

# GROWING INTRODUCED VEGETABLES IN THE LOWLANDS

## 4. VEGETABLE VARIETY RECOMMENDATIONS FOR THE PORT MORESBY LOWLANDS

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### INTRODUCTION

In the first article in this series of four papers, the lowland environment (climate) in Papua New Guinea was discussed. In the second and third articles all the introduced vegetables were discussed and the environmental or other limits for each species were listed. In this article, the best varieties are listed for each crop. Obtaining seed, by saving your own, or buying it is also discussed.

### VARIETY RECOMMENDATIONS

The choice of a good variety of any vegetable crop may mean the difference between successfully producing a good crop, or having no crop at all. For example if the tomato variety you choose does not have bacterial wilt resistance, and if this disease is present in your soil, all the plants may die before any tomatoes are produced.

The variety recommendations listed in Table 1 are the result of over 10 years research by many staff at D.P.I. Laloki. They have also been tried by commercial growers around Port Moresby and elsewhere in the lowlands. These are not the only varieties that can be grown successfully. But they are varieties which give good yields. They are also less affected by important diseases than are some other varieties.

Seed companies are always breeding or selecting new varieties. In the future new varieties may replace the ones in this list.

### OBTAINING SEEDS

It is not always easy in Papua New Guinea to obtain seed for your new crop. There are two sorts of vegetable crop. With some like corn and pumpkin you can save your own seed. For others, like cabbage, you must buy seed for every crop.

#### Saving your own seed

Those crops which you can save your own seed from are marked in the Table with a star. An article on producing and saving your own vegetable seed is in HARVEST, Volume 9, No. 1, pp. 1-4 (1983). Small packets of seed of these varieties can be obtained from D.P.I. Laloki. This will give you the right variety, which you can then multiply yourself.

#### Buying your seed

There are two reasons why the seed cannot be saved from some crops. Some crops like cabbage will not flower and produce seed in the lowlands. The other reason is that some vegetable seed sold by commercial firms is labelled hybrid or F1 hybrid. These seeds have been produced by crossing two differ-



ent parent lines. Crops from these seeds are often better than from ordinary varieties.

Hybrid seed only comes true during the first generation. If you save seed from your crop and then grow that seed (second generation) you will find that the plant will be different and not as good as from the bought seed. In Papua New Guinea many cabbage and Chinese cabbage varieties are F1 hybrid as are some watermelon and cucumber and a few tomato and capsicum varieties. If the seed you bought is labelled F1 hybrid, DO NOT try to save seed from your crop.

In the world there are many different seed companies. Each company breeds or selects new varieties. These varieties may then be sold by other firms, in different countries.

In Papua New Guinea there are no seed companies, although some breeding and selecting is done by the Department of Primary Industry. For trials, we obtain seed from many different seed companies to try under our conditions.

In the Table you will see that some varieties which come from

seed companies such as Takii in Japan and Yates in New Zealand are recommended. These varieties are bought overseas by trading companies and then re-sold in Papua New Guinea. You should buy seed through these trading companies, not directly from overseas. This is because a quarantine permit is required before the seed can be brought into the country.

In Port Moresby vegetable seed can be bought from the following companies: Brian Bell, Burns Philp, Carpenters, Central Food Marketing, South Pacific Machinery and Steamships. Some smaller stores also sell seeds. And some other companies will order seed overseas for you. When you are buying seed you should always ask the salesman for the particular variety you want. Sometimes the seed on sale is of unsuitable varieties.

#### FURTHER READING

Fitzgerald, J. and Bull, P.B. (1983). Producing and saving your own vegetable seeds. Harvest 9(1): 1-4.

Van Greve, J. (1983). Safe storage for small quantities of seed. Harvest 9(1): 5-10.



TABLE 1. VEGETABLE VARIETY RECOMMENDATIONS FOR THE PORT MORESBY LOWLANDS

CROP		VARIETY	SEED COMPANY
<u>1. Fruit vegetables</u>			
Pumpkin		* Rabaul	
		* Singapore	
		* Green Gem	Yates, N.Z.
		(1) Green Bowl Fl	Known You
Watermelon		* Sugar Baby	Yates, N.Z.
		(1) New Dragon Fl	Known You
Rockmelon		Hales PMR 45	Yates Aust.
			Yates N.Z.
Tomato		* NG 7536	
Eggplant	round	* Chahat	
	long	* Pin Tung Long	Known You
Capsicum	sweet	* Yolo Wonder	Yates, N.Z.
		* California Wonder	Yates, N.Z.
	hot	* Ilimo	
<u>2. Corn</u>			
		* Suwan	
		* Metro	
<u>3. Legumes</u>			
Winged bean		* UPS 31	
Peanut		* White Spanish	
Green bean	climbing	* Blue Lake	Yates, Aust.
	dwarf	* Redlands New Pioneer	Yates, Aust.
Snake bean	climbing	* Yardlong	Yates, N.Z.
	dwarf	* Bush sitao	
<u>4. Bulb and root vegetables</u>			
Onion	bulb - white	Texas Early Grano	Yates, N.Z.
		Yellow Granex Fl	Yates, N.Z.
	- red bunching (2)	Red Creole	Yates, N.Z.
		Bunching	Yates, Aust.
		Early Purple	Yates, N.Z.
Kohlrabi			
Radish	European	Stoplight	Yates, N.Z.
	Japanese	Minowase No. 2. Fl	Takii
Carrot		New Kuroda	Takii
<u>5. Green vegetables</u>			
Chinese cabbage	heading type	Tropical Delight Fl	Sakata
	Pak choi type	* Pak Choi Kwang Moon	Yates, N.Z.
		Pai Tsai Green Petiole	Known You
	Mustard	* Kai Choi Waianae	University of Hawaii

TABLE 1 (continued)

Cabbage	KK Cross Fl	Takii
	KY Cross Fl	Takii
	YR Summer 50 Fl	Takii
	Express Cross 60 Fl	Takii
Cauliflower	Snow Queen Fl	Takii
Broccoli	Green Comet Fl	Takii
Lettuce	* Minetto	Yates, Aust.
Silver beet	Fordhook Master	Yates, Aust.
		Yates, N.Z.
Okra	* Clemsons Spineless	Yates, N.Z.

NOTES

Where no seed company is listed, seed is available from D.P.I., Laloki.

\* Seed can be saved from good plants of these crops.

(1) Recommended for commercial growers only.

(2) These can be multiplied by sections of the old clump.

Seed Companies listed in the Table

Takii and Sakata are in Japan;

Known You is in Taiwan;

University of Hawaii is in Honolulu;

Yates are different companies with the same name in Australia and New Zealand.