957

- 1957 *Mattiphus yunnanensis* Zia, Acta Ent. Sin. 7:436, 439, 447-448, figs. 27, 32. (K)
 1980 *Mattiphus yunnanensis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)

Distribution: China (Yunnan).

Megaedoeum Karsh, 1895

Type species: *Megaedoeum verruculatum* Karsch, 1895, by monotypy.

- 1895 *Megaedoeum* Karsch, Ent. Nachr. Berlin 21(17):267-268.
 1904 *Megaedoeum*: Bergroth, Wien. Ent. Ztg. 23(2):37, 38-39, 40, fig. (Ts, D)
 1905 *Megaedoeum* (sic) Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):230, 234. (K, S, D)
 1908 *Megaedoeum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Megaedoeum*: Kirkaldy, Cat. Hem. 1:357. (S)
 1970 *Megaedoeum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 17, 25, 29. (K, D)

Megaedoeum bomansi Schouteden, 1957

- 1957 *Megaedoeum* (sic) *bomansi* Schouteden, Rev. Zool. Bot. Afr. 55(3-4):417-418.

Distribution: Zaïre.

Megaedoeum karschi Schouteden, 1905

- 1905 *Megaedoeum* (sic) *karschi* Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):236, fig. 106.
 1908 *Megaedoeum karschi*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Megaedoeum karschi*: Kirkaldy, Cat. Hem. 1:357. (S)
 1949 *Megaedoeum* (sic) *karschi*: Villiers, I.F.A.N. Catalogues 5:89.
 1952b *Megaedoeum* (sic) *karschi*: Villiers, Mem. I.F.A.N. 19:307. (R)
 1957 *Megaedoeum* (sic) *karschi*: Schouteden, Rev. Zool. Bot. Afr. 55(3-4):418. (R)
 1964 *Megaedoeum* (sic) *karschi*: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
 1970 *Megaedoeum karschi*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):25, figs. 91-92. (Ge)
 1980 *Megaedoeum karschi*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Megaedoeum* (sic) *karschi*: Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Cameroon, Ivory Coast, Guinea, Nigeria.

Megaedoeum obliquum Bergroth, 1904

- 1904 *Megaedoeum obliquum* Bergroth, Wien. Ent. Ztg. 23(2):39, 40. (K)
 1904a *Megaedoeum* (sic) *obliquum*: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:160. (R)
 1905 *Megaedoeum* (sic) *obliquum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):236-238, figs. 107, 108.

pl. 5 fig. 11.

- 1908 *Megaedoeum obliquum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

- 1909 *Megaedoeum obliquum*: Kirkaldy, Cat. Hem. 1:358. (S)

Distribution: Cameroon.

Megaedoeum verruculatum Karsch, 1895

- 1895 *Megaedoeum verruculatum* Karsch, Ent. Nachr. Berlin 21(17):268-269.
 1904 *Megaedoeum verruculatum*: Bergroth, Wien. Ent. Ztg. 23(2):39-40, fig. (D)
 1905 *Megaedoeum* (sic) *verruculatum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):234-236, figs. 101-105. (S, D)
 1908 *Megaedoeum verruculatum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Megaedoeum verruculatum*: Kirkaldy, Cat. Hem. 1:358. (S)
 1970 *Megaedoeum verruculatum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):28, figs. 101, 102, 117. (E, Ge)

Distribution: Cameroon, Togo.

Origanus Distant, 1893

Type species: *Origanus humerosus* Distant, 1893, by monotypy.

- 1893 *Origanus* Distant, Ann. Mag. Nat. Hist. (6)11:432-433.
 1893 *Origanus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1894 *Origanus*: Montandon, Ann. Soc. Ent. Belg. 38:639. (cf. *Anacanthopus*)
 1902 *Origanus*: Distant, Fauna Brit. Ind. Rh. 1:263, 271. (K, D)
 1909 *Origanus*: Kirkaldy, Cat. Hem. 1:355. (S)
 1970 *Origanus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 22, 30. (K, D)

Origanus humerosus Distant, 1893

- 1893 *Origanus humerosus* Distant, Ann. Mag. Nat. Hist. (6)11:433.
 1893 *Origanus humerosus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1902 *Origanus humerosus*: Distant, Fauna Brit. Ind. Rh. 1:271-272, fig. 171. (D)
 1909 *Origanus humerosus*: Kirkaldy, Cat. Hem. 1:355. (S)
 1970 *Origanus humerosus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 26-27, figs. 79-8, 111. (E, Ge)
 1990 *Origanus humerosus*: Zheng & Jir Contr. Shanghai Inst. Ent. 9:145. (R)

Distribution: China (Xizang = Tibet), India (Assam).

Origanus tibetanus Zheng & Jin, 1990

- 1990 *Origanus tibetanus* Zheng & Jin, Contr. Shanghai Inst. Ent. 9:142, 143, figs. 2, 4.

Distribution: China (Xizang).

Oxylobus Stål, 1870 — see *Pseudopycnanus*

Oxylobus nigromarginatum Stål, 1863. — see *Pseudopycnanus nigromarginatum*

Oxylobus westwoodi (Vollenhoven, 1866) — see *Sanganus westwoodi*

Pseudopycnanus Bergroth, 1891

Type species: *Pycnanus nigromarginatum* Stål 1863, designated by Kirkaldy, 1909

- 1870 *Oxylobus* Stål, Sv. Vet. Akad. Handl. 9(1):70, 75-76. (K) (preoccup. Chaudoir, 1855)
- 1889 *Oxylobus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):79. (D)
- 1891 *Pseudopycanum* Bergroth, Rev. Ent. 10:214. (Nn for *Oxylobus* Stål, 1870)
- 1893 *Oxylobus*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
- 1909 *Oxylobus*: Kirkaldy, Cat. Hem. 1:XXXVI. (Tsp)
- 1909 *Pseudopycanum*: Kirkaldy, Cat. Hem. 1:356. (S)
- 1970 *Pseudopycanum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19, 30. (K, D)
- Pseudopycanum nigromarginatum* (Stål, 1863)
- 1863 *Pycanum nigromarginatum* Stål, Trans. Ent. Soc. Lond. (3):1:601.
- 1866 *Dalcantha servillei* Vollenhoven, Tijdschr. Ent. (2):1:220, pl. 11, fig. 9. (syn. by Stål, 1870)
- 1868 *Pycanum nigromarginatum*: Walker, Cat. Het. 3:470. (R)
- 1870 *Oxylobus nigromarginatum*: Stål, Sv. Vet. Akad. Handl. 9(1):76. (S, R)
- 1873 *Oxylobus nigromarginatum*: Walker, Cat. Het. Suppl. 27. (L)
- 1889 *Oxylobus nigromarginatum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):80. (S, D)
- 1893 *Oxylobus nigromarginatum*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (L)
- 1909 *Pseudopycanum nigromarginatum*: Kirkaldy, Cat. Hem. 1:356-357. (S)
- 1945 *Pseudopycanum nigromarginatum*: Blöte, Zool. Meded. 25:307. (R, T)
- 1970 *Pseudopycanum nigromarginatum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, figs. 65-68. (Ge)
- Distribution:** Moluccas.
- Pseudopycanum westwoodii* (Vollenhoven, 1866) — *Sanganus westwoodii*
- Pycanum*** Amyot & Serville, 1843
- Type species: *Edessa amethystina* Fabricius, 1803 [= *Cimex rubens* Fabricius, 1794] by monotypy.
- 1843 *Pycanum* Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 171-172. (K)
- 1846 *Pycanum*: Agassiz, Normen. Zool. Hem. Add. 11. (Ety)
- 1850 *Pycanum*: Spinola, Gen. Ins. Afr. 32. (K) (misdet. of *Cyclopelta* Amyot & Serville, 1834, family Dinidoridae, see Kirkaldy, 1909)
- 1850 *Cyclopelta*: Spinola, Gen. Ins. Afr. 33. (K) (misdet. see Kirkaldy, 1909)
- 1851 *Pycanum*: Dallas, List. Hem. 1:318, 345. (K, S)
- 1951 *Pycanum*: Herrich-Schäffer, Wanz. Ins. 9:283. (K)
- 1852 *Pycanum*: Spinola, Mem. Soc. Ital. Modena 25(1):72. (reprint of 1850 paper)
- 1852 *Cyclopelta*: Spinola, Mem. Soc. Ital. Modena 25(1):73. (reprint of 1850 paper)
- 1865 *Pycanum*: Stål, Hem. Afr. 1:225. (K)
- 1868 *Pycanum*: Vollenhoven, Fauna Ent. Indo-Neerl. 3:32. (D)
- 1870 *Pycanum*: Stål, Sv. Vet. Akad. Handl. 9(1):71, 75. (K, S)
- 1889 *Pycanum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):75. (S, D)
- 1893 *Pycanum*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
- 1902 *Pycanum*: Distant, Fauna Brit. India, Rh. 1:263, 274. (K, S, D)
- 1903 *Pycanum*: Kirkaldy, Entomol. 36(484):231. (Tsp)
- 1909 *Pycanum*: Kirkaldy, Cat. Hem. 1:356. (S)
- 1935 *Pycanum*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 122-123. (K, S, D)
- 1935 *Pycanum*: Tang, Cat. Ins. Sin. 2:368. (S)
- 1957 *Pycanum*: Zia, Acta Ent. Sin. 7:425, 445. (K, S, D, Ks)
- 1970 *Pycanum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):17, 22, 30. (K, D)
- 1972 *Pycanum* (sic): Jordan, Handb. Zool. 4(2):20:39. (L)
- 1977 *Pycanum*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 67. (K)
- Pycanum alternatum* Lepeletier & Serville, 1825 — see *Pycanum rubens*
- Pycanum alternatum amethysta* Kirkaldy, 1909 — see *Pycanum rubens*
- Pycanum amethystinum* (Weber, 1801) — see *Pycanum rubens*
- Pycanum amplicolle* Stål, 1863 — see *Carpona amplicolle*
- Pycanum amyoti* (Vollenhoven, 1866) — see *Carpona vollenhoveni*
- Pycanum angulatum* Stål, 1863 — see *Carpona angulata*
- Pycanum imperiale* Dohrn, 1863 — see *Carpona imperialis*
- Pycanum jaspideum* Herrich-Schäffer, 1851 — see *Mattiphus jaspideus*
- Pycanum nigromarginatum* Stål, 1863 — see *Pseudopycanum nigromarginatum*
- Pycanum ochraceum* Distant, 1893
- 1879 *Pycanum rubens*: Distant, Ann. Mag. Nat. Hist. (5):3:52. (misdet. see Distant, 1893; Dn, R)
- 1893 *Pycanum ochraceum*: Distant, Ann. Mag. Nat. Hist. (6):11:433-434
- 1893 *Pycanum ochraceum*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (L)
- 1901a *Pycanum ochraceum*: Distant, Trans. Ent. Soc. Lond. 1901(1):104. (R)
- 1902 *Pycanum ochraceum*: Distant, Fauna Brit. India, Rh. 1:275. (D, R)
- 1909 *Pycanum ochraceum*: Kirkaldy, Cat. Hem. 1:356. (S)
- 1919 *Pycanum ochraceum*: Paiva, Rec. Indian Mus. 16:354. (R)
- 1921 *Pycanum ochraceum*: Distant, Entomol. 54. (69d)164. (R)
- 1935 *Pycanum ochraceum*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S, R)
- 1935 *Pycanum ochraceum*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):123, pl. 4 fig. 67. (S, O, R)
- 1935 *Pycanum ochraceum*: Tang, Cat. Ins. Sin. 2:368. (S, D)
- 1945 *Pycanum ochraceum*: Blöte, Zool. Meded. 25:307. (R)
- 1948 *Pycanum ochraceum*: Hoffmann, Lingnan Sci. J. 22(1-4):38-39. (S, R)
- 1957 *Pycanum ochraceum*: Zia, Acta Ent. Sin. 7:445, 446. (K, S, D, R)
- 1962 *Pycanum ochraceum*: Yang, Econ. Ins. Fauna China 2:40, 42-43, pl. 4 fig. 30.
- 1977 *Pycanum ochraceum*: Hsiao et al., Handb. Chinese Hem.-Het. 1:67, fig. 309, pl. 7 fig. 114. (D)
- 1980 *Pycanum ochraceum*: Chen, Ghizhou Agric. Sci.

- 1980(3):54, 58. (R, K)
 1985 *Pycanum ochraceum*: Zhang, Econ. Ins. China 31:50, pl. 46 fig. 156. (D)
 1987 *Pycanum ochraceum*: Zhang & Lin, Agric. Ins. Xizang 1:76. (R)
 1988 *Pycanum ochraceum*: Zhang & Lin, Ins. Mt. Namjagbarwa 84. (R)
 1989 *Pycanum ochraceum*: Hua, List Ins. Zhongshan Univ. 45. (L)
 1990 *Pycanum ochraceum*: Zheng & Jin, Contr. Shanghai Inst. Ent. 9: 142. (R)
Distribution: Bhutan, Burma, China (Guangxi, Guizhou, Xizang, Yunnan), India (Assam, Bengal, West Bengal (Darjeeling), Sikkim), Indo-China, Vietnam.

Pycanum oculatum Jensen-Haarup, 1931

- 1931 *Pycanum oculatum* Jensen-Haarup, Ent. Medd. 17:328.
Distribution: Java.

Pycanum pallipes Walker, 1868 — see *Asiarcha oblonga*

Pycanum ponderosum Stål, 1854

- 1854 *Pycanum ponderosum* Stål, Öfv. Vet. Akad. Förh. 11(8):234.
 1856 *Pycanum ponderosum*: Stål, Öfv. Vet. Akad. Förh. 13:63-64, pl. 1 fig. 1. (D)
 1859 *Pycanum ponderosum*: Dohrn, Cat. Hem.: 21. (L)
 1866 *Dalcantha sanctifargavi* Vollenhoven, Tijdschr. Ent. (2):1:218, pl. 11 fig. 6. (syn. by Stål, 1870)
 1868 *Pycanum ponderosum*: Walker, Cat. Het. 3:471. (S, R)
 1870 *Pycanum ponderosum*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (S)
 1889 *Pycanum ponderosum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):77. (S, D, R)
 1892 *Pycanum ponderosum*: Kirby, Linn. J. Zool. 24:87. (R)
 1893 *Pycanum ponderosum*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1901a *Pycanum ponderosum*: Distant, Trans. Ent. Soc. Lond. 1901(1):104. (R)
 1902 *Pycanum ponderosum*: Distant, Fauna Brit. India, Rh. 1:275. (S, D, R)
 1909 *Pycanum ponderosum*: Kirkaldy, Cat. Hem. 1:356. (S)
 1921 *Pycanum ponderosum*: Distant, Entomologist 54:(698)164. (R)
 1931 *Pycanum ponderosum*: Miller, Dept. Agric. S.S. & F.M.S. Sci. Ser. 5:68-72, figs. 59-62. (S, H, B, E, I, D)
 1934 *Pycanum ponderosum*: Miller, J. F. M. S. Mus. 17(3):517, fig. 32. (egg cluster)
 1935 *Pycanum ponderosum*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137, 177. (S, R)
 1945 *Pycanum ponderosum*: Biôte, Zool. Meded. 25:307. (R)
 1948 *Pycanum ochraceum*: Hoffmann, Lingnan Sci. J. 22(1-4):39. (S, R)
 1956 *Pycanum ponderosum*: Miller, Biol. Het. ed. 1:48. (E)
 1970 *Pycanum ponderosum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 26, 27, 30, fig. 112. (& Ge)
 1971 *Pycanum ponderosum*: Miller, Biol. Het. 57. (E)
 1985 *Pycanum ponderosum*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:23-24, fig. 57. (Dn, R)
 1987 *Pycanum ponderosum*: Schaefer & Ahmad, Phytophaga 1:27. (H)
Distribution: Burma, India (Assam, Sikkim), Malay Peninsula, Sri Lanka, Vietnam.

Pycanum pretiosum Stål, 1854

- 1854 *Pycanum pretiosum* Stål, Öfv. Vet. Akad. Förh. 11(8):234.

