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A New Variety of *Dolichos Lablab* and Its Economic Value

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There are two varieties of *Dolichos lablab*, one the climbing variety commonly grown in the kitchen garden for its tender pods, and the other the field variety cultivated on the dry lands, as a mixture with millets and whose seeds only serve as a pulse food for man. The former is known as *Avarai* (Tamil) or *Chikkudu* (Telugu) and the latter as *Mochai* or *Anumulu*. These are similar to the "snap" and "shell" varieties in the pea[1] *(Pisum sativum)* and in the French bean[2] *(Phaseolus vulgaris)*. Between the two varieties of lablab many marked differences exist, morphological as well as physiological, but those that concern the cultivator are :

	The Kitchen garden variety	*The field variety*
i.	Pod edible; not fibrous	Pod not edible, fibrous; seeds only can be used, ripe seeds as a pulse and unripe seeds as a vegetable
ii.	A typical climber; requires '*pandals*' or other support	Bushy to sprawling in habit; no support necessary
iii.	Needs frequent irrigation	A rain-fed crop
iv.	Heavy manuring necessary and constant attention essential during growth	A hardy plant that comes up well even on comparatively poor soils; practically no care required after sowing

At the Millet Breeding Station, Coimbatore, where collections of both these varieties from almost all parts of the Madras province have been studied and numerous crosses between them have been made, it was observed that although the two varieties cross readily, the subsequent generations suffer from varying degrees of sterility. One of these crosses however was found to be fairly fertile. Its parents were D. L. 250, a fleshy, tasty and high yielding kitchen garden variety, and D. L. 231, a strain of the field variety. Continued selection in the progeny of this cross has resulted in D. L. 1428, a strain that combines the desirable qualities of both its parents and is at the same time as fertile as either of them[3]. Its pods are non-fibrous and as tasty a food material as some of the best varieties of the typical kitchen garden lablab. There is a slight trace of the smell of the field variety pod which is disagreeable to some, but this disappears on cooking.

This variety was grown for seed multiplication in a limited area (40 cents) last season, and to estimate its yielding capacity 100 rows, each 25

links long were marked out at random in this area and the green pods harvested at intervals. In all, eight pickings were taken and the harvests lasted from December to February. The yield as estimated from these rows amounted to 6,070 lb. of tender pods per acre (standard error=177 lb.). The approximate cost of cultivation per acre is given below:

		Rs.	As.	Ps.
Preparatory cultivation				
One ploughing with Victory plough (2 pairs, 2 men)	...	3	0	0
Wooden *guntaka* worked thrice (1½ pairs, 1½ men)	...	2	4	0
Manures and manuring				
Cost of 5 cart loads of farm yard manure	...	10	0	0
Carting and spreading (½ pair, 2 men, 2 women)	...	1	14	0
Ploughing with the wooden plough (1½ pairs, 1½ men)		2	4	0
Seed and sowing				
Cost of 10 lb. of seed @ Re. 1 per lb.	...	10	0	0
Sowing and covering (1 pair, 1 man, 1 boy)	...	1	12	0
Harvest				
Picking 6,000 lb. of green pods (120 women)	...	30	0	0
Cutting vines and removing (12 women)	...	3	0	0
	Total	64	2	0
Income				
Price of 6,000 lb. of pods @ 4 pies per lb.	...	125	0	0
Profit	...	60	14	0

The harvest of the green pods is the costliest item of the cultivation bill. When the variety is cultivated on a small scale so that the members of the cultivator's household could attend to the periodical harvests, the cost under this head can be lessened and perhaps entirely saved. Similarly the cost of the seed can be saved by preserving the seed from the previous crop.

Summary By crossing the kitchen garden variety of lablab with the field variety, a new variety has been evolved which combines the desirable qualities of the two and yielding pods that are equal in quality to those of the typical kitchen garden lablab. It is a leguminous vegetable suitable for growing in dry lands and its cultivation is profitable.

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