

TABLE OF PLANTING DISTANCES.*

The following table shows the number of plants to the acre at distances of 1 to 50 feet apart, and the area in square feet available for each plant:—

Distance apart in feet.	Area for each plant in square feet.	Number of plants to acre.	Distance apart. Feet.	Area for each plant in square feet.	Number of Plants to the acre.
1 by 1	1	43,560	15 by 15	225	193
1½ by 1½	2¼	19,360	16 by 16	256	170
2 by 2	4	10,890	17 by 17	289	150
2½ by 2½	6¼	6,970	18 by 18	324	134
3 by 3	9	4,840	19 by 19	361	120
3½ by 3½	12¼	3,556	20 by 20	400	108
4 by 4	16	2,722	22 by 22	484	90
5 by 5	25	1,742	24 by 24	576	75
6 by 6	36	1,210	26 by 26	676	64
6 by 7	42	1,037	28 by 28	784	55
7 by 7	49	889	30 by 30	900	48
8 by 8	64	680	32 by 32	1,024	42
9 by 9	81	537	35 by 35	1,225	35
10 by 10	100	435	37 by 37	1,369	32
12 by 12	144	302	40 by 40	1,600	27
13 by 13	169	257	45 by 45	2,025	21
14 by 14	196	222	50 by 50	2,500	18

For numbers not given in the above table, divide 43,560 by the square of the distance apart the trees are required to stand, in feet; the result is the number of plants required per acre.

HOW TO DESTROY RATS.

Rats, at times, do get into a house or an outhouse, however carefully kept, and the housewife is naturally keen on keeping the pests away, or of getting rid of them when they appear.

Here are a variety of ways found useful, and such as can be dealt with by all womenfolk.

When a house is infested with rats which refuse to be caught by cheese and other baits, a few drops of the highly-scented oil of rhodium poured on the bottom of the trap will be an attraction they cannot refuse.

Place on the floor, near where rats' holes are, a thin layer of moist caustic potash. When the rats travel on this it will cause their feet to become sore, which they lick, and their tongues become likewise sore. The consequence is that they shun this locality, and seem to inform all the neighbouring rats about it, and the result is that they soon abandon a house that has such a preventive.

Cut some corks as thin as wafers and rub them in grease. Place the same in their tracks; or a bit of sponge dipped in treacle or honey, with a small quantity of oil of rhodium, will fasten to their coats and cause them to depart.

If a live rat be caught and smeared over with train oil, and afterwards allowed to escape in the holes of other rats, it will soon cause all to take their departure.

* Extract from *Tropical Planting and Gardening*, by H. F. MacMillan, page 51.

Take a pan about 12 inches deep and fill it with water; then sprinkle some bran on the water and set the pan in a place where the rats most frequent. In the morning you will find several rats in the pan.

Make two parts of common squills (well bruised) and three parts of finely-chopped bacon into a stiff mass, with as much barley meal as may be required, and then bake in small cakes and put for the rats to eat.—*The Planter and Tanganyika Advertiser*, April, 1939.

HOW WEATHER NEWS IS COLLECTED.*

One of the many duties of the British Royal Air Force of which the general public is not aware is the maintenance of a special flight of pilots, known as the Weather Flight or, more ceremoniously, the Meteorological Flight. These pilots ascend daily to heights of about 25,000 feet to gather information of vital importance to the Air Ministry's experts when they work out their weather forecasts.

A knowledge of the weather conditions he is likely to meet is essential to the pilot who has to keep to a time schedule on regular routes, and the highly-organized weather service now operating co-ordinates information received from a network of ground stations observing weather conditions on land, from ships as they move about on the oceans, from pilotless balloons, whose behaviour as they rise in the air is being observed and interpreted by meteorological experts, and from aircraft reporting what happens in the upper air.

The Royal Air Force Meteorological Service Branch was established in 1924, since when the flight has carried out almost continuously its onerous duties; the occasions when the pilots have been prevented by bad weather from going up have been extremely rare. The last occasion when they had a "day off" was in November, 1936, when all Britain was hidden in a blanket of fog and not a single aerodrome could be seen from the air. Since then the flight has completed 1,500 high-altitude flights in unbroken succession, soaring to heights where in winter time they often encounter temperatures of 80 degrees below freezing point.

NOTES ON COPRA.†

Copra dried to 6 to 7 per cent., if stored in a well-ventilated dry store at an even temperature, will not seriously deteriorate. It is apparent that there is little to gain by drying copra much below 6 per cent. moisture content, although in the past much more stringent recommendations have been made.—*The Tropical Agriculturist*, Vol. 89, No. 5, 1937.

As usually shipped in the East, copra is attacked in transit by moulds and insects, resulting in serious losses and deterioration. Experiment had shown that it can be dried to such an extent that moulds and insects do not touch it, and that the resultant short weight is amply compensated by the absence of loss. This is not yet fully appreciated, but undoubtedly will be in time.—*Supplement to United Empire*, August, 1938.

* Extract from W.740, Weekly London Letter by Andrew Blackmore, 1939.

† From *Agricultural Journal*, Department of Agriculture, Fiji, Vol. 10., No. 2, 1939.