- 1856 *Pycanum pretiosum*: Stål, Öfv. Vet. Akad. Förh. 13:64, pl. 1 fig. 2. (D)
 1859 *Pycanum pretiosum*: Dohrn, Cat. Hem.: 21. (L)
 1868 *Pycanum pretiosum*: Walker, Cat. Het. 3:471. (L)
 1868 *Pycanum rubidum* Walker, Cat. Het. 3:471-472. (syn. by Distant, 1893)
 1870 *Pycanum pretiosum*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (S, R)
 1871 *Pycanum pretiosum*: Stål, Öfv. Vet. Akad. Förh. 27(7):608, 645. (Dn, R)
 1889 *Pycanum pretiosum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):77. (S, D)
 1893 *Pycanum pretiosum*: Distant, Ann. Mag. Nat. Hist. (6)11:434. (S)
 1893 *Pycanum pretiosum*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1900 *Pycanum pretiosum*: Distant, Ann. Mag. Nat. Hist. (7)6:64. (S)
 1903a *Pycanum pretiosum*: Distant, Fasc. Malay. Zool. 1(2):238. (S, R)
 1909 *Pycanum pretiosum*: Kirkaldy, Cat. Hem. 1:356. (S)
 1923 *Pycanum pretiosum*: Lehmann, Zool. Anz. 57(7/8):181. (R)
 1968 *Pycanum pretiosum*: Black, Ent. Medd. 36:562. (R)
Distribution: Malay Peninsula (Malaya), Moluccas, Philippines

Pycanum rubens (Fabricius, 1794)

- 1794 *Cimex rubens* Fabricius, Ent. Syst. 4:107.
 1801 *Cimex amethystinus* Weber, Obs. Ent.:115. (syn. by Kirkaldy, 1909)
 1803 *Edessa amethystinus* Fabricius, Syst. Rh.:150. (as n. sp.; syn. by Vollenhoven, 1868)
 1803 *Edessa rubens*: Fabricius, Syst. Rh.:151.
 1825 *Tessaraloma alternata* Lepeletier & Serville, Enc. Meth. 10:591-592. (syn. with *Edessa amethystinus* by Burmeister, 1935)
 1834 *Aelia amethystina*: Burmeister, Silb. Rev. Ent. 2:22. (antennae)
 1835 *Aspongopus amethystinus*: Burmeister, Handb. Ent. 2:351-352. (S, Dn)
 1837 *Dinidor (Eusthes) amethystinus*: Spinola, Essai 303. (L)
 1837 *Qinidor alternatum*: Spinola, Essai 304. (Ts)
 1838 *Aspongopus amethystinus*: Herrich-Schäffer, Wanz. Ins. 4:85, fig. 417.
 1840 *Aspongopus amethystinus*: Blanchard, Hist. Nat. Ins. 3:143. (S, D)
 1843 *Pycanum amethystinum*: Amyot & Serville, Hist. Nat. Ins. Hem.:172. (S, D)
 1844 *Dinidor amethystinus*: Herrich-Schäffer, Wanz. Ins. 7:76. (K)
 1851 *Pycanum amethystinus*: Dallas, List. Hem. 1:345. (S, R)
 1859 *Pycanum amethystinus*: Dohrn, Cat. Hem.: 21. (S)
 1862 *Pycanum amethystinus*: Ellenrieder, Nat. Tijds. Ned. Ind. 24:161-169, pl. 5 fig. 28, pl. 6 figs. 1, 4, 6-10. (D)
 1866 *Aspongopus amethystinus*: Dohrn, Stett. Ent. Ztg. 27:331, pl. 4 fig. 12
 1866 *Pycanum amethystinus*: Mayr, Reise Novara Zool. 2(1):74. (S, R)
 1868 *Pycanum rubens*: Vollenhoven, Fauna Ent. Indo-Neerl. 3:32-33. (S, T, D, varr.)
 1868 *Pycanum rubens*: Stål, Sv. Vet. Akad. Handl. 7(11):40. (S, T)
 1868 *Pycanum amethystinus*: Walker, Cat. Het. 3:471. (R)
 1870 *Pycanum rubens*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (S, R)

- 1873 *Pycanum rubens*: Walker, Cat. Het. Suppl. 27. (S)
 1879 *Pycanum rubens*: Distant, Ann. Mag. Nat. Hist. (5)3:45, 52. (misdet. see *Pycanum ochraceum*)
 1888 *Pycanum rubens*: Lethierry, Ann. Mus. Civ. Storia Nat. Genova (2)6(26):461. (R)
 1889 *Pycanum rubens*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):75-76. (S, D, R)
 1893 *Pycanum rubens*: Distant, Ann. Mag. Nat. Hist. (6)11:433, 434. (cf. *Pycanum ochraceum*)
 1893 *Pycanum rubens*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1900a *Pycanum rubens* var. *amethystinus*: Breddin, Abh. Senckenb. Naturf. Ges. 25:148. (R)
 1900b *Pycanum rubens*: Breddin, Stett. Ent. Ztg. 61:331. (R)
 1900b *Pycanum rubens* var. *amethystinus*: Breddin, Stett. Ent. Ztg. 61:331. (R)
 1901a *Pycanum rubens*: Distant, Trans. Ent. Soc. Lond. 1901(1):104.
 1901 *Pycanum rubens*: Kirkaldy, Entomol. 34(453):52. (R)
 1902 *Pycanum rubens*: Distant, Fauna Brit. India, Rh. 1:274-275. (S, D, R)
 1903a *Pycanum rubens*: Distant, Fasc. Malay. Zool. 1(2):238. (S, R)
 1903 *Pycanum rubens*: Kirkaldy, Entomol. 34(484):231. (Tsp, S)
 1909 *Pycanum rubens*: Banks, Philipp. J. Sci. 4(6):564. (S, R)
 1909 *Pycanum alternatum*: Kirkaldy, Cat. Hem. 1:356. (S, H)
 1909 *Pycanum alternatum* var. *amethysta* (sic): Kirkaldy, Cat. Hem. 1:371. (Nn for *Cimex amethystinus* Weber, 1801)
 1923 *Pycanum alternatum*: Lehmann, Zool. Anz. 57(7/8):181. (R)
 1928 *Pycanum rubens*: China, J.F.M.S. Mus. 8:193. (R)
 1933 *Pycanum alternatum*: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51. (R)
 1934 *Pycanum alternatum*: Miller, J. F. M. S. Mus. 17(3):503, 516, figs. 13, 31. (E, I)
 1945 *Pycanum alternatum*: Blöte, Zool. Meded. 25:306-307. (R)
 1948 *Pycanum rubens*: Hoffmann, Lingnan Sci. J. 22(1-4):39-40. (S, R)
 1950 *Pycanum alternatum*: Kaishoven, Plagen Cultuurgewassen Indonesie 1:203-204, fig. 88 (H, R)
 1957 *Pycanum rubens*: Zia, Acta Ent. Sin. 7:445-446. (K, S, D, R)
 1968 *Pycanum ruber* (sic): Cobben, Evol. Trends Het Eggs 1:114-115. (E)
 1970 *Pycanum rubens*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 26, 27, figs. 82-83. (Ge)
 1980 *Pycanum rubens*: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)
 1981 *Pycanum ruber* (sic): Hinton, Biol. Ins. Eggs. 1:594. (E)
 1981 *Pycanum alternatum*: Kaishoven, Pests Crops Indonesia: 94, fig. 65. (H, R)
 1987 *Pycanum alternatum*: Schaefer & Ahmad, Phytophaga 1:27. (H)
Distribution: Borneo, Burma, China (Yunnan), E. Indies, India, Indo-China, Indonesia (Bangka I., Belitung I., Nias I.), Java, Malay Peninsula, Moluccas, Philippines, Sumatra, Vietnam.

Pycanum rubidum Walker, 1868 — see *Pycanum pretiosum*

Pycanum smaragdiferum Walker, 1868 — see *Carpona angulata*

Pycanum stabile Walker, 1868 — see *Carpona stabile*

Pycanum westwoodii (Vollenhoven, 1866) — see *Sanganus westwoodii*

Pyganum Amyot & Serville, 1843 — see *Pycanum*

Sanganus Distant, 1909

Type species: *Sanganus jenseni* Distant, 1909, by original designation.

1909a *Sanganus*: Distant, Trans. Ent. Soc. Lond. 1909(3):389.

1909 *Sanganus*: Kirkaldy, Cat. Hem. 1:366. (L)

1970 *Sanganus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19-20, 30. (K, D)

Sanganus jenseni Distant, 1909

1909a *Sanganus jenseni* Distant, Trans. Ent. Soc. Lond. 1909(3):389-390, pl. 10 fig. 6.

1909 *Sanganus jenseni*: Kirkaldy, Cat. Hem. 1:366. (L)

1945 *Sanganus jenseni*: Blöte, Zool. Meded. 25:307. (R)

1970 *Sanganus jenseni*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19-20, 26, 27, figs. 69-70, 108. (& Ge)

Distribution: Borneo, New Guinea, Sumatra.

Sanganus westwoodii (Vollenhoven, 1866)

1866 *Dalcantha westwoodii* Vollenhoven, Tijdschr. Ent. 2(1):217-218, pl. 11, fig. 5.

1868 *Pycanum westwoodii*: Vollenhoven, Faune Ent. Indo-Neerl. 3:33-34, pl. 3 fig. 7. (D)

1868 *Pycanum westwoodii*: Walker, Cat. Het. 3:471. (L)

1870 *Oxylobus westwoodii*: Stal, Sv. Vet. Akad. Handl. 9(1):76. (S)

1873 *Oxylobus westwoodii*: Walker, Cat. Het. Suppl. 27. (L)

1893 *Oxylobus westwoodii* (sic): Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)

1907a *Oxylobus westwoodii* (sic): Schouteden, Notes Leyden Mus. 30:44. (Ts)

1909 *Pseudopycanum westwoodii* (sic): Kirkaldy, Cat. Hem. 1:357. (S)

1945 *Sanganus westwoodii*: Blöte, Zool. Meded. 25:307. (R)

Distribution: Sumatra.

Serrocarpone Blöte, 1945

Type species: *Serrocarpone celebensis* Blöte, 1945, by original designation.

1945 *Serrocarpone* Blöte, Zool. Meded. 25:305-306

Serrocarpone celebensis Blöte, 1945

1945 *Serrocarpone celebensis* Blöte, Zool. Meded. 25:306 fig. 5.

Distribution: Sulawesi (Celebes)

Viribius Stål, 1865 — see *Carpona*

Viribius angulatus (Stål, 1863) — *Carpona angulata*

Viribius imperialis (Dohrn, 1863) — *Carpona imperialis*

TESSARATOMARIA

Stål, 1865: 33

Type genus: *Tessaratomia* Lepeletier & Serville, 1825

1865 *Tessaratomia* Stål, Hem. Afr. 1:33

1902 *Tessaratomaria*: Distant, Fauna Brit. India, Rh. 1:257 (S, D, Kg)

1937 *Tessaratomini*: Beier, Handb. Zool. 4(2) Ins. 2:2186 (D)

1970 *Tessaratomaria*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4-5 (K, Kg)

***Acidosterna* Stal, 1872**

Type species: *Acidosterna nitida* Stal, 1872, by monotypy

1872 *Acidosterna* Stal, Sv. Vet. Akad. Handl. 10(4): 129-130

1893 *Acidosterna*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)

1909 *Acidosterna*: Kirkaldy, Cat. Hem. 1:351. (L)

1970 *Acidosterna*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 8, 15.

***Acidosterna nitida* Stal, 1872**

1872 *Acidosterna nitida* Stal, Sv. Vet. Akad. Handl. 10(4): 130.

1893 *Acidosterna nitida*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)

1909 *Acidosterna nitida*: Kirkaldy, Cat. Hem. 1:351. (L)

Distribution: Moluccas.

***Acidosterna notata* Blöte, 1945**

1945 *Acidosterna notata* Blöte, Zool. Meded. 25:296

Distribution: Sumatra.

***Amissus* Stål, 1863**

Type species: *Amissus atlas* Stal, 1863a, by monotypy.

1863 *Amissus* Stal, Trans. Ent. Soc. Lond. (3):1:595

1870 *Amissus*: Stal, Sv. Vet. Akad. Handl. 9(1):70 (L)

1889 *Amissus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):62-63. (D)

1893 *Amissus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)

1902 *Amissus*: Distant, Fauna Brit. India, Rh. 1:257, 262 (K, D)

1909 *Amissus*: Kirkaldy, Cat. Hem. 1:353. (L)

1956 *Amissus*: Miller, Biol. Het. ed. 1:45. (Dn)

1970 *Amissus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4, 5, 15. (K, D)

1971 *Amissus*: Miller, Biol. Het. 54 (Dn)

***Amissus atlas* Stal, 1863**

1863 *Amissus atlas* Stal, Trans. Ent. Soc. Lond. (3):1:596.

1868 *Amissus atlas*: Walker, Cat. Het. 3:466. (R)

1870 *Amissus atlas*: Stal, Sv. Vet. Akad. Handl. 9(1):70 (L)

1889 *Amissus atlas*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):63. (S, D)

1893 *Amissus atlas*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)

1902 *Amissus atlas*: Distant, Fauna Brit. India, Rh. 1:262 fig. 167. (S, D, R, T)

1909 *Amissus atlas*: Kirkaldy, Cat. Hem. 1:353. (S)

1945 *Amissus atlas*: Blöte, Zool. Meded. 25:299. (R)

1970 *Amissus atlas*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):fig. 39. (spermatheca)

Distribution: Burma, Malay peninsula (Singapore), Sumatra.

***Amissus nitidus* Walker, 1868**

1868 *Amissus nitidus* Walker, Cat. Het. 3:466.

1893 *Amissus nitidus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)

1900 *Amissus nitidus*: Distant, Ann. Mag. Nat. Hist. (7):6.62 (Ts)

1900a *Amissus nitidus*: Breddin, Abh. Senckenb. Naturf.

Ges. 25:147. (R)

1909 *Amissus nitidus*: Kirkaldy, Cat. Hem. 1:353. (L)

1945 *Amissus nitidus*: Blöte, Zool. Meded. 25:299. (R)

1970 *Amissus nitidus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 12, 13, figs 6-8, 40 (& Ge)

Distribution: Borneo, Sarawak

***Amissus testaceus* Distant, 1909**

1909a *Amissus testaceus* Distant, Trans. Ent. Soc. Lond. 1909(3):388-389, pl. 10 fig. 5.

1909 *Amissus testaceus*: Kirkaldy, Cat. Hem. 1:370. (L)

1970 *Amissus testaceus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):12. (Ge)

Distribution: Moluccas.

***Embolosterna* Stal, 1870**

Type species: *Tessaratom taurus* Westwood, 1837, by monotypy.

1870 *Embolosterna* Stal, Sv. Vet. Akad. Handl. 9(1):66.

1889 *Embolosterna*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):52-53. (D)

1893 *Embolosterna*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (L)

1909 *Embolosterna*: Kirkaldy, Cat. Hem. 1:349. (L)

1921 *Embolosterna*: Lehmann, Arch. Naturges. Berlin. 87A(6):36-37. (Ks)

1922a *Embolosterna*: Bergroth, Ann. Soc. Ent. Belg. 61:376 (humeri)

1935 *Embolosterna*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 126-127. (K, D)

1935 *Embolosterna*: Tang, Cat. Ins. Sin. 2:362. (S)

1956 *Embolosterna*: Miller, Biol. Het. ed. 1:45. (Dn)

1957 *Embolosterna*: Zia, Acta Ent. Sin. 7:425. (K, D)

1970 *Embolosterna*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 10, 14, 15. (K, D)

1971 *Embolosterna*: Miller, Biol. Het. 54. (Dn)

1977 *Embolosterna*: Hsiao et al., Handb. Chinese Hem. Het. 1:63. (K)

***Embolosterna olivacea* Horváth, 1900**

1900a *Embolosterna olivacea* Horváth, Term. Füzet. 23:366

1908 *Embolosterna olivacea*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)

1909 *Embolosterna olivacea*: Kirkaldy, Cat. Hem. 1:349. (L)

1921 *Embolosterna olivacea*: Lehmann, Arch. Naturges. Berlin 87A(6):37, fig. 1c. (K)

1945 *Embolosterna olivacea*: Blöte, Zool. Meded. 25:292 (R)

Distribution: Borneo.

***Embolosterna rubromaculata* Lehmann, 1921**

1921 *Embolosterna rubromaculata* Lehmann, Arch. Naturges. Berlin 87A(6):36, 37-38, fig. 1b. (K)

1923 *Embolosterna rubromaculata*: Lehmann, Zool. Anz. 57(7/8):150. (R)

Distribution: Borneo

***Embolosterna taurus* (Westwood, 1837)**

1837a *Tessaratomia* (sic) *taurus* Westwood, Cat. Hope 1:27.

1851 *Tessaratomia*? *cornuta* Dallas, List. Hem. 1:342 (syn. by Stal, 1862)

1859 *Tessaratomia*? *cornuta*: Dohrn, Cat. Hem. 21

1859 *Tessaratomia*? *taurus*: Dohrn, Cat. Hem. 21

1862 *Tessaratomia* (sic) *taurus*: Stal, Ofv. Vet. Akad. Förh. 19(9):501. (S)

1868 *Tessaratomia* (sic) *cornuta*: Walker, Cat. Het. 3:462. (R)

- 1870 *Embolosterna taurus*: Stål, Sv. Vet. Akad. Handl. 9(1):66. (S, R)
- 1873 *Tessaratomia* (sic) *cornuta*: Walker, Cat. Het. Suppl. 26. (S)
- 1889 *Embolosterna taurus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):53. (S, D)
- 1893 *Embolosterna taurus*: Distant, Anni. Mag. Nat. Hist. (6)11:430-431. (Dn, R)
- 1893 *Embolosterna taurus*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
- 1901c *Embolosterna taurus*: Distant, Proc. Zool. Soc. Lond. 1900(4):820. (S)
- 1909 *Embolosterna taurus*: Kirkaldy, Cat. Hem. 1:349. (S)
- 1921 *Embolosterna taurus*: Lehmann, Arch. Naturges. Berlin. 87A(6):37, fig. 1a. (K)
- 1932b *Embolosterna taurus*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10.
- 1935 *Embolosterna taurus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:130. (S, R)
- 1935 *Embolosterna taurus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):127, pl. 5 figs. 76-77. (D, R)
- 1935 *Embolosterna taurus*: Tang, Cat. Ins. Sin. 2:362. (S, R)
- 1945 *Embolosterna taurus*: Blöte, Zool. Meded. 25:292. (R)
- 1948 *Embolosterna taurus*: Hoffmann, Lingnan Sci. J. 22(1-4):28-29. (S, D)
- 1956 *Embolosterna taurus*: Miller, Biol. Het. ed. 1:28-29. (stridulation)
- 1957 *Embolosterna taurus*: Zia, Acta Ent. Sin. 7:425-426, fig. 2. (S, D)
- 1970 *Embolosterna taurus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):10, 12, 13, figs. 30-32, 38. (K, & Ge)
- 1980 *Embolosterna taurus*: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
- Distribution:** Borneo, China, India, Malay Peninsula, Sumatra.

Embolosterna unicolorus Distant, 1909

- 1909a *Embolosterna unicolorus* Distant, Trans. Ent. Soc. Lond. 1909(3):388, pl. 10 fig. 4.
- 1909 *Embolosterna unicolorus* Kirkaldy, Cat. Hem. 1:370
- 1921 *Embolosterna unicolorus* Lehmann, Arch. Naturges. Berlin. 87A(6):36. (K)

Distribution: Borneo

Embolosterna vacca Martin, 1902

- 1902 *Embolosterna vacca* Martin, Bull. Mus. Paris 8:335
- 1908 *Embolosterna vacca* Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1909 *Embolosterna vacca* Kirkaldy, Cat. Hem. 1:349
- 1921 *Embolosterna vacca* Lehmann, Arch. Naturges. Berlin. 87A(6):36. (K)
- 1922 *Embolosterna vacca* Bergroth, Ann. Soc. Ent. Belg. 61:376. (humeral)
- 1923 *Embolosterna vacca* Lehmann, Zool. Anz. 57(7/8):180. (R)
- 1945 *Embolosterna vacca* Blöte, Zool. Meded. 25:292. (R)
- Distribution:** Borneo

Enada Walker, 1863

Type species: *Enada rosea* Walker, 1866, by monotypy

- 1866 *Enada* Walker, Cat. Het. 3:485
- 1893 *Enada*: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)
- 1909 *Enada*: Kirkaldy, Cat. Hem. 1:360. (L)
- 1945 *Enada*: Blöte, Zool. Meded. 25:298. (Dn moved from Aplosternini to Tessaratomini)
- 1974 *Enada*: Kumar, J. Nat. Hist. 8(6):676. (Dn, R)

Enada dollingi Kumar, 1974

- 1974 *Enada dollingi* Kumar, J. Nat. Hist. 8(6):677-678, figs. 6-13.

Distribution: Borneo.

Enada marginepunctata Blöte, 1945

- 1945 *Enada marginepunctata* Blöte, Zool. Meded. 25:298-299.

Distribution: Borneo.

Enada rosea Walker, 1866

- 1866 *Enada rosea* Walker, Cat. Het. 3:485.
- 1893 *Enada rosea*: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)
- 1900a *Enada rosea*: Distant, Ann. Mag. Nat. Hist. (7)6:233. (Ts)
- 1909 *Enada rosea*: Kirkaldy, Cat. Hem. 1:360. (L)
- 1974 *Enada rosea*: Kumar, J. Nat. Hist. 8(6):677, fig. 14. (Dn)

Distribution: unknown.

Hypencha Amyot & Serville, 1843

Type species: *Tessaratomia apicalis* Lepeletier & Serville, 1825, by monotypy.

- 1843 *Hypencha* Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII. 166. (K)
- 1846 *Hypencha*: Agassiz, Nomen. Zool. Hem. Add. 7. (Ety)
- 1851 *Hypencha*: Herrich-Schäffer, Wanz. Ins. 9:284. (K)
- 1865 *Hypencha*: Stål, Hem. Afr. 1:225. (K)
- 1870 *Hypencha*: Stål, Sv. Vet. Akad. Handl. 9(1):68. (S)
- 1889 *Hypencha*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):59. (S, D)
- 1893 *Hypencha*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
- 1902 *Hypencha*: Distant, Fauna Brit. India, Rh. 1:257, 260. (K, S, D)
- 1903 *Hypencha*: Kirkaldy, Entomol. 36(484):231. (Tsp)
- 1909 *Hypencha*: Kirkaldy, Cat. Hem. 1:351. (S)
- 1956 *Hypencha*: Miller, Biol. Het. ed. 1:45. (Dn)
- 1970 *Hypencha*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 9, 15. (K, D)
- 1971 *Hypencha*: Miller, Biol. Het. 5.4. (Dn)

Hypencha aeroplana Bergroth, 1922

- 1922a *Hypencha aeroplana* Bergroth, Ann. Soc. Ent. Belg. 61:376-377, fig.

Distribution: Malay Peninsula

Hypencha alata Breddin, 1905

- 1905 *Hypencha alata* Breddin, Mitt. Nat. Mus. Hamb. 22:210-211.
- 1908 *Hypencha alata* Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 *Hypencha alata*: Kirkaldy, Cat. Hem. 1:351. (L)
- 1922 *Hypencha alata*: Bergroth, J. Straits Soc. 83:78. (R)
- 1945 *Hypencha alata*: Blöte, Zool. Meded. 25:296. (R)

Distribution: Borneo, Malaysia (Sangaili); Sumatra.

Hypencha apicalis (Lepeletier & Serville, 1825)

- 1825 *Tessaratomia apicalis* Lepeletier & Serville, Enc. Meth. 10:591
- 1835 *Tessaratomia apicalis* Burmeister, Handb. Ent. 2:351. (Dn)
- 1843 *Hypencha apicalis*: Amyot & Serville, Hist. Nat. Ins. Hem. 166. (Dn, S)

- 1851 *Hypencha apicalis*: Herrich-Schäffer, Wanz. Ins. 9:309. (L)
 1851 *Tessaratomia picea* Dallas, List. Hem. 1:341. (syn. by Vollenhoven, 1868)
 1859 *Tessaratomia picea*: Dohrn, Cat. Hem. 21. (L)
 1859 *Hypencha apicalis*: Dohrn, Cat. Hem. 21. (L)
 1862 *Hypencha reriki* Ellenrieder, Nat. Tijds. Ned. Ind. 24:160-161, pl. 5 fig. 30. (syn. by Vollenhoven, 1868)
 1863 *Hypencha apicalis*: Stål, Trans. Ent. Soc. Lond. (3)1:596.
 1868 *Tessaratomia* (sic) *apicalis*: Vollenhoven, Faune Ent. Indo-Neerl. 3:26-27. (S, D)
 1868 *Tessaratomia* (sic) *apicalis*: Walker, Cat. Het. 3:462. (S, R)
 1868 *Tessaratomia* (sic) *reriki*: Walker, Cat. Het. 3:462. (L)
 1868 *Tessaratomia* (sic) *semicuprea*: Walker, Cat. Het. 3:465. (syn. by Distant, 1900)
 1870 *Hypencha apicalis*: Stål, Sv. Vet. Akad. Handl. 9(1):68-69. (S)
 1889 *Hypencha apicalis*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):60. (S, D)
 1893 *Hypencha apicalis*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1893 *Hypencha?* *semicuprea*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)
 1900 *Hypencha apicalis*: Distant, Ann. Mag. Nat. Hist. (7)6:61, 63. (S)
 1903 *Hypencha apicalis*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 *Hypencha apicalis*: Kirkaldy, Cat. Hem. 1:351. (S)
 1923 *Hypencha apicalis*: Lehmann, Zool. Anz. 57(7/8):180. (R)
 1945 *Hypencha apicalis*: Blöte, Zool. Meded. 25:296. (R)
 1970 *Hypencha apicalis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):9, 12, 13, figs. 24-26. (K, Ge)

Distribution: Borneo, Java, Sumatra.

Hypencha luctuosa Stål, 1863

- 1863 *Hypencha luctuosa* Stål, Trans. Ent. Soc. Lond. (3)1:596.
 1868 *Tessaratomia* (sic) *luctuosa*: Walker, Cat. Het. 3:463. (R)
 1870 *Hypencha luctuosa*: Stål, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1889 *Hypencha luctuosa*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):59-60. (S, D)
 1893 *Hypencha luctuosa*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1902 *Hypencha luctuosa*: Distant, Fauna Brit. India, Rh. 1:260, fig. 165. (D, T)
 1909 *Hypencha luctuosa*: Kirkaldy, Cat. Hem. 1:351. (S)

Distribution: Burma.

Hypencha opposita (Walker, 1868)

- 1868 *Tessaratomia* (sic) *opposita*: Walker, Cat. Het. 3:465.
 1900 *Hypencha opposita*: Distant, Ann. Mag. Nat. Hist. (7)6:61, 63. (Ts, R)
 1909 *Hypencha opposita*: Kirkaldy, Cat. Hem. 1:351. (L)
 1956 *Hypencha opposita*: Miller, Biol. Het. ed. 1:28-29. (stridulation)
 1970 *Hypencha opposita*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):fig. 47. (spermatheca)

Distribution: Malay Peninsula

Hypencha ophthalmica Stål, 1863

- 1863 *Hypencha ophthalmica* Stål, Trans. Ent. Soc. Lond. (3)1:596.
 1868 *Tessaratomia* (sic) *ophthalmica*: Walker, Cat. Het.

3:463. (L)

- 1870 *Hypencha ophthalmica*: Stål, Sv. Vet. Akad. Handl. 9(1):69. (R)
 1889 *Hypencha ophthalmica*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):60-61. (S, D)
 1893 *Hypencha ophthalmica*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 *Hypencha ophthalmica*: Kirkaldy, Cat. Hem. 1:351. (L)
 1922 *Hypencha ophthalmica*: Bergroth, J. Straits Soc. 83:78. (R)
 1945 *Hypencha ophthalmica*: Blöte, Zool. Meded. 25:296. (R)

Distribution: Borneo, Malay Peninsula, Sumatra.

Hypencha reriki Ellenrieder, 1862 — see *Hypencha apicalis*

Hypencha semicuprea (Walker, 1868) — see *Hypencha apicalis*

Mecanum Amyot & Serville, 1843 — see *Mucanum*

Mucanum Amyot & Serville, 1843

Type species: *Tessaratomia canaliculata* Lepeletier & Serville, 1825, by monotypy

- 1843 *Mucanum* Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 163-164. (K)
 1846 *Mucanum*: Agassiz, Nomen. Zool. Add. 9. (Ety)
 1851 *Mucanum*: Dallas, List. Hem. 1:317, 338. (K)
 1851 *Mecanum* (sic): Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1865 *Mucanum*: Stål, Hem. Afr. 1:224. (K)
 1868 *Mucanum*: Vollenhoven, Faune Ent. Indo-Neerl. 3:21
 1870 *Mucanum*: Stål, Sv. Vet. Akad. Handl. 9(1):65. (S)
 1893 *Mucanum*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
 1903 *Mucanum*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 *Mucanum*: Kirkaldy, Cat. Hem. 1:349. (L)
 1956 *Mucanum*: Miller, Biol. Het. ed. 1:45. (Dn)
 1970 *Mucanum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 10, 15. (K, D)
 1971 *Mucanum*: Miller, Biol. Het. 54. (Dn)
 1972 *Mucanum*: Jordan, Handb. Zool. 4(2)2/20.39. (L)

Mucanum canaliculatum (Lepeletier & Serville, 1825)

- 1825 *Tessaratomia canaliculatum* Lepeletier & Serville Enc. Meth. 10:590.
 1837 *Tessaratomia canaliculatum*: Spinola, Essai 342. (Ts?)
 1843 *Mucanum canaliculatum*: Amyot & Serville, Hist. Nat. Ins. Hem. 1:164. (Dn)
 1951 *Mucanum canaliculatum*: Herrich-Schäffer, Wanz. Ins. 9:309. (L)
 1951 *Mucanum canaliculatum*: Dallas, List. Hem. 1:338. (S, R)
 1859 *Mucanum canaliculatum*: Dohrn, Cat. Hem. 20. (L)
 1868 *Mucanum canaliculatum*: Vollenhoven, Faune Ent. Indo-Neerl. 3:21-22. (S, D)
 1868 *Mucanum canaliculatum*: Walker, Cat. Het. 3:459. (R)
 1870 *Mucanum canaliculatum*: Stål, Sv. Vet. Akad. Handl. 9(1):65. (S)
 1893 *Mucanum canaliculatum*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
 1903 *Mucanum canaliculatum*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 *Mucanum canaliculatum*: Kirkaldy, Cat. Hem. 1:349. (S)

1945 *Mucanum canaliculatum*: Blöte, Zool. Meded. 25:291.

(R)

Distribution: Java

Mucanum muciligerum Stal, 1858

1858 *Mucanum muciligerum* Stal, Öfv. Vet. Akad. Förh. 15:438.

1863 *Mucanum muciligerum*: Stal, Trans. Ent. Soc. Lond. (3):1:594

1868 *Mucanum muciligerum*: Vollenhoven, Faune Ent. Indo-Neerl. 3:22-23. (S, Dn)

1868 *Mucanum muciligerum*: Walker, Cat. Het. 3:459 (R)

1870 *Mucanum muciligerum*: Stal, Sv. Vet. Akad. Handl. 9(1):66. (S, R)

1871 *Mucanum muciligerum*: Stal, Öfv. Vet. Akad. Förh. 27(7):642. (R)

1893 *Mucanum muciligerum*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)

1909 *Mucanum muciligerum*: Kirkaldy, Cat. Hem. 1:349. (S)

1923 *Mucanum muciligerum* (sic): Lehmann, Zool. Anz. 57(7/8):180. (R)

1945 *Mucanum muciligerum*: Blöte, Zool. Meded. 25:292 (L)

1972 *Mucanum muciligerum*: Jordan, Handb. Zool. 4(2)/20:fig. 84. (fig. only)

Distribution: Java, Philippines.

Mucanum patibulum Vollenhoven, 1868

1868 *Mucanum patibulum*: Vollenhoven, Faune Ent. Indo-Neerl. 3:22, pl. 3 fig. 1.

1868 *Mucanum patibulum*: Walker, Cat. Het. 3:459. (R)

1870 *Mucanum patibulum*: Stal, Sv. Vet. Akad. Handl. 9(1):65. (R)

1893 *Mucanum patibulum*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (L)

1900b *Mucanum patibulum*: Breddin, Stett. Ent. Ztg. 63:331 (R)

1905 *Mucanum patibulum*: Breddin, Mitt. Nat. Mus. Hamb. 22:210. (R)

1907a *Mucanum patibulum*: Schouteden, Notes Leyden Mus. 30:44. (Ts)

1909 *Mucanum patibulum*: Kirkaldy, Cat. Hem. 1:349. (L)

1945 *Mucanum patibulum*: Blöte, Zool. Meded. 25:292 (T, R)

1970 *Mucanum patibulum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):10, 12, 13, figs. 27-29, 48. (S, Ge)

Distribution: Borneo, Java, Malaysia (Malaysia, Banggril), Moluccas, Sarawak, Sumatra

Mucanum relandii Eilennieder, 1862 — see *Pygoplatys relandii*

Pygoplatys Dallas, 1851

Type species: *Pygoplatys validus* Dallas, 1851, designated by Distant, 1902

Pygoplatys (*Odontoteuchus*): *Pygoplatys* thereby: Dohm, 1863, designated by Kirkaldy, 1909

1851 *Pygoplatys* Dallas, List. Hem. 1:317, 338-339 (K)

1865 *Pygoplatys*: Stal, Hem. Afr. 1:225. (K)

1868 *Pygoplatys*: Vollenhoven, Faune Ent. Indo-Neerl. 3:23. (D)

1870 *Pygoplatys*: Stal, Sv. Vet. Akad. Handl. 9(1):69. (S)

1871 *Pygoplatys* (*Pygoplatys*): Stal, Öfv. Vet. Akad. Förh. 27(7):642

1871 *Pygoplatys* (*Odontoteuchus*): Stal, Öfv. Vet. Akad. Förh. 27(7):643. (syn. by Kumar & Ghauri, 1970)

1889 *Pygoplatys*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):61

(S, D)

1901 *Pygoplatys*: Breddin, Abh. Naturf. Ges. Halle 24:159, 171.

1902 *Pygoplatys*: Distant, Fauna Brit. India, Rh. 1:257, 261.

1909 *Pygoplatys*: Kirkaldy, Cat. Hem. 1:XXXVI, 351. (Tsp)

1922a *Pygoplatys*: Bergroth, Ann. Soc. Ent. Belg. 61:376. (diversity of humeri)

1923 *Pygoplatys*: Lehmann, Zool. Anz. 57(7/8):181. (subgen. & spp. listed)

1948 *Pygoplatys*: Hoffmann, Lingnan Sci. J. 22(1-4):31-32 (S)

1956 *Pygoplatys*: Miller, Biol. Het. ed. 1:45. (Dn)

1970 *Pygoplatys*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4, 5, 15. (K, D, S)

1971 *Pygoplatys*: Miller, Biol. Het. 54. (Dn)

Pygoplatys subgenus *Odontoteuchus* Stal, 1871 — see *Pygoplatys*

Pygoplatys subgenus *Pygoplatys* Dallas, 1851 — see *Pygoplatys*

Pygoplatys acutus Dallas, 1851

1851 *Pygoplatys acutus* Dallas, List. Hem. 1:340.

1859 *Pygoplatys acutus*: Dohrn, Cat. Hem. 2:1. (L)

1868 *Pygoplatys roseus* Vollenhoven, Faune Ent. Indo-Neerl. 3:24. (syn. by Stal, 1870)

1868 *Pygoplatys acutus*: Walker, Cat. Het. 3:460. (L)

1870 *Pygoplatys acutus*: Stal, Sv. Vet. Akad. Handl. 9(1):69. (S)

1889 *Pygoplatys acutus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):61-62. (S, D)

1893 *Pygoplatys acutus*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)

1902 *Pygoplatys acutus*: Distant, Fauna Brit. India, Rh. 1:261, fig. 166. (S, D, R)

1907a *Pygoplatys acutus*: Schouteden, Notes Leyden Mus. 30:44. (T, S)

1909 *Pygoplatys* (*Pygoplatys*) *acutus*: Kirkaldy, Cat. Hem. 1:352. (S)

1945 *Pygoplatys* (*Pygoplatys*) *acutus*: Blöte, Zool. Meded. 25:296. (R)

1945 *Pygoplatys* (*Pygoplatys*) *roseus*: Blöte, Zool. Meded. 25:298. (R)

Distribution: Burma, India, Moluccas, Sumatra

Pygoplatys auro-punctatus Blöte, 1945

1945 *Pygoplatys* (*Pygoplatys*) *auro-punctatus* Blöte, Zool. Meded. 25:297. (R)

1948 *Pygoplatys auro-punctatus*: Hoffmann, Lingnan Sci. J. 22(1-4):32. (L)

Distribution: Laos

Pygoplatys bovis Stal, 1871

1871 *Pygoplatys bovis* Stal, Öfv. Vet. Akad. Förh. 27(7):643.

1873 *Pygoplatys bovis*: Walker, Cat. Het. Suppl. 24. (L)

1893 *Pygoplatys bovis*: Distant, Ann. Mag. Nat. Hist. (6):11:432. (cf. *Pygoplatys lunatus*)

1893 *Pygoplatys bovis*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)

1909 *Pygoplatys* (*Pygoplatys*) *bovis*: Kirkaldy, Cat. Hem. 1:352. (L)

Distribution: Philippines.

Pygoplatys celebensis Breddin, 1901

1901 *Pygoplatys celebensis* Breddin, Abh. Naturf. Ges. Halle 24:14, 62-63.

- 1908 *Pygoplatys celebensis*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Pygoplatys (Pygoplatys) celebensis*: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 *Pygoplatys (Odontoteuchus) celebensis*: Blöte, Zool. Meded. 25:298. (Ts)
 1971 *Pygoplatys celebensis*: Gaedike, Beitr. Ent. 21(1-2): 82 (T)

Distribution: Sulawesi (Celebes).

Pygoplatys cribratus (Walker, 1868)

- 1868 *Piezosternum cribratum* Walker, Cat. Het. 3:458.
 1868 *Pygoplatys trucidus* Walker, Cat. Het. 3:461. (syn. by Distant, 1900)
 1893 *Pygoplatys trucidus*: Distant, Ann. Mag. Nat. Hist. (6)11:431. (cf. *Pygoplatys tauriformis*)
 1893 *Pygoplatys cribratus*: Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn, R)
 1893 *Pygoplatys cribratus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1893 *Pygoplatys trucidus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1900 *Pygoplatys cribratus*: Distant, Ann. Mag. Nat. Hist. (7)6:61, 63.
 1909 *Pygoplatys (Pygoplatys) cribratus*: Kirkaldy, Cat. Hem. 1:352. (S)
 1945 *Pygoplatys (Pygoplatys) trucidus*: Blöte, Zool. Meded. 25:298.

Distribution: Borneo, Moluccas.

Pygoplatys firmatus (Walker, 1868)

- 1868 *Piezosternum firmatus* Walker, Cat. Het. 3:458.
 1889 *Piezosternum ?firmatum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):83. (D)
 1893 *Pygoplatys firmatus*: Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn, R)
 1893 *Pygoplatys firmatus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1900 *Pygoplatys firmatus*: Distant, Ann. Mag. Nat. Hist. (7)6:63. (Ts)
 1903a *Pygoplatys firmatus*: Distant, Fasc. Malay. Zool. 1(2):237. (S, R)
 1909 *Pygoplatys (Pygoplatys) firmatus*: Kirkaldy, Cat. Hem. 1:352. (L)

Distribution: Malaysia, Moluccas.

Pygoplatys forticornis (Walker, 1868)

- 1868 *Tesseratoma* (sic) *forticornis* Walker, Cat. Het. 3:465.
 1893 *Pygoplatys forticornis*: Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn, R)
 1893 *Pygoplatys forticornis*: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1900 *Pygoplatys forticornis*: Distant, Ann. Mag. Nat. Hist. (7)6:63. (Ts)
 1909 *Pygoplatys (Pygoplatys) forticornis*: Kirkaldy, Cat. Hem. 1:352. (L)

Distribution: Borneo

Pygoplatys haedulus Stål, 1871

- 1871 *Pygoplatys (Odontoteuchus) haedulus* Stål, Ofv. Vet. Akad. Förh. 27(7):644.
 1873 *Pygoplatys haedulus*: Walker, Cat. Het. Suppl. 25. (L)
 1893 *Pygoplatys haedulus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Odontoteuchus) haedulus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 *Pygoplatys haedulus*: Lehmann, Zool. Anz. 57(7/8):180. (R)

Distribution: Philippines.

Pygoplatys ingenuus (Walker, 1868)

- 1868 *Piezosternum ingenuum* Walker, Cat. Het. 3:459.
 1889 *Piezosternum ? ingenuus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):83. (D)
 1893 *Pygoplatys ingenuus* (sic): Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn)
 1893 *Pygoplatys ingenuus* (sic): Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1900 *Pygoplatys ingenuus* (sic): Distant, Ann. Mag. Nat. Hist. (7)6:63. (Ts)
 1909 *Pygoplatys (Pygoplatys) ingenuus*: Kirkaldy, Cat. Hem. 1:352. (S)

Distribution: unknown.

Pygoplatys lancifer Walker, 1868

- 1868 *Pygoplatys lancifer* Walker, Cat. Het. 3:460.
 1893 *Pygoplatys lancifer*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1900 *Pygoplatys lancifer*: Distant, Ann. Mag. Nat. Hist. (7)6:62. (Ts)
 1909 *Pygoplatys (Pygoplatys) lancifer*: Kirkaldy, Cat. Hem. 1:352.
 1945 *Pygoplatys lancifer*: Blöte, Zool. Meded. 25:297. (R)
 1956 *Pygoplatys lancifer*: Miller, Biol. Het. ed. 1: pl. 1 fig. 17 (fig. only)
 1970 *Pygoplatys lancifer*: Kumar & Ghauri, Dt. Ent. Z. (N F) 17(1-3):12, fig. 42. (Ge)
 1971 *Pygoplatys lancifer*: Miller, Biol. Het., pl. 1 fig. 17. (figure only)

Distribution: Borneo.

Pygoplatys longiceps Stål, 1871

- 1871 *Pygoplatys (Odontoteuchus) longiceps* Stål, Ofv. Vet. Akad. Förh. 27(7):643.
 1873 *Pygoplatys longiceps*: Walker, Cat. Het. Suppl. 25. (L)
 1893 *Pygoplatys longiceps*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Odontoteuchus) longiceps*: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 *Pygoplatys longiceps*: Lehmann, Zool. Anz. 57(7/8):180. (R)
 1945 *Pygoplatys (Odontoteuchus) longiceps*: Blöte, Zool. Meded. 25:296. (R)

Distribution: Philippines.

Pygoplatys lunatus Distant, 1893

- 1893 *Pygoplatys lunatus*: Distant, Ann. Mag. Nat. Hist. (6)11:431-432
 1893 *Pygoplatys lunatus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Pygoplatys) lunatus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 *Pygoplatys (Pygoplatys) lunatus*: Blöte, Zool. Meded. 25:297. (R)

Distribution: Borneo

Pygoplatys merinjakensis Distant, 1914

- 1914a *Pygoplatys merinjakensis* Distant, Ann. Mag. Nat. Hist. (8)14:335

Distribution: Borneo

Pygoplatys minax Vollenhoven, 1868

- 1868 *Pygoplatys minax* Vollenhoven, Faune Ent. Indo-Neerl. 3:23-34, pl. 3 fig. 3.
 1868 *Pygoplatys minax*: Walker, Cat. Het. 3:460. (L)
 1870 *Pygoplatys minax*: Stål, Sv. Vet. Akad. Handl. 9(1):69.

- (L)
 1889 *Pygoplatys minax*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):62. (D)
 1893 *Pygoplatys minax*: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1903a *Pygoplatys minax*: Distant, Fasc. Malay. Zool. 1(2):237. (R)
 1907a *Pygoplatys minax*: Schouteden, Notes Leyden Mus. 30:44. (T, Ts)
 1909 *Pygoplatys (Pygoplatys) minax*: Kirkaldy, Cat. Hem. 1:352.
 1945 *Pygoplatys minax*: Blöte, Zool. Meded. 25:297. (R)
 1970 *Pygoplatys minax*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):13, fig. 45. (Ge)

Distribution: Borneo, India, Malaysia, Sumatra.

Pygoplatys montanus Distant, 1900

- 1900c *Pygoplatys montanus* Distant, Trans. Ent. Soc. Lond. 1900(4):696-697.
 1908 *Pygoplatys montanus*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Pygoplatys (Pygoplatys) montanus*: Kirkaldy, Cat. Hem. 1:352. (L)

Distribution: Borneo.

Pygoplatys obtusus Blöte, 1945

- 1945 *Pygoplatys obtusus* Blöte, Zool. Meded. 25:297-298.

Distribution: Borneo.

Pygoplatys ralandii (Ellenreider, 1862)

- 1862 *Mucanum ralandii* Ellenreider, Nat. Tijds. Ned. Ind. 24:159-160, pl. 5 fig. 29.
 1868 *Pygoplatys ralandii*: Vollenhoven, Faune Ent. Indo-Neerl. 3:24. (D, H)
 1868 *Mucanum ralandii*: Walker, Cat. Het. 3:459. (L)
 1870 *Pygoplatys ralandii*: Stal, Sv. Vet. Akad. Handl. 9(1):69. (S)
 1873 *Pygoplatys ralandii*: Walker, Cat. Het. Suppl. 26. (S)
 1893 *Pygoplatys ralandii*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1900b *Pygoplatys ralandii* (sic): Breddin, Stett. Ent. Ztg. 61:331.
 1909 *Pygoplatys (Pygoplatys) ralandii*: Kirkaldy, Cat. Hem. 1:352. (S, H)

Distribution: Sumatra.

Pygoplatys roseus Vollenhoven, 1868 -- see *Pygoplatys acutus*

Pygoplatys rosulentus Stal, 1871

- 1871 *Pygoplatys (Odontoteuchus) rosulentus* Stal, Öfv. Vet. Akad. Förh. 27(7):644.
 1873 *Pygoplatys rosulentus*: Walker, Cat. Het. Suppl. 25. (L)
 1893 *Pygoplatys rosulentus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Odontoteuchus) rosulentus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 *Pygoplatys rosulentus*: Lehmann, Zool. Anz. 57(7/8):180-181. (R)

Distribution: Philippines

Pygoplatys shelfordi Distant, 1901

- 1901b *Pygoplatys shelfordi* Distant, Trans. Ent. Soc. Lond. 1901(4):567.
 1908 *Pygoplatys shelfordi*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)

Distribution: Borneo.

Pygoplatys subrugosus Vollenhoven, 1868

- 1868 *Pygoplatys subrugosus* Vollenhoven, Faune Ent. Indo-Neerl. 3:23, pl. 3 fig. 2.
 1868 *Pygoplatys subrugosus*: Walker, Cat. Het. 3:460. (L)
 1870 *Pygoplatys subrugosus*: Stal, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1893 *Pygoplatys subrugosus*: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1907a *Pygoplatys subrugosus*: Schouteden, Notes Leyden Mus. 30:44. (T, Ts)
 1909 *Pygoplatys (Pygoplatys) subrugosus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 *Pygoplatys (Pygoplatys) subrugosus*: Blöte, Zool. Meded. 25:298. (R, T)
 1970 *Pygoplatys subrugosus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):12, fig. 43. (Ge)

Distribution: Moluccas (Amboina I, Buru I.).

Pygoplatys tauniformis Distant, 1893

- 1893 *Pygoplatys tauniformis* Distant, Ann. Mag. Nat. Hist. (6)11:431, 432. (cf. *Pygoplatys lunatus*)
 1893 *Pygoplatys tauniformis*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1902 *Pygoplatys tauniformis*: Distant, Fauna Brit. India, Rh. 1:261-262. (D)
 1909 *Pygoplatys (Pygoplatys) lunatus*: Kirkaldy, Cat. Hem. 1:352. (S)

Distribution: Burma.

Pygoplatys thoreyi Dohrn, 1863

- 1863 *Pygoplatys? thoreyi* Dohrn, Stett. Ent. Ztg. 24:350.
 1868 *Pygoplatys thoreyi*: Walker, Cat. Het. 3:460. (L)
 1870 *Pygoplatys thoreyi*: Stal, Sv. Vet. Akad. Handl. 9(1):70. (L)
 1871 *Pygoplatys (Odontoteuchus) thoreyi*: Stal, Öfv. Vet. Akad. Förh. 27(7):643. (K)
 1873 *Pygoplatys thoreyi*: Walker, Cat. Het. Suppl. 24. (S)
 1893 *Pygoplatys thoreyi*: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1909 *Pygoplatys (Odontoteuchus) thoreyi*: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 *Pygoplatys thoreyi*: Lehmann, Zool. Anz. 57(7/8):181. (R)
 1970 *Pygoplatys thoreyi*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):12, 13, fig. 44. (Ge)

Distribution: Philippines.

Pygoplatys trucidus Walker, 1868 -- see *Pygoplatys cribratus*

Pygoplatys validus Dallas, 1851

- 1851 *Pygoplatys validus* Dallas, List. Hem. 1:339-340, pl. 11 fig. a-d.
 1859 *Pygoplatys validus*: Dohrn, Cat. Hem. 21. (L)
 1868 *Pygoplatys validus*: Walker, Cat. Het. 3:459. (L)
 1870 *Pygoplatys validus*: Stal, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1893 *Pygoplatys validus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Pygoplatys) validus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 *Pygoplatys (Pygoplatys) validus*: Blöte, Zool. Meded. 25:298. (R)
 1970 *Pygoplatys validus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, figs. 9-11, 41. (Ge)

Distribution: Borneo.

Pygoplatys zonatus Stal, 1863

- 1863 *Pygoplatys zonatus* Stal, Trans. Ent. Soc. Lond. (3)1:595

- 1868 *Pygoplatys zonatus*: Walker, Cat. Het. 3:460. (R)
 1870 *Pygoplatys zonatus*: Stål, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1893 *Pygoplatys zonatus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Pygoplatys) zonatus*: Kirkaldy, Cat. Hem. 1:352. (L)
Distribution: Borneo.

***Siphnus* Stål, 1863**

Type species: *Siphnus alcidus* Stål, 1863, designated by Kirkaldy, 1909.

- 1863 *Siphnus*: Stål, Trans. Ent. Soc. Lond. (3) 1:597.
 1865 *Siphnus*: Stål, Hem. Afr. 1:225. (K)
 1868 *Siphnus*: Walker, Cat. Het. 3:467. (L)
 1870 *Siphnus*: Stål, Sv. Vet. Akad. Handl. 9(1):68. (S)
 1889 *Siphnus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):57-58. (S, D)
 1893 *Siphnus*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 *Siphnus*: Kirkaldy, Cat. Hem. 1:XXXVI, 351. (Tsp)
 1956 *Siphnus*: Miller, Biol. Het. ed. 1:45. (Dn)
 1970 *Siphnus*: Kumar & Ghauri, Dt. Ent. Z. (N>F.) 17(1-3):4, 5-6, 15. (K, D, Tsp)
 1971 *Siphnus*: Miller, Biol. Het. 154. (Dn)

***Siphnus alcidus* Stål, 1863**

- 1863 *Siphnus alcidus*: Stål, Trans. Ent. Soc. Lond. (3) 1:597.
 1868 *Siphnus alcidus*: Walker, Cat. Het. 3:467. (R)
 1870 *Siphnus alcidus*: Stål, Sv. Vet. Akad. Handl. 9(1):68. (R)
 1889 *Siphnus alcidus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):58. (S, D)
 1893 *Siphnus alcidus*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 *Siphnus alcidus*: Kirkaldy, Cat. Hem. 1:351. (L)
 1935 *Siphnus alcidus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:132. (S, R)
 1945 *Siphnus alcidus*: Blöte, Zool. Meded. 25:295. (R)
 1968 *Siphnus alcidus*: Cobben, Evol. Trends Het. Eggs. 112, 114 fig. 116. (E)
 1981 *Siphnus alcidus*: Hinton, Biol. Ins. Eggs. 1:594. (E)
Distribution: Cambodia, Vietnam.

***Siphnus dilatatus* Walker, 1868**

- 1868 *Siphnus dilatatus*: Walker, Cat. Het. 3:467.
 1889 *Siphnus dilatatus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):58-59. (D)
 1893 *Siphnus dilatatus*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1900 *Siphnus dilatatus*: Distant, An. Mag. Nat. Hist. (7)6:62. (Ts)
 1909 *Siphnus dilatatus*: Kirkaldy, Cat. Hem. 1:351. (L)
 1970 *Siphnus dilatatus*: Kumar & Ghauri, Dt. Ent. Z. (N>F.) 17(1-3):5-6, figs. 12-14. (Jo Ge)
Distribution: Thailand.

***Siphnus hector* Stål, 1863**

- 1863 *Siphnus hector*: Stål, Trans. Ent. Soc. Lond. (3) 1:597.
 1868 *Siphnus hector*: Walker, Cat. Het. 3:467. (L)
 1870 *Siphnus hector*: Stål, Sv. Vet. Akad. Handl. 9(1):68. (R, Dn)
 1889 *Siphnus hector*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):58. (S, D)
 1893 *Siphnus hector*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 *Siphnus hector*: Kirkaldy, Cat. Hem. 1:351

Distribution: Ligor, Malaysia, Moluccas.

***Siphnus hercules* Blöte, 1945**

- 1945 *Siphnus hercules*: Blöte, Zool. Meded. 25:295-596.
Distribution: Borneo

***Tessaratoma* Lepeletier & Serville, 1825**

Type species: *Tessaratoma tessaratoma papillosa* Drury, [= *Cimex papillosus* Drury, 1770] designated by Distant 1902

- 1825 *Tessaratoma*: Lepeletier & Serville, Enc. Meth. 10:590.
 1827 *Tessaratoma*: Berthold, Latreille's Nat. Fam. Thierr. 416. (K)
 1829 *Tessaratomia* (sic): Latreille, Regne An. 5:195. (lists spp. originally included)
 1833 *Tessaratomia*: Laporte, Mag. Zool. (Guérin), 2:55, 59. (K, D)
 1834 *Tessaratomia* (sic): Burmeister, Silb. Rev. Ent. 2:14, 15, 18, 19, 21, pl. 16 fig. 2 (D)
 1835 *Tessaratomia* (sic): Boisduval, Voy. Astrolabe Ent. 2:631. (L)
 1835 *Tessaratomia* (sic): Burmeister, Handb. Ent. 2:347, 350. (K, D)
 1835 *Tessaratomia*: Hahn, Wanz. Ins. Nurnberg. 2:122-123. (D)
 1835 *Tessaratomia*: Brullé, Hist. Nat. Ins. 9:394, 395. (K, Dn)
 1837 *Tessaratomia*: Spinola, Essai: 340-342. (K, D)
 1840 *Tessaratomia* (sic): Blanchard, Hist. Nat. Ins. 3:142. (cf. *Oncomeris*)
 1843 *Tessaratomia* (sic): Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 164-165. (K, D)
 1846 *Tessaratomia*: Agassiz, Nomen Zool. 19, Addenda: 13. (N)
 1850 *Tessaratomia* (sic): Spinola, Gen. Ins. Artr. 32. (K)
 1851 *Tessaratomia*: Dallas, List. Hem. 1:317, 340. (K)
 1851 *Tessaratomia* (sic): Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1852 *Tessaratomia* (sic): Spinola, Mem. Soc. Ital. Modena 25(1):72. (K)
 1865 *Tessaratomia*: Stål, Hem. Afr. 1:224, 229. (K, D)
 1868 *Tessaratomia* (sic): Vollenhoven, Faune Ent. Indo-Neerl. 3:25. (D)
 1870 *Tessaratomia*: Stål, Sv. Vet. Akad. Handl. 9(1):66. (S)
 1889 *Tessaratomia*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):53-54. (S, D)
 1893 *Tessaratomia*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
 1902 *Tessaratomia*: Distant, Fauna Brit. India. Rh. 1:257. (K, S, D)
 1905 *Tessaratomia*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):221-222. (S, D, Ks)
 1909 *Tessaratomia*: Kirkaldy, Cat. Hem. 1:349. (S)
 1911 *Tessaratomia*: Muir & Kershaw, Psyche 18:3, pl. 2, fig. 7. (M)
 1925 *Tessaratomia*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 128. (K, S, D)
 1935 *Tessaratomia*: Tang, Cat. Ins. Sin. 2:363. (S)
 1952a *Tessaratomia*: Villiers, Int. Afr. 9:82-83. (D)
 1957 *Tessaratomia*: Zia, Acta Ent. Sin. 7:425, 426. (K, S, D)
 1972 *Tessaratomia*: Jordan, Handb. Zool. 4(2):20-39. (L)
 1977 *Tessaratomia*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 65-66. (K, Ks)

***Tessaratomia absimilis* Distant, 1893**

- 1893 *Tessaratomia absimilis*: Distant, Ann. Mag. Nat. Hist. (6)11:431.

- 1893 *Tessaratomia absimilis*: Lethierry & Severin, Cat. Gen. Hem. 1:226.
 1905 *Tessaratomia absimilis*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 225, fig. 82. (K, S, D)
 1909 *Tessaratomia absimilis*: Kirkaldy, Cat. Hem. 1:349 (S)
Distribution: East Africa

Tessaratomia aethiops Distant, 1877

- 1877 *Tessaratomia* (sic) *aethiops*: Distant, Ent. Mo. Mag. 14(159):62-63. (K)
 1882 *Tessaratomia aethiops*: Waterhouse, Aid. Ident. Ins. 1, pl. 49.
 1892 *Tessaratomia aethiops*: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)
 1893 *Tessaratomia aethiops*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1894 *Tessaratomia hornimani*: Montandon, Ann. Soc. Ent. Belg. 38(1893):634. (misdet. sec. Schouteden, 1905)
 1894 *Tessaratomia aethiops*: Karsch, Stett. Ent. Ztg. 55:100 (R)
 1901 *Tessaratomia aethiops*: Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1904a *Tessaratomia aethiops*: Schouteden, Mem. Soc. Espaq. Hist. Nat. 1:160. (R)
 1904a *Tessaratomia hornimani*: Schouteden, Mem. Soc. Espaq. Hist. Nat. 1:160. (R, misdet. sec. Schouteden, 1905)
 1905 *Tessaratomia aethiops*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):221, 222-223, 224, 274, figs. 75, 76, pl. 5 fig. 3. (K, S, D, R, N)
 1909 *Tessaratomia aethiops*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68. (R)
 1909 *Tessaratomia aethiops*: Kirkaldy, Cat. Hem. 1:349 (S)
 1910 *Tessaratomia aethiops*: Schouteden, Ann. Soc. Ent. Belg. 54:405. (R)
 1911 *Tessaratomia aethiops*: Schouteden, Rev. Zool. Afr. 1:185. (R)
 1921 *Tessaratomia* (sic) *aethiops*: Lehmann, Arch. Naturges. Berlin Abt. 87A(6):38 (cf. *Tessaratomia hornimani*)
 1934 *Tessaratomia aethiops*: Mayné & Ghesquiere, Ann. Gembloux 40(1):12. (R, H)
 1945 *Tessaratomia aethiops*: Blöte, Zool. Meded. 25:292 (R)
 1952a *Tessaratomia aethiops*: Villiers, Init. Afr. 9:83, fig. 105 (Dn, R)
 1956 *Tessaratomia aethiops*: Leston, Bull. I F A N 18A(2) 618 (R)
 1959 *Tessaratomia aethiops*: LePelley, Agric. Ins. E. Afr. 56, 103.
 1966 *Tessaratomia aethiops*: Roggini et al., EOS 42: 9, 10 14-18 (sgf)
 1967 *Tessaratomia aethiops*: Villiers, Bull. I F A N (ser. A) 29(4):1807 (R)
 1979 *Tessaratomia aethiops*: Staddon, Adv. Ins. Physiol. 14:362 (sgf)
 1980 *Tessaratomia aethiops*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1981 *Tessaratomia aethiops*: Blum, Chem. Def. Arthr. 58, 113-114, 116, 126, 215. (sgf)
Distribution: Cameroon, Congo, Kenya, Zaire

Tessaratomia afzeli Stal, 1854

- 1803 *Edessa papillosa*: Fabricius, Syst. Rh. 1:150. (misdet. sec. Stal, 1856)
 1835 *Tessaratomia* (sic) *papillosa*: Burmeister, Handb. Ent. 2:350-351 (misdet. sec. Stal, 1854)
 1854 *Tessaratomia* (sic) *afzeli*: Stal, Öfv. Vet. Akad. Förh. 11(8):233-234.

- 1856 *Tessaratomia* (sic) *afzeli*: Stal, Öfv. Vet. Akad. Förh. 13:63. (Dn, S)
 1859 *Tessaratomia afzeli*: Dohrn, Cat. Hem. 21. (S)
 1865 *Tessaratomia afzeli*: Stal, Hem. Afr. 1:229. (D, S, R)
 1868 *Tessaratomia* (sic) *afzeli*: Walker, Cat. Het. 3:463. (S)
 1870 *Tessaratomia afzeli*: Stal, Sv. Vet. Akad. Handl. 9(1):68. (S, R)
 1877 *Tessaratomia* (sic) *afzeli* (sic): Distant, Ent. Mo. Mag. 14(159):63. (K)
 1890 *Tessaratomia afzeli*: Distant, Ann. Soc. Ent. Belg. 34:53. (R)
 1892 *Tessaratomia afzeli*: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)
 1893 *Tessaratomia afzeli*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1894 *Tessaratomia afzeli*: Karsch, Stett. Ent. Ztg. 55:100. (R)
 1901 *Tessaratomia afzeli*: Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1903 *Tessaratomia usambarica*: Breddin, Soc. Ent. 18:107. (syn. Schouteden, 1905)
 1904 *Tessaratomia niemensis*: Schouteden, Ann. Soc. Ent. Belg. 48:143-144. (syn. Schouteden, 1905)
 1905 *Tessaratomia afzeli*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 226-227, figs. 83-86. (K, S, D, R)
 1909 *Tessaratomia afzeli*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68. (R)
 1909 *Tessaratomia afzeli*: Kirkaldy, Cat. Hem. 1:349. (S)
 1911 *Tessaratomia afzeli*: Schouteden, Rev. Zool. Afr. 1:185. (R)
 1913 *Tessaratomia afzeli*: Jeannel, Voy. Alluaud Hem. 1:108. (S, R)
 1934 *Tessaratomia afzeli*: Mayné & Ghesquiere, Ann. Gembloux 40(1).
 1945 *Tessaratomia afzeli*: Blöte, Zool. Meded. 25:292. (R)
 1949 *Tessaratomia afzeli*: Villiers, I. F. A. N. Catalogues 5:89. (R)
 1950 *Tessaratomia afzeli*: Villiers, Bull. I F A N. 12(4):938 (R)
 1952b *Tessaratomia afzeli*: Villiers, Mem. I F A N. 19:307 (R)
 1952a *Tessaratomia afzeli*: Villiers, Init. Afr. 9:83 (Dn, R)
 1956 *Tessaratomia afzeli*: Villiers, Ent. Arb. Mus. Gg. Frey 7:213 (R)
 1971 *Tessaratomia usambarica*: Gaedike, Beitr. Ent. 21(1-2):102. (T)
 1980 *Tessaratomia afzeli*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Tessaratomia* (sic) *afzeli*: Linnavuori, Acta Zool. Fenn. 163:11. (R)
Distribution: Cameroon, Congo, Gabon, Ghana, Guinea, Ivory Coast, Kenya, Liberia, Nigeria, Sierra Leone, Tanzania, Togo, Zaire

Tessaratomia alternata Lepelletier & Serville, 1825 - see *Pycnanum rubens*

Tessaratomia angularis Dohrn, 1863 - see *Tessaratomia javanica*

Tessaratomia apicalis Lepelletier & Serville, 1825 - see *Hyperichia apicalis*

Tessaratomia bicornis Lepelletier & Serville, 1825 - see *Eurypleura bicornis*

Tessaratomia canaliculatum Lepelletier & Serville, 1825 - see *Mucanum canaliculatum*

Tessaratoma chinensis (Thunberg, 1783) — see Tessaratoma papillosa

Tessaratoma (sic) clara Walker, 1868 — see Tessaratoma javanica

Tessaratoma conspersa Stål, 1863

- 1863 Tessaratoma conspersa Stål, Trans. Ent. Soc. Lond. (3):1:595.
 1868 Tessaratomajavanica var. stictica Vollenhoven, Faune Ent. Indo-Néerl. 3:26. (authorship attributed to de Haan; syn. with Tessaratoma conspersa)
 1868 Tessaratoma (sic) conspersa Walker, Cat. Het. 3:462. (R)
 1870 Tessaratoma conspersa Stål, Sv. Vet. Akad. Handl. 9(1):67. (Ts)
 1893 Tessaratoma conspersa Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1901 Tessaratoma conspersa Breddin, Abh. Naturf. Ges. Halle 24:13, 61. (R, D)
 1907a Tessaratoma conspersa Schouteden, Notes Leyden Mus. 30:44. (S)
 1909 Tessaratoma conspersa Kirkaldy, Cat. Hem. 1:349. (S)
 1932 Tessaratoma conspersa Wu, Mar. Biol. Assoc. China, 1st Ann. Rep. :82. (R)
 1935 Tessaratoma conspersa Hoffmann, Lingnan Univ. Sci. Bull. 7:130. (S, R)
 1935 Tessaratoma conspersa Tang, Cat. Ins. Sin. 2:363. (S)
 1945 Tessaratoma conspersa Blöte, Zool. Meded. 25:292. (R)
 1945 Tessaratoma stictica Blöte, Zool. Meded. 25:295. (as Nn for Tessaratomajavanica var. stictica Vollenhoven, 1868)
 1948 Tessaratoma conspersa Hoffmann, Lingnan Sci. J. 22(1-4):29. (China record queried)

Distribution: China (Fujian), Java, Sulawesi (Celebes).

Tessaratoma cornuta Dallas, 1851 — see Embolosterna taurus

Tessaratoma cuprea Westwood, 1837 — see Eusthenes cupreus

Tessaratoma dilatatum Montrouzier, 1855 — see Plisthenes dilatatus

Tessaratoma flavicornis Guérin, 1831 — see Oncomeris flavicornis

Tessaratoma (sic) forticornis Walker, 1868 — see Pygoplatys forticornis

Tessaratoma (sic) furcifera Walker, 1868 — see Tessaratoma javanica

Tessaratoma hornimani Distant, 1877

- 1877 Tessaratoma (sic) hornimani Distant, Ent. Mon. Mag. 14(159):63. (K)
 1882 Tessaratoma hornimani Waterhouse, Aid. Ident. Ins. 1, pl. 49.
 1891 Tessaratoma hornimani Bergroth, Rev. Ent. 10:213. (Dn)
 1892 Tessaratoma hornimani Distant, Ent. Mon. Mag. (2)3(31):188, 189. (Dn)
 1893 Tessaratoma hornimani Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1894 Tessaratoma hornimani Haglund, Öfv. Vet. Akad. Förh. 51(8):406. (Dn, R)

1894 Tessaratoma hornimani Montandon, Ann. Soc. Ent. Belg. 38(1893):634. (misdet. see Tessaratoma aethiops)

1894 Tessaratoma hornimani Karsch, Stett. Ent. Ztg. 55:100. (R)

1904 Tessaratoma hornimani Schouteden, Mem. Soc. Espan. Hist. Nat. 1:160. (R, misdet. see Tessaratoma aethiops)

1905 Tessaratoma hornimani Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 223-224, 274, figs. 77, 78, pl. 5 fig. 2. (K, S, D, R, I)

1909 Tessaratoma hornimani Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68. (R)

1909 Tessaratoma hornimani Kirkaldy, Cat. Hem. 1:349-350. (S)

1909c Tessaratoma hornimani Distant, Trans. Zool. Soc. Lond. 19(1)(9-11):73. (R)

1921 Tessaratoma (sic) hornimani Lehmann, Arch. Naturges. Berlin Abt. 87A(6):28. (cf. Tessaratoma aethiops)

1982a Tessaratoma (sic) hornimani (sic) Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Cameroon, Congo, Zaire (Ruwendzori)

Tessaratoma indica Breddin, 1909

- 1909 Tessaratoma indica Breddin, Ann. Soc. Ent. Belg. 53:282. (Diagnosis)
 1912 Tessaratoma indica Breddin, Arch. Naturges. Berlin. 78A(6):80-81. (as n. sp.)
 1918 Tessaratoma indica Distant, Faun. Brit. India Rh. 7:147. (Ts)
 1945 Tessaratoma indica Blöte, Zool. Meded. 25:293.
 1971 Tessaratoma indica Gaedike, Beitr. Ent. 21(1-2):88. (T)

Distribution: Sri Lanka.

Tessaratoma indicta Distant, 1890

- 1890b Tessaratoma indicta Distant, Proc. Zool. Soc. Lond. 1890(3):477.
 1892 Tessaratoma indicta Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)
 1893 Tessaratoma indicta Lethierry & Severin, Cat. Gen. Hem. 1:227.
 1894 Tessaratoma indicta Haglund, Öfv. Vet. Akad. Förh. 51(8):406. (Dn, R)
 1901 Tessaratoma indicta Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1904a Tessaratoma indicta Schouteden, Mem. Soc. Espag. Hist. Nat. 1:160. (R)
 1905 Tessaratoma indicta Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 228, 275, figs. 89-91. (K, S, D, I)
 1909 Tessaratoma indicta Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68. (R)
 1909 Tessaratoma indicta Kirkaldy, Cat. Hem. 1:350. (S)
 1929 Tessaratoma indicta Schouteden, Rev. Zool. Bot. Afr. 17(1):64. (R)
 1934 Tessaratoma indicta Mayné & Ghesquiere, Ann. Gembloux 40(1):12. (R, H)

Distribution: Cameroon, Central Africa, Zaire.

Tessaratoma javanica (Thunberg, 1783)

- 1783 Cimex javanicus Thunberg, Nov. Ins. Sp. 2:45
 1790 Cimex javanicus Gmelin, Syst. Nat. ed. 13, 1(4):2158. (Dn)
 1796 Acanthis papillosa Lichtenstein, Cat. :111. (sec. unpublished work of W. R. Dolling)
 1834 Tessaratoma (sic) javanica Burmeister, Silb. Rev.

- Ent. 2:26, fig. 2. (antenna)
- 1835 *Tessaratomia* (sic) *javana* Burmeister, Handb. Ent. 2:350. (syn. by Amyot & Serville, 1843)
- 1837a *Tessaratomia* (sic) *proxima* Westwood, Cat. Hope 1:27. (syn. by Stal, 1870, disputed)
- 1840 *Tessaratomia* (sic) *papillosa*: Blanchard, Hist. Nat. Ins. 3:142, pl. 6 fig. 2. (misdet. sec. Amyot & Serville, 1843; S, D)
- 1843 *Tessaratomia* (sic) *javanica*: Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 165. (S, D)
- 1851 *Tessaratomia papillosa*: Herrich-Schäffer, Wanz. Ins. 9:309 (cf. *T. papillosa*)
- 1851 *Tessaratomia papillosa*: Dallas, List. Hem. 1:340-341 (misdet?)
- 1859 *Tessaratomia proxima*: Dohrn, Cat. Hem. 21 (L)
- 1863 *Tessaratomia angularis* Dohrn, Stett. Ent. Ztg. 24:349-350. (syn. by Vollenhoven, 1868)
- 1868 *Tessaratomia* (sic) *javanica*: Vollenhoven, Faune Ent. Indo-Néerl. 3:25-26, pl. 3 fig. 4b. (D, R; plate legend misspelled *javana*)
- 1868 *Tessaratomia* (sic) *angularis*: Walker, Cat. Het. 3:462. (L)
- 1868 *Tessaratomia* (sic) *javanica*: Walker, Cat. Het. 3:462. (S, R)
- 1868 *Tessaratomia* (sic) *proxima*: Walker, Cat. Het. 3:462. (L)
- 1868 *Tessaratomia* (sic) *striata* Walker, Cat. Het. 3:463. (syn. by Distant, 1902; syn. with *T. papillosa* by Stichel, 1962)
- 1868 *Tessaratomia* (sic) *furcifera* Walker, Cat. Het. 3:463-464. (syn. by Distant, 1902; syn. with *T. papillosa* by Stichel, 1962)
- 1868 *Tessaratomia* (sic) *timorensis* Walker, Cat. Het. 3:464 (preoccupied Vollenhoven, 1868; syn. by Distant, 1902)
- 1868 *Tessaratomia* (sic) *clara* Walker, Cat. Het. 3:464-465 (syn. by Distant, 1902; syn. with *T. papillosa* by Stichel, 1962)
- 1870 *Tessaratomia javanica*: Stal, Sv. Vet. Akad. Handl. 9(1):67. (S, R)
- 1888 *Tessaratomia* (sic) *javanica*: Lethierry, Ann. Mus. Civ. Storia Nat. Genova (2)6(26):461 (R)
- 1889 *Tessaratomia javanica*: Atkinson, J. Asiatic Soc. Bengal 58(pt. 2):55-56. (S, D, part)
- 1889 *Tessaratomia furcifera*: Atkinson, J. Asiatic Soc. Bengal 58(pt. 2):57. (quotes original D)
- 1892 *Tessaratomia papillosum* var. *clara*: Kirby, Linn. J. Zool. 24:87 (as syn. of *Tessaratomia papillosa*)
- 1893 *Tessaratomia javanica*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
- 1893 *Tessaratomia furcifera*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (L)
- 1893 *Tessaratomia striata*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)
- 1900 *Tessaratomia papillosa*: Distant, Ann. Mag. Nat. Hist. (7)6:60, 63 (syn. only sec. Distant 1902)
- 1900 *Tessaratomia javanica*: Horváth, Zoolog. Forschungsreisen 5:633. (S, R)
- 1901a *Tessaratomia javanica*: Distant, Trans. Ent. Soc. Lond. 1901(1):103 (R)
- 1902 *Tessaratomia javanica*: Distant, Fauna Brit. India. Rh. 1:259. (S, D, R)
- 1903a *Tessaratomia javanica*: Distant, Fasc. Malay. Zool. 1(2):236-237. (S, R)
- 1905a *Tessaratomia javanica*: Breddin, Mitt. Nat. Mus. Hamb. 22:115. (R)
- 1909 *Tessaratomia javanica*: Maxwell-Lefroy, Indian Ins. Life: 677, fig. 438 pl. 74 fig. 8 (Dn i. stridulation)
- 1909 *Tessaratomia javanica*: Kirkaldy, Cat. Hem. 1:350. (S)
- 1917 *Tessaratomia javanica*: Seidlecki, Bull. Acad. Sci. Cracovie 1917(B):232-238, figs. 1, 2a, 2b (l. cf. *T. papillosa*)
- 1921 *Tessaratomia javanica*: Distant, Entomologist 54:(698)164 (R)
- 1923 *Tessaratomia javanica*: Lehmann, Zool. Anz. 57(7/8):180. (R)
- 1935 *Tessaratomia javanica*: Glover, Ind. Lac. Res. Inst. Ann. Rpt. 1934-1935. 15. (H)
- 1935 *Tessaratomia javanica*: Hoffmann, Lingnan Univ. Sci. Bull. 7:130, 177. (S, R)
- 1938 *Tessaratomia javanica*: Sen, Rpt. Ind. Lac. Res. Inst. Namhum. 38. (H)
- 1945 *Tessaratomia furcifera*: Blöte, Zool. Meded. 25:292, fig. 3a. (Dn, R)
- 1945 *Tessaratomia javanica*: Blöte, Zool. Meded. 25:293, fig. 3b. (Dn, R)
- 1945 *Tessaratomia proxima*: Blöte, Zool. Meded. 25:292, 295, fig. 3c. (Dn, R)
- 1945 *Tessaratomia striata*: Blöte, Zool. Meded. 25:292, 295, fig. 3d. (Dn, R)
- 1948 *Tessaratomia furcifera*: Hoffmann, Lingnan Sci. J. 22(1-4):29. (S, R)
- 1948 *Tessaratomia javanica*: Hoffmann, Lingnan Sci. J. 22(1-4):29. (S, R)
- 1950 *Tessaratomia javanica*: Kalshoven, Plag. Cult. Indonesie. 1:204, ppl. 4 fig. k. (H, I)
- 1955 *Tessaratomia javanica*: Mehra & Kapur, Indian J. Ent. 17(1):76-88. (B)
- 1957 *Tessaratomia furcifera*: Zia, Acta Ent. Sin. 7:426, 428-429, fig. 3b. (K, S, D, R)
- 1958 *Tessaratomia javanica*: Mehra & Purakayastha, Indian J. Ent. 19(3):214-216. (outbreak)
- 1963 *Tessaratomia javanica*: Bose & Sinha, Indian J. Ent. 25:269, 270. (scent gland Ph)
- 1966 *Tessaratomia javanica*: Mehra, Indian J. Ent. 28(2):241-249. (P)
- 1966 *Tessaratomia javanica*: Bose & Sen, J. Zool. Soc. India 18(1-2):94-103. (salivary apparatus)
- 1968 *Tessaratomia javanica*: Cobben, Evol. Trends Het. Eggs: 112, 114. (E)
- 1973 *Tessaratomia javanica*: Cheema et al. Comm. Inst. Biol. Contr. Tech. Bull. 16:37. (E, P)
- 1978 *Tessaratomia javanica*: Reddy et al., Entomon. 3(1):25-29. (C)
- 1979 *Tessaratomia javanica*: Janasah et al., Indian J. Exp. Biol. 17:1233-1235. (sgf)
- 1980 *Tessaratomia javanica*: Devri et al., J. Anim. Morph. Physiol. 27(1-2):290-294. (wing venation)
- 1980 *Tessaratomia javanica*: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
- 1981 *Tessaratomia javanica*: Hinton, Biol. Ins. Eggs 1:594. (E)
- 1981 *Tessaratomia javanica*: Hili, Agric. Ins. Pests Trop. 591. (H)
- 1982 *Tessaratomia javanica*: Nuamah, Insect Sci. Application 3(1):15, 25. (C)
- 1983 *Tessaratomia javanica*: Kalshoven, Pest. Crops Indonesia 94, pl. C fig. k. (H)
- 1987 *Tessaratomia javanica*: Schaefer & Ahmad, Phytophaga 1:27. (H)
- Distribution:** Borneo, Burma, China (Yunnan), India (Assam), Indo-China, Java, Laos, Lesser Sunda Is. (Adonara, Bali, Flores I., Lombok I., Timor I.), Malay Peninsula, Philippines, Sri Lanka, Sumatra, Thailand, Vietnam

Tessaratoma javanica nigripes Dallas, 1851 — see Tessaratoma kina

Tessaratoma (sic) javanica stictica Vollenhoven, 1868 — see Tessaratoma conspersa

Tessaratoma (sic) javanica timorensis Vollenhoven, 1868 — see Tessaratoma timorensis

Tessaratoma kina Distant, 1909.

1868 Tessaratoma (sic) javanica var. nigripes: Vollenhoven, Faune Ent. Indo-Neerl. 3:26. (misdet. sec. Breddin, 1912 & Blöte 1945)

1909 Tessaratoma kina Distant, Rec. Indian Mus. 3(2): 164-165, pl. 10 fig. 11, 11a, 11b.

1912 Tessaratoma lauta Breddin, Arch. Naturges. Berlin 78A(6):81. (syn. by Blöte 1945)

1945 Tessaratoma lauta: Blöte, Zool. Meded. 25:294. (S. R.)

1971 Tessaratoma lauta: Gaedike, Beitr. Ent. 21(1-2):90. (T)

Distribution: Borneo.

Tessaratoma kinta Distant, 1909.

1909 Tessaratoma kinta Distant, Rec. Indian Mus. 3(2): 163-164, pl. 10 fig. 8, 8a, 8b.

Distribution: Malaysia (Perak).

Tessaratoma lauta Breddin, 1912 — Tessaratoma kina

Tessaratoma longicornis Dohrn, 1863

1863 Tessaratoma longicornis Dohrn, Stett. Ent. Ztg. 24:349.

1868 Tessaratoma longicornis: Walker, Cat. Het. 3:462. (L)

1870 Tessaratoma longicornis: Stål, Sv. Vet. Akad. Handl. 9(1):66. (R)

1871 Tessaratoma longicornis: Stål, Öfv. Vet. Akad. Förh. 27(7):642. (R)

1893 Tessaratoma longicornis: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)

1909 Tessaratoma longicornis: Kirkaldy, Cat. Hem. 1:350. (S)

1923 Tessaratoma longicornis: Lehmann, Zool. Anz. 57(7/8):180. (R)

1945 Tessaratoma longicornis: Blöte, Zool. Meded. 25:294. (R)

Distribution: Philippines

Tessaratoma luctuosa (Stål, 1863) — see Hypencha luctuosa

Tessaratoma malaya Stål, 1870

1870 Tessaratoma malaya Stål, Sv. Vet. Akad. Handl. 9(1):67.

1873 Tessaratoma (sic) malaya: Walker, Cat. Het. Suppl. 26. (L)

1879 Tessaratoma malaya: Distant, Ann. Mag. Nat. Hist. (5)3:45. (misdet. see T. quadrata)

1889 Tessaratoma malaya: Atkinson, J. Asiatic Soc. Bengal 58(pt 2):54-55. (misdet. see Tessaratoma quadrata)

1890 Tessaratoma (sic) malaya: Sharp, Trans. Ent. Soc. Lond. 1890(3):402, pl. 12 fig. 1. (M)

1892 Tessaratoma malaya: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)

1893 Tessaratoma malaya: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)

1909 Tessaratoma malaya: Kirkaldy, Cat. Hem. 1:350. (S)

Distribution: India, Ligor, Moluccas.

Tessaratoma miscella Montandon, 1894

1894 Tessaratoma miscella Montandon, Ann. Soc. Ent. Belg. 38(1893):634-635.

1905 Tessaratoma miscella: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 229-230, figs. 92-93.

1908 Tessaratoma miscella: Bergroth, Mem. Soc. Ent. Belg. 15:169. (L)

1909 Tessaratoma miscella: Kirkaldy, Cat. Hem. 1:250. (S)

Distribution: Congo, Gabon.

Tessaratoma miscella viridans Montandon, 1894

1894 Tessaratoma miscella var. viridans Montandon, Ann. Soc. Ent. Belg. 38(1893):635-636.

1905 Tessaratoma miscella var. viridans: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 230, pl. 5 fig. 4.

1909 Tessaratoma miscella var. viridans: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68

1909 Tessaratoma miscella var. viridans: Kirkaldy, Cat. Hem. 1:250. (S)

1969 Tessaratoma miscella var. viridans: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(32):14. (T)

Distribution: Congo, Gabon.

Tessaratoma nemorivaga Distant, 1890

1890a Tessaratoma nemorivaga Distant, Proc. Zool. Soc. Lond. 1890(3):476-477.

1892 Tessaratoma nemorivaga: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)

1893 Tessaratoma nemorivaga: Lethierry & Severin, Cat. Gen. Hem. 1:227. (L)

1905 Tessaratoma nemorivaga: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 224-225, 275, figs. 79-81. (K, S, D, R, I)

1909 Tessaratoma nemorivaga: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 69 (R)

1909 Tessaratoma nemorivaga: Kirkaldy, Cat. Hem. 1:250. (S)

1921 Tessaratomia (sic) nemorivaga: Lehmann, Arch. Naturges. Berlin Abt. 87A(6):39. (R)

1952a Tessaratomia nemorivaga: Villiers, Init. Afr. 9:83. (Dn, R)

Distribution: Cameroon, Congo, Zaire.

Tessaratoma niamensis Schouteden, 1904 — see Tessaratomia alzei

Tessaratoma nigripes Dallas, 1851

1851 Tessaratoma nigripes Dallas, List. Hem. 1:341.

1859 Tessaratoma nigripes: Dohrn, Cat. Hem. 21. (L)

1862 Tessaretoma (sic) nigripes: Stål, Öfv. Vet. Akad. Förh. 19(9):497 (as syn. of Hypencha apicales Amyot & Serville)

1868 Tessaretoma (sic) javanica var. nigripes: Vollenhoven, Faune Ent. Indo-Neerl. 3:26. (misdet. see Tessaratomia kina)

1868 Tessaratomia nigripes: Walker, Cat. Het. 3:461. (R)

1870 Tessaratomia nigripes: Stål, Sv. Vet. Akad. Handl. 9(1):67. (L)

1871 Tessaratomia nigripes: Stål, Öfv. Vet. Akad. Förh. 27(7):642. (R)

1889 Tessaratomia nigripes: Atkinson, J. Asiatic Soc. Bengal 58(pt 2):54. (S, D)

1890 Tessaretoma (sic) nigripes: Sharp, Trans. Ent. Soc. Lond. 1890(3):401-402, pl. 12 fig. 2. (M)

1893 Tessaratomia nigripes: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)

1902 Tessaratomia nigripes: Distant, Fauna Brit. India, Rh. 1: 257-258. (S, D, R)

1909 Tessaratomia nigripes: Kirkaldy, Cat. Hem. 1:350 (syn)

- 1910 *Tessaratoma nigripes*: Stebbing, Ind. For. Men. 1:21. (H)
- 1923 *Tessaratoma nigripes*: Lehmann, Zool. Anz. 57(7/8):108. (R)
- 1985 *Tessaratoma nigripes*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:24, fig. 58. (Dn, R)
- Distribution:** Borneo, E. Indies, India (Sikkim), Java, Malay Peninsula, Philippines, S.E. Asia, Sumatra.
- Tessaratoma nigroscutellata* Distant, 1921
- 1921 *Tessaratoma nigroscutellata* Distant, Entomol. 54:(698)165.
- 1932b *Tessaratoma nigroscutellata*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
- 1935 *Tessaratoma nigroscutellata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:130. (L)
- 1935 *Tessaratoma nigroscutellata*: Tang, Cat. Ins. Sin. 2:363. (S)
- 1945 *Tessaratoma nigroscutellata*: Blöte, Zool. Meded. 25:294. (R)
- 1948 *Tessaratoma nigroscutellata*: Hoffmann, Lingnan Sci. J. 22(1-4):29. (R)
- Distribution:** Vietnam.
- Tessaratoma oblonga* Blöte, 1945
- 1945 *Tessaratoma oblonga* Blöte, Zool. Meded. 25:294, fig. 3a.
- Distribution:** Borneo.
- Tessaratoma ophthalmica* (Stål, 1863) — see *Hypencha ophthalmica*
- Tessaratoma* (sic) *opposita* Walker, 1868 — see *Hypencha opposita*
- Tessaratoma ossacruenta* Gray, 1832 — see *Tessaratoma papillosa*
- Tessaratoma ostracioplera* Montrouzier, 1845 — see *Oncomeris ostracioplera*
- Tessaratoma papillosa* (Drury, 1770)
- 1770 *Cimex papillosus* Drury, Ill. Nat. Hist. 1:96-97, pl. 43 fig. 2. (species name in index)
- 1783 *Cimex chinensis* Thunberg, Nov. Ins. Sp. 2:45, pl. 2 fig. 59 (syn. by Wolff, 1880)
- 1790 *Cimex sinopsis* (sic) Gmelin, Syst. Nat. ed. 13, 1(4):2158. (Dn)
- 1794 *Cimex papillosus*: Fabricius, Ent. Syst. 4:106-107. (misdet. see *Piezosternum calidum*)
- 1800 *Cimex papillosus*: Wolff, Icon. Cim. 1:12, pl. 2 fig. 12 (S, D)
- 1800 *Cimex papillosus*: Donovan, Nat. Hist. Ins. India: 14 (fig.), 21. (Dn, I)
- 1803 *Edessa papillosus*: Fabricius, Syst. Rh. 1:150 (misdet. see *Tessaratoma afzelii*)
- 1825 *Tessaratoma sonnerati* Lepelletier & Serville, Eric Meth. 10:590-591. (syn. with *Cimex chinensis* Thunberg, 1783, by Mayr, 1966)
- 1831 *Tessaratoma* (sic) *sonnerati*: Guérin-Ménéville, Voy. Coq. Ins. 2(2): pl. 65 fig. 4.
- 1831 *Tessaratoma* (sic) *sonnerati*: Guérin-Ménéville, Icon. Règne Animal. vol. 2, pl. 55 fig. 4. [date tentative]
- 1831 *Tessaratoma* (sic) *chinensis*: Guérin-Ménéville, Icon. Règne Animal. Insectes. 345, pl. 55 fig. 4. [date uncertain]
- 1832 *Tessaratoma ossacruenta* Gray, Griffith's Anim. Kingd. 15:239.
- 1833 *Tessaratoma chinensis*: Laporte, Mag. Zool. (Guérin), 2:59-60. (Dn)
- 1834 *Tessaratoma* (sic) *sonnerati*: Burmeister, Nov. Act. Leop. Carol. 16 Suppl.:293. (R)
- 1835 *Tessaratoma* (sic) *javana*: Burmeister, Handb. Ent. 2:350. (syn. by Dallas, 1851, disputed, see *Tessaratoma javanica*)
- 1835 *Tessaratoma* (sic) *papillosa*: Burmeister, Handb. Ent. 2:350-351. (misdet. see *Tessaratoma afzelii*)
- 1835 *Tessaratoma papillosa*: Hahn, Wanz. Ins. 2:123-124, fig. 204. (S, Dn)
- 1835 *Tessaratoma papillosa*: Brullé, Hist. Nat. Ins. 9:395, pl. 30 fig. 5. (Dn)
- 1837 *Tessaratoma papillosa*: Spinola, Essai: 341. (L)
- 1840 *Tessaratoma* (sic) *papillosa*: Blanchard, Hist. Nat. Ins. 3:142, pl. 6 fig. 2. (misdet. see *Tessaratoma javanica*)
- 1840 *Tessaratoma* (sic) *sonnerati*: Blanchard, Hist. Nat. Ins. 3:142. (S, D)
- 1842 *Tessaratoma papillosa*: Westwood, Donovan's Ins. India. 24, pl. 14 fig. 2.
- 1843 *Tessaratoma* (sic) *papillosa*: Amyot & Serville, Hist. Nat. Ins. Hem.: 165-166. (S, D)
- 1851 *Tessaratoma* (sic) *papillosa*: Herrich-Schäffer, Wanz. Ins. 9:309. (cf. *T. javanica*)
- 1851 *Tessaratoma chinensis*: Dallas, List. Hem. 1:340. (S, R)
- 1851 *Tessaratoma papillosa*: Dallas, List. Hem. 1:340-341. (misdet?)
- 1859 *Tessaratoma chinensis*: Dohrn, Cat. Hem.: 21. (S)
- 1859 *Tessaratoma papillosa*: Dohrn, Cat. Hem.: 21. (part)
- 1862 *Tessaratoma* (sic) *papillosa*: Eilenrieder, Nat. Tijdschr. Ned. India 24:169-170, pl. 6 figs. 2, 3a, 5.
- 1866 *Tessaratoma* (sic) *chinensis*: Mayr, Reise Novara Zool. 2(1):74. (S, R)
- 1868 *Tessaratoma* (sic) *chinensis*: Vollenhoven, Faune Ent. Indo-Neerl. 3:pl. 3 fig. 4a (fig. only)
- 1868 *Tessaratoma* (sic) *chinensis*: Walker, Cat. Het. 3:461 (R)
- 1868 *Tessaratoma* (sic) *papillosa*: Walker, Cat. Het. 3:461 (R)
- 1870 *Tessaratoma papillosa*: Stål, Sv. Vet. Akad. Handl. 9(1):67-68. (S, R)
- 1889 *Tessaratoma papillosa*: Atkinson, J. Asiatic Soc. Bengal 58(pt. 2):56-57. (S, D; part see also *Tessaratoma javanica*)
- 1890 *Tessaratoma* (sic) *papillosa*: Sharp, Trans. Ent. Soc. Lond. 1890(3):402, pl. 12 fig. 3. (M)
- 1892 *Tessaratoma* (sic) *papillosa*: Kirby, Linn. J. Zool. 24:87. (misdet. of *Tessaratoma javanica*?)
- 1893 *Tessaratoma papillosa*: Lethierry & Serville, Cat. Gen. Hem. 1:227. (S)
- 1900 *Tessaratoma papillosa*: Distant, Ann. Mag. Nat. Hist. (7):60, 63 (see *Tessaratoma javanica*)
- 1901c *Tessaratoma papillosa*: Distant, Proc. Zool. Soc. Lond. 1900(4):817, 823. (syn. *Tessaratoma proxima* Westwood, 1837, disputing Stål, 1870; see *Tessaratoma javanica*)
- 1901 *Tessaratoma* (sic) *papillosa*: Kirkaldy, Entomol. 34(453):52. (R, behavior)
- 1902 *Tessaratoma papillosa*: Distant, Fauna Brit. India, Rh. 1: 259-260. (S, Dn, R)
- 1907 *Tessaratoma papillosa*: Kershaw, Trans. Ent. Soc. Lond. 1907:253-255, pl. 23. (B)
- 1907 *Tessaratoma papillosa*: Muir, Trans. Ent. Soc. Lond. 1907: 256-258. (M)
- 1909 *Tessaratoma papillosa*: Maxwell-Lefroy, Indian Ins. Life: 678, fig. 441. (I, fig. only)
- 1909 *Tessaratoma papillosa*: Kirkaldy, Cat. Hem. 1:350-

351. (S)
- 1910 *Tessaratomia papillosa*: Kirkaldy, Ann. Soc. Ent. Belg. 54(4):111. (R)
- 1911 *Tessaratomia papillosa*: Bugnion & Popoff, Archs. Zool. Exp. Gen. (5)7(2):649, 651, 653, 654, 656, 668, figs. 15-18. (M)
- 1917 *Tessaratomia papillosa*: Siedlecki, Bull. Acad. Sci. Cracovie 1917(B):232-238, figs. 3, 4a, 4b. (I, cf. *I. javanica*)
- 1919 *Tessaratomia chinensis*: Hart, Ill. Nat. Hist. Surv. Bull. 13:pl. 16 fig. 2. (fig. only)
- 1925 *Tessaratomia papillosa*: Falkenstein, Lingnan Agric. Rev. 3(1):64-65. (B, H, R)
- 1929 *Tessaratomia papillosa*: Hoffmann, Proc. 3rd. Pan-Pac. Sci. Congr. Tokyo 2:2034. (squirts scent fluid)
- 1930 *Tessaratomia papillosa*: Weber, Biol. Hem. 75, 256. (stridulation, sgf)
- 1931 *Tessaratomia papillosa*: Falkenstein, Lingnan Sci. J. 10:29-82. pls. 11, 12. (B, E, I, P, R)
- 1931 *Tessaratomia papillosa*: Shang [Chang], Lingnan Sci. J. 10(4):399-411. (D)
- 1931 *Tessaratomia papillosa*: Hoffmann, Ins. Pst. Sur. Bull. 11(3):144. (L)
- 1932 *Tessaratomia papillosa*: Hoffmann, Arch. Zool. Ital. 16(3-4):1026-1027. (H, B)
- 1932 *Tessaratomia papillosa*: Wu, Mar. Biol. Assoc. China, 1st. Ann. Rep. 82. (R)
- 1932a *Tessaratomia papillosa*: Hoffmann, Lingnan Sci. J. 11(1):141. (R)
- 1932b *Tessaratomia papillosa*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
- 1933 *Tessaratomia papillosa*: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51. (R)
- 1933 *Tessaratomia papillosa*: Wu, Lingnan Sci. J. 12 Suppl. 224. (R)
- 1934 *Tessaratomia papillosa*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52-54, fig. 3. (K, D)
- 1935 *Tessaratomia papillosa*: Hoffmann, Lingnan Univ. Sci. Bull. 7:130-131, 177. (S, R)
- 1935 *Tessaratomia papillosa*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):128-129, pl. 5 figs. 78, 79. (S, D, K)
- 1935 *Tessaratomia papillosa*: Tang, Cat. Ins. Sin. 2:363-364 (S, R)
- 1935 *Tessaratomia papillosa*: Cheo, Bull. Nat. Hist. Peking 10(1):31. (H, R)
- 1945 *Tessaratomia papillosa*: Blöte, Zool. Meded. 25:294-295. (R)
- 1948 *Tessaratomia papillosa*: Hoffmann, Lingnan Sci. J. 22(1-4):30-31. (S, R, H)
- 1951 *Tessaratomia papillosa*: Poisson, Traité Zool. 10(2):1793. (sgf)
- 1953 *Tessaratomia papillosa*: Dupuis, Cah. Nat. (Bull. Nat. Paris) (n.s.) 8(3-4):25. (stridulation)
- 1956 *Tessaratomia* (sic) *papillosa*: Stichel, Verz. Pal. Hem. Het. 4:204. (S)
- 1957 *Tessaratomia papillosa*: Zia, Acta Ent. Sin. 7:426, 427-429, fig. 3a, 6-8. (K, S, D, R)
- 1962 *Tessaratomia papillosa*: Yang, Econ. Ins. Fauna China 2:40-41, pl. 4 fig. 28.
- 1962 *Tessaratomia papillosa*: Hasegawa, Nature Life S.E. Asia 2:7, pl. 1 fig. 7. (S, R)
- 1964 *Tessaratomia* (sic) *papillosa*: Sienkiewicz, Cat. Montandon Coll.: 112. (R)
- 1974 *Tessaratomia papillosa*: Chang, Acta Ent. Sin. 17(3):356.
- 1977 *Tessaratomia papillosa*: Hsiao et al., Handb. Chinese Hem.-Het. 1:66, figs. 297, 312, pl. 7 fig. 109. (K)
- 1979 *Tessaratomia papillosa*: Staddon, Adv. Ins. Physiol. 14:368. (scent gland)
- 1980 *Tessaratomia papillosa*: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
- 1983a *Tessaratomia papillosa*: Hill, Agric. Ins. Pests Trop.:268-269, figs. (H, B, D)
- 1985 *Tessaratomia papillosa*: Zhang, Econ. Ins. China 31:48-49, fig. 112, pl. 1, fig. 2. 1-2 6. (D: plate figure mislabeled *I. quadrata*)
- 1987 *Tessaratomia papillosa*: Schaefer & Ahmad, Phytophaga 1:27. (H)
- 1988 *Tessaratomia papillosa*: Chen & Yang, J. Guizhou Agric. Coll. no. 1:90. (R)
- 1989 *Tessaratomia papillosa*: Hua, List Ins. Zhongshan Univ. 45. (L)
- 1990 *Tessaratomia papillosa*: Ren et al., Act. Ent. Sin. 33(2):191, pl. 3 fig. E. (egg-burster)
- 1991 *Tessaratomia papillosa*: Easton, Ent. News 102(2):107. (R, H)
- Distribution:** Australia, Borneo, Burma, China (Fujian, Guangdong, Guangxi, Guizhou, Hainan I., Jiangxi, Kiangsi, Kweichow, Kwangtung, Manchuria, Sichuan, Yunnan), E. Indies, India (Assam), Indo-China, Indonesia, Japan, Java, Laos, Lesser Sunda Is. (Lombok I., Timor I.), Malaysia, Philippines, Sierra Leone, S.E. Asia, Sri Lanka, Sumatra, Thailand, Vietnam.
- Note: Stichel (1962) lists *Tessaratomia striata* Walker, 1868; *I. furcifer* Walker, 1868; and *I. clara* Walker, 1868, in the synonymy of *I. papillosa* without explanation, thus disputing Distant (1902) who synonymized these names under *I. javanica*.
- Tessaratomia papillosa* *clara* Walker, 1868 — see *Tessaratomia javanica*
- Tessaratomia picea* Dallas, 1851 — see *Hyperba apicalis*
- Tessaratomia planicarinata* Breddin, 1912
- 1912 *Tessaratomia planicarinata* Breddin, Arch. Naturges. Berlin. 78A(6):79-80.
- 1945 *Tessaratomia planicarinata*: Blöte, Zool. Meded. 25:295. (R)
- 1971 *Tessaratomia planicarinata*: Gaedike, Beitr. Ent. 21(1-2):96. (T)
- Distribution:** Lesser Sunda Is. (Arondara, Flores I., Sumbawa I., Timor I., Wetar I.)
- Tessaratomia* (sic) *proxima* Westwood, 1837 — see *Tessaratomia javanica*
- Tessaratomia quadrata* Distant, 1902
- 1879 *Tessaratomia malaya* Distant, Anni. Mag. Nat. Hist. (5)3:45. (R, misdet. sec. Distant, 1902)
- 1889 *Tessaratomia malaya*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):54-55. (misdet. sec. Distant, 1902: D)
- 1902 *Tessaratomia quadrata* Distant, Fauna Brit. India. Rh. 1: 258-259, fig. 164. (S)
- 1908 *Tessaratomia quadrata*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 *Tessaratomia quadrata*: Kirkaldy, Cat. Hem. 1:351. (S)
- 1921 *Tessaratomia quadrata*: Distant, Entomol. 54:(698)164. (R)
- 1935 *Tessaratomia quadrata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:131. (S, R)
- 1945 *Tessaratomia quadrata*: Blöte, Zool. Meded. 25:295. (R)
- 1948 *Tessaratomia quadrata*: Hoffmann, Lingnan Sci. J. 22(1-4):31. (S, R)

- 1957 *Tessaratoma quadrata*: Zia, Acta Ent. Sin. 7:426, 427, figs. 3C, 4, 5. (K, D, R)
 1962 *Tessaratoma quadrata*: Yang, Econ. Ins. Fauna China 2:40, 41-42.
 1977 *Tessaratoma quadrata*: Hsiao et al., Handb. Chinese Hem.-Het. 1:65, figs. 296, 315, pl. 7 fig. 108. (K)
 1980 *Tessaratoma quadrata*: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
 1985 *Tessaratoma quadrata*: Zhang, Econ. Ins. China 31:48, pl. 46 fig. 154. (D; fig. 113 not this species; fig. 154 on pl. 46 mislabeled *T. quadrata*)
 1988 *Tessaratoma quadrata*: Chen & Yang, J. Guizhou Agric. Coll. no. 1:90. (R)
 1989 *Tessaratoma quadrata*: Hua, List Ins. Zhongshan Univ. 45.

Distribution: China (Guangxi, Ghizhou, Guangdong, Sichuan, Yunnan), India (Assam, Sikkim), Indo-China, Nepal, Vietnam.

Tessaratoma reriki (Ellenreider, 1862) — see *Hypencha apicalis*

Tessaratoma robustus Lepeletier & Serville, 1828 — see *Eusthenes robustus*

Tessaratoma rubida Breddin, 1901

- 1901 *Tessaratoma rubida* Breddin, Abh. Naturf. Ges. Halle 24:14, 61-62.
 1908 *Tessaratoma rubida*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Tessaratoma rubida*: Kirkaldy, Cat. Hem. 1:351. (L)
 1945 *Tessaratoma conspersa* var. *rubida*: Blöte, Zool. Meded. 25:292. (R)
 1971 *Tessaratoma rubida*: Gaedike, Beitr. Ent. 21(1-2):98. (T)

Distribution: Sulawesi (Celebes)

Tessaratoma scutellaris Herrich-Schäffer, 1838 — see *Eusthenes scutellaris*

Tessaratoma (sic) *semicuprea* Walker, 1868 — see *Hypencha apicalis*

Tessaratoma sonneratii Lepelletier & Serville, 1828 — see *Tessaratoma papillosa*

Tessaratoma spinipes Bergroth, 1906

- 1906 *Tessaratoma spinipes* Bergroth, Ann. Soc. Ent. Belg. 50:196-197.
 1908 *Tessaratoma spinipes*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Tessaratoma spinipes*: Kirkaldy, Cat. Hem. 1:351. (L)
Distribution: E. Africa, Tanzania (Pemba I.)

Tessaratoma sbetica Vollenhoven, 1868 — see *Tessaratoma conspersa*

Tessaratoma striata Walker, 1868 — see *Tessaratoma javanica*

Tessaratoma (sic) *taurus* Westwood, 1837 — see *Embolosterna taurus*

Tessaratoma timorensis Vollenhoven, 1868

- 1868 *Tessaratoma* (sic) *javanica* var. *timorensis* Vollenhoven, Faune Ent. Indo-Néerl. 3:26, pl. 3 fig. 5
 1893 *Tessaratoma timorensis*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (part)
 1907a *Tessaratoma timorensis*: Schouteden, Notes Leyden Mus. 30:44. (Ts)

1945 *Tessaratoma timorensis*: Blöte, Zool. Meded. 25:295. (as Nn for *Tessaratoma javanica* var. *timorensis* Vollenhoven, 1868)

Distribution: Lesser Sunda Is. (Adonara, Timor).

Tessaratoma timorensis Walker, 1868 — *Tessaratoma javanica*

Tessaratoma usambarica Breddin, 1903 — *Tessaratoma afzelii*

Tessaratoma* [misspelling] — see *Tessaratoma

INCERTAE SEDIS

NOTOPOMINI

Horváth, 1900b.

Type genus: *Notopomus* Montandon, 1894a

1900a *Notopomaria* Horváth, Term. Füzet. 23:340. (K)

1937 *Notopomini*: Beier, Handb. Zool. 4(2) Ins. 2:2186. (P)

1955 *Notopomini*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (L)

***Notopomus* Montandon, 1894**

Type species: *Notopomus isidorei* Montandon, 1894, by monotypy

1894 *Notopomus* Montandon, Ann. Soc. Ent. Belg. 38(1893):641-642.

1908 *Notopomus*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

1909 *Notopomus*: Kirkaldy, Cat. Hem. 1:358. (L)

1969 *Notopomus*: Kumar, Ann. Ent. Soc. Am. 62(4):693-694. (Ge)

***Notopomus isidorei* Montandon, 1894**

1894 *Notopomus isidorei* Montandon, Ann. Soc. Ent. Belg. 38(1893):642-643.

1908 *Notopomus isidorei*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

1909 *Notopomus isidorei*: Kirkaldy, Cat. Hem. 1:358. (L)

Distribution: Malay Peninsula (Pinang I.)

FOSSIL

Tessaratomoides maximus Jordan, 1967

1967 *Tessaratomoides maximus* Jordan, Ber. Naturh. Ges. 111:83, pl. 2 fig. 9

Distribution: Eocene, Germany.

Note: *Tessaratomoides* does not meet the criteria for availability, having been published without a description, diagnosis or indication

SYNONYMS IN GENERA OUTSIDE TESSARATOMIDAE

Acanthia papillosa (Drury, 1770) — see *Tessaratoma javanica* [TESSARATOMARIA]

Aelia amethystina (Fabricius, 1803) — see *Pycanum rubens* [EUSTHENARIA]

Cimex amethystinus Weber, 1801 — see *Pycanum rubens* [EUSTHENARIA]

Cimex calidus Fabricius, 1787 — see *Piezosternum calidum* [ONCOMERINAE]

Cimex chinensis Thunberg, 1783 — see *Tessaratomya papillosa* [TESSARATOMARIA]

Cimex gazella Fabricius, 1794 — see *Piezosternum subulatum* [ONCOMERINAE]

Cimex javanicus Thunberg, 1783 — see *Tessaratomya javanica* [TESSARATOMARIA]

Cimex merianae Fabricius, 1775 — see *Plisthenes merianae* [ONCOMERINAE]

Cimex meriani Fabricius, 1775 — see *Plisthenes merianae* [ONCOMERINAE]

Cimex papillosus Drury, 1770 — see *Tessaratomya papillosa* [TESSARATOMARIA]

Cimex rubens Fabricius, 1794 — see *Pycnum rubens* [EUSTHENARIA]

Cimex subulatus Thunberg, 1783 — see *Piezosternum subulatum* [ONCOMERINAE]

Cimex vacca Fabricius, 1794 — see *Piezosternum subulatum* [ONCOMERINAE]

Diridior subgenus *Eusthenes* Laporte, 1833 — see *Eusthenes* [EUSTHENARIA]

Diridior (*Eusthenes*) *robustus* Lepeletier & Serville, 1826 — see *Eusthenes robustus* [EUSTHENARIA]

Edessa amethystinus (Weber, 1801) — see *Pycnum rubens* [EUSTHENARIA]

Edessa merianae (Fabricius, 1775) — see *Plisthenes merianae* [ONCOMERINAE]

Edessa papillosa (Drury, 1770) — see *Tessaratomya alzei* [TESSARATOMARIA]

Edessa rubens (Fabricius, 1794) — see *Pycnum rubens* [EUSTHENARIA]

Edessa vacca (Fabricius, 1794) — see *Piezosternum subulatum* [ONCOMERINAE]

Edessa vicina Westwood, 1837 — see *Piezosternum calidum* [ONCOMERINAE]

Lygaeus merianae (Fabricius, 1775) — see *Plisthenes merianae* [ONCOMERINAE]

Pentatoma platygaster Westwood, 1837 — see *Pentatoma platygaster* [EUSTHENARIA]

Pentatoma tenebrioides Palisot de Beauvois, 1806 — see *Piezosternum calidum* [ONCOMERINAE]

Pentatoma vacca (Fabricius, 1794) — see *Piezosternum subulatum* [ONCOMERINAE]

Rhaphigaster longitudinalis Westwood, 1837 — see *Erga longitudinalis* [ONCOMERINAE]

TAXA REMOVED FROM TESSARATOMIDAE

Delocephalus Distant, 1881 [transferred to PENTATOMIDAE by Schouteden, 1909, concurrence by Kumar, 1969b]

Eumenotes Westwood, 1844 [transferred to DINODORIDAE by Leston, 1955, concurrence by Durai, 1987]

Muscanda Walker, 1868 [transferred to PENTATOMIDAE by Kumar & Ghauri 1970]

Vitruvius Distant, 1901 [transferred to PENTATOMIDAE by Kumar & Ghauri 1970]

Xiengia Distant, 1921 [transferred to PENTATOMIDAE by Kumar & Ghauri 1970]

Piezosternum vividum (Stål, 1870) [erroneously transferred from *Pantochlora* Stål by Walker, 1873]

Tessaratomya obscura Lepeletier & Serville, 1826 [transferred to DINODORIDAE: *Cyclopelta obscura* by Dallas, 1851]

ABBREVIATIONS AND TITLES FOR SERIALS IN REFERENCES

Abh. Naturf. Ges. Halle = Abhandlungen der Naturforschenden Gesellschaft zu Halle.

Abh. Senckenb. Naturf. Ges. = Abhandlungen hrsg. von Senckenbergischen der Naturforschenden Gesellschaft, Frankfurt a. M.

Acta Ent. Bohemoslovaca = Acta Entomologica Bohemoslovaca, Prague.

Acta Ent. Sin. = Acta Entomologica Sinica, Beijing. (Peiping)

Acta Zool. Fenn. = Acta Zoologica Fennica, Helsinki.

Acta Zool. Lill. = Acta Zoologica Lilloana, Tucuman.

Adv. Ins. Physiol. = Advances in Insect Physiology, London.

Agric. Gaz. N.S.W. = Agricultural Gazette of New South Wales, Sydney.

Agric. Ins. Xizang = Agricultural Insects, Spiders, Plant Diseases and Weeds of Xizang

Am. Mus. Novit. = American Museum Novitates, New York

Ann. Ent. Soc. Am. = Annals of the Entomological Society of America, Washington.

Ann. Gembloux = Annales de l'Institut Agronomique et des Stations de Recherches de Gembloux.

Ann. Mag. Nat. Hist. = Annals and Magazine of Natural History, London.

Ann. Mus. Civ. Storia Nat. Genova = Annali del Museo Civico di Storia Naturale di Genova.

Ann. Mus. Congo Belge Zool. = Annales du Musée Royal du Congo Belge, Zoologie, Bruxelles, Tervuren.

Ann. Mus. Nat. Hung. = Annales Historico-Naturelles Muséi Nationalis Hungarici, Budapest.

Ann. Mus. Zool. St. Petersburg = Annuaire du Musée Zoologique de l'Académie Impériale des Sciences, St. Petersburg

Ann. Queensl. Mus. = Annals of the Queensland Museum, Brisbane.

Ann. Soc. Agric. Lyon = Annales de la Société d'Agriculture, Sciences et Industries de Lyon.

Ann. Soc. Ent. Belg. = Annales de la Société Entomologique de Belgique, Bruxelles.

Ann. Soc. Ent. Fr. = Annales de la Société Entomologique de France, Paris.

Ann. S. Afr. Mus. = Annals of the South African Museum.

- Cape Town.
 Ann. Transv. Mus. = Annals of the Transvaal Museum, Pretoria.
 Arch. Naturges. Berlin = Archiv für Naturgeschichte, Berlin.
 Arch. Zool. Ital. = Archivio Zoologico Italiano, Napoli, later Torino.
 Archs. Zool. Exp. Gen. = Archives de Zoologie Expérimentale et Générale, Paris.
 Ark. Zool. = Arkiv för Zoologie, Stockholm.
 Aust. J. Chem. = Australian Journal of Chemistry.
 Aust. J. Zool. = Australian Journal of Zoology, Melbourne.
 Beih. Jb. Hamb. Wiss. Anst. = Beiheft zum Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten, Hamburg. (until 1917, Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten)
 Ber. Naturh. Ges. = Bericht der Naturhistorischen Gesellschaft zu Hannover.
 Berl. Ent. Z. = Berliner Entomologische Zeitschrift, Berlin.
 Biol. Cent. Am. Rh. = Biologia Central-Americana, Rhynchota Heteroptera. Godman, F. D. and O. Salvin (eds.).
 Bol. Soc. Port. Cienc. Nat. = Boletim da Sociedade Portuguesa de Ciências Naturais, Lisbon.
 Boll. Soc. Ent. Ital. = Bollettino della Società Entomologica Italiana, Genova.
 Bull. Acad. Sci. Cracovie = Bulletin International de l'Académie des Sciences et des lettres de Cracovie, Kraków.
 Bull. Am. Mus. Nat. Hist. = Bulletin of the Museum of Natural History, New York.
 Bull. Brit. Mus. (N.H.) Ent. Ser. = Bulletin of the British Museum of Natural History, Entomology Series, London.
 Bull. Div. Ent. Pl. Path. Qd = Queensland Department of Agriculture and Stock, Division of Entomology and Plant Pathology.
 Bull. Fan. Mem. Inst. Biol. = Bulletin of the Fan Memorial Institute of Biology, Beijing. (Peiping).
 Bull. I.F.A.N. = Bulletin de l'Institut Français d'Afrique Noire, Dakar.
 Bull. Inst. R. Sci. Nat. Belg. = Bulletin de l'Institut Royal d'Histoire Naturelle de Belgique, Bruxelles.
 Bull. Mus. Paris = Bulletin du Muséum National d'Histoire Naturelle, Paris.
 Bull. Soc. Zool. Fr. = Bulletin de la Société Zoologique de France, Paris.
 Cah. Nat. (Bull. Nat. Paris) = Cahiers des Naturalistes (Bulletin des Naturalistes Parisiens), Paris.
 Can. Ent. = Canadian Entomologist, Ottawa.
 Comm. Inst. Biol. Contr. Tech. Bul. = Commonwealth Institute of Biological Control Technical Bulletin, Trinidad, W. I.
 Contr. Shanghai Inst. Ent. = Contributions of the Shanghai Institute of Entomology.
 Denkschr. Med. Naturw. Ges. Jena = Denkschriften der Medizinisch-Naturwissenschaftlichen Gesellschaft zu Jena.
 Dept. Agric. S.S. & F.M.S. Sci. Ser. = Department of Agriculture Straits Settlements and Federated Malayan States Science Series.
 Dt. Ent. Z. = Deutsche Entomologische Zeitschrift, Berlin.
 Ent. Am. = Entomologica Americana, New York.
 Ent. Arb. Mus. Gg. Frey = Entomologische Arbeiten aus dem Museum Georg Frey, München.
 Ent. Exp. & Appl. = Entomologia Experimentalis et Applicata, Amsterdam.
 Ent. Medd. = Entomologiske Meddelelser, Copenhagen.
 Ent. Mo. Mag. = Entomologists Monthly Magazine, London.
 Ent. Nachr. Berlin = Entomologisches Nachrichten, Berlin.
 Ent. News = Entomological News, Philadelphia.
 Ent. Soc. Karachi = Entomological Society of Karachi.
 Pakistan.
 Ent. Tidskr. = Entomologisk Tidskrift, Stockholm.
 Entomol. = Entomologist, London.
 Entomon. = Entomon Kariavattom, India.
 EOS = EOS, Revista Española de Entomología, Madrid.
 Fragm. Ent. = Fragmenta Entomologica, Rome.
 Guizhou Agric. Sci. = Guizhou Agricultural Science, Guizhou.
 Iheringia (Zool.) = Iheringia, Museu Rio-Grandense de Ciências Naturais, Porto Alegre. Serie Zoologica.
 Ill. Nat. Hist. Surv. Bull. = Bulletin of the Illinois State Laboratory of Natural History, Bloomfield.
 Indian J. Ent. = Indian Journal of Entomology, New Delhi.
 Indian J. Exp. Biol. = Indian Journal of Experimental Biology, New Delhi.
 Init. Afr. = Initiations Africaines, Dakar.
 Insect Sci. Application = Insect Science and Its Application, London.
 J. Agric. Univ. P. R. = The Journal of Agriculture of the University of Puerto Rico. The Agriculture Experiment Station, Rio Piedras.
 J. Anim. Morph. Physiol. = The Journal of Animal Morphology and Physiology, Bombay.
 J. Asiat. Soc. Beng. = Journal of the Asiatic Society of Bengal, Calcutta.
 J. Dept. Agric. P. R. = The Journal of Agriculture of the Department of Agriculture of Porto Rico. Insular Experiment Station, Rio Piedras.
 J.F.M.S. Mus. = Journal of the Federated Malay States Museums, Kuala Lumpur.
 J. Guizhou Agric. Coll. = Journal of Guizhou Agricultural College.
 J. Ins. Physiol. = Journal of Insect Physiology, London.
 J. Nat. Hist. = Journal of Natural History, London.
 J. Pan-Pac. Res. Inst. = Journal of the Pan-Pacific Research Institute.
 J. Sci. Math. Phys. Nat. = Jornal de Ciencias Mathematicas, Physicas e Naturaes, Lisbon.
 J. Soc. Biblioph. Nat. Hist. = Journal of the Society for the Bibliography of Natural History, London.
 J. Straits Soc. = Journal of the Straits Branch of the Royal Asiatic Society, Singapore.
 J. Zool. Soc. India = Journal of the Zoological Society of India, Calcutta.
 Jb. Hamb. Wiss. Anst. = Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten, Hamburg.
 Le Nat. = Le Naturaliste, Paris.
 Lingnan Agric. Rev. = Lingnan Agricultural Review, Canton. (Continued with volume 5 as Lingnan Science Journal).
 Lingnan Sci. J. = Lingnan Science Journal, Canton.
 Lingnan Univ. Sci. Bull. = Lingnan University Science Bulletin, Canton.
 Mar. Biol. Assoc. China = Marine Biology Association of China.
 Mem. I.F.A.N. = Mémoires de l'Institut Français d'Afrique Noire, Dakar.
 Mem. Inst. Scient. Madagascar = Mémoires de l'Institut Scientifique de Madagascar, Tananarive.
 Mem. Mus. Hist. Nat. Belg. = Mémoires du Musée Royal d'Histoire Naturelle de Belgique, Bruxelles.
 Mem. Soc. Cubana Hist. Nat. = Memorias de la Sociedad Cubana de Historia Natural, Havana, Cuba.
 Mem. Soc. Ent. Belg. = Mémoires de la Société Entomologique de Belgique, Bruxelles.
 Mem. Soc. Españ. Hist. Nat. = Memorias de la Real Sociedad Española de Historia Natural, Madrid.
 Mem. Soc. Ital. Modena = Memorie di Matematica e di Fisica della Società Italiana delle Scienze residente in Modena.

- Mem. Soc. Sci. Nat. Maroc = Mémoires de la Société de Sciences Naturelles du Maroc, Paris.
- Mitt. Nat. Mus. Hamb. = Mitteilungen aus dem Naturhistorischen Museum in Hamburg (Published in Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten).
- Monit. Zool. Ital. Suppl. = Monitore Zoologico Italiano, supplement (Atti della Società Italiana di Anatomia), Firenze.
- Nature Life S.E. Asia = Nature and Life in Southeast Asia, Kyoto, Japan.
- Nat. Tijd. Ned. Ind. = Natuurkundig Tijdschrift voor Nederlandsch-Indië, Batavia.
- Notes Leyden Mus. = Notes from the Leyden Museum, Leyden.
- Notul. Ent. = Notulae Entomologicae, Helsinki.
- Öfv. Finska Vet. Soc. Förh. = Översigt af Finska Vetenskaps-Societetens Förhandlingar, Helsinki.
- Öfv. Vet. Akad. Förh. = Översigt af Kongliga Svenska Vetenskaps-Akademien's Förhandlingar, Stockholm.
- Ohio Nat. = Ohio Naturalist, Columbus.
- Philipp. J. Sci. = Philippine Journal of Science, Manila.
- Proc. Ent. Soc. Lond. = Proceedings of the Entomological Society of London (continued after 1933 as Proceedings of the Royal Entomological Society of London).
- Proc. Pakistan Congr. Zool. = Proceedings of the Pakistan Congress of Zoology.
- Proc. R. Soc. Queensl. = Proceedings of the Royal Society of Queensland, Brisbane.
- Proc. R. Soc. Vict. = Proceedings of the Royal Society of Victoria, Melbourne.
- Publ. Cult. Comp. Diam. Angola = Publicações Culturais da Companhia de Diamantes de Angola, Lisbon.
- Proc. Zool. Soc. Lond. = Proceedings of the Zoological Society of London.
- Quaes. Ent. = Quaestiones Entomologicae, Edmonton, Alberta.
- Queensl. Agric. J. = Queensland Agricultural Journal, Brisbane.
- Rec. Indian Mus. = Record of the Indian Museum, Calcutta.
- Rec. Zool. Surv. India Occ. Pap. = Record of the Zoological Survey of India, Occasional Papers, Delhi.
- Rev. Ent. = Revue d'Entomologie, Caen.
- Rev. Soc. Ent. Argent. = Revista de la Sociedad Entomologica Argentina, Buenos Aires.
- Rev. Zool. Afr. = Revue de Zoologie Africaine, Bruxelles.
- Rev. Zool. Bot. Afr. = Revue de Zoologie et Botanique Africaines, Bruxelles.
- Sarawak Mus. J. = Sarawak Museum Journal, Sarawak.
- Silb. Rev. Ent. = Revue Entomologique (Silbermann).
- Smithson. Contr. Zool. = Smithsonian Contributions to Zoology, Washington, D.C.
- Soc. Ent. = Societas Entomologica, Stuttgart.
- Spec. Bull. Lep. Soc. Jap. = Special Bulletin of the Lepidopterological Society of Japan, Osaka.
- Stett. Ent. Ztg. = Stettiner Entomologische Zeitung, Stettin.
- Sv. Vet. Akad. Handl. = Kongliga Svenska Vetenskaps-Akademien's Handlingar, Stockholm.
- Term. Füzet. = Termeszettajzi Füzetek, Budapest.
- Tijdschr. Ent. = Tijdschrift voor Entomologie, Amsterdam.
- Trans. Am. Ent. Soc. = Transactions of the American Entomological Society, Philadelphia.
- Trans. Ent. Soc. Lond. = Transactions of the Entomological Society of London (continued after 1933 as Transactions of the Royal Entomological Society of London).
- Trans. Linn. Soc. Lond. = Transactions of the Linnean Society

of London.

Trans. Zool. Soc. Lond. = Transactions of the Zoological Society of London.

USDA Ins. Pest Surv. Bull. = U.S.D.A. Bureau of Entomology, Insect Pest Survey Bulletin.

Wien. Ent. Ztg. = Wiener Entomologische Zeitung, Vienna.

Zool. Jahrb. = Zoologische Jahrbücher, Jena.

Zool. Meded. = Zoologische Mededeelingen, Leiden.

Zool. Res. = Zoological Research, Kunming, China

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ERRATUM

The last two lines of the abstract of the paper by L.S. Kuniata and G. R. Young (vol 36. NO. 1, p.70) should read as follows;

The LC50 and LC95 for chlorpyrifos were 0.03 % a.i. and 1.40 % a.i., respectively, against weevil borer larvae, and 0.03 % a.i. and 4.60 % a.i against all weevil borer stages.

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g	- gram
kg	- kilogram
t	- tonne
l	- litre
ml	- millilitre
ha	- hectare
mm	- millimetre
cm	- centimetre
m	- metre
a.s.l.	- above sea level
yr	- year
wk	- week
h	- hour
min	- minute
s	- second
K	- kina

n.a.	- not applicable or not available
n.r.	- not recorded
var	- variance
s.d.	- standard deviation
s.e.m.	- standard error of mean
s.e.d.	- standard error of difference
d.f.	- degrees of freedom

Levels of significance

n.s.	not significant
*	- 0.01 $\leq p < 0.05$
**	- 0.001 $\leq p < 0.01$
***	- $p < 0.001$

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