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A NOTE ON THE PERFORMANCE OF Co. 1 LAB-LAB (OTTUMOCHAI)
UNDER GRADED DOSES OF **PHOSPHORUS** AND POTASH AT
DIFFERENT SPACINGS IN VELLAYANI

Co. 1 lab-lab is a cross between field lab-lab (*Dolichos lab-lab* var. *lignozus*) and kitchen garden lab-lab (*Dolichos lab-lab* var. *typicus*) evolved at Pulses Breeding Station, Agricultural College and Research Institute, Coimbatore. The high yielding character coupled with non-season bound nature of this variety has made it popular in Tamilnadu. It is a dual purpose variety maturing in about 115-120 days. The tender pods can be used as a vegetable and the mature pods as pulse. Another advantage of this variety is that it does not require either standard or pandal for its cultivation.

There was no information available about the suitability of Co. 1 lab-lab for cultivation under Kerala conditions. Therefore a trial has been conducted to study the performance of Co. 1 lab-lab in Vellayani during 1968-69. The treatment consisted of four levels of phosphorus (0, 25, 50 and 75 kg P₂O₅/ha) three levels of potash (0, 15 and 30 kg K₂O/ha) and three spacings (40 cm X 15 cm, 40 cm X 25 cm, and 40 cm X 35 cm). The design was a 4 X 3² partially confounded factorial experiment with two replications:

Results were assessed in terms of the yield of green pods obtained in eight harvests. The yield data are given in Table 1 below. The analysis showed that phosphorus application did not have any effect in increasing the yield of pods. The lack of response can be attributed to the high status of available phosphorus in the soil under study (96 lb P₂O₅/acre). Potash also failed to show significant effect in increasing the yield of pods. One of the reasons for lack of response for applied potash may be that the crop might have obtained its requirements from non-exchangeable portion of soil (Sen *et al*, 1949). The heavy rain fall (345 mm) occurred during the first week of application of potash also might have contributed to the lack of response. The data revealed that variation in spacing did not have any significant influence on the yield of green pods at all levels of phosphorus and potash applied. However, the highest yield of 2495 kg/ha was recorded by closest spacing viz. 40 cm X 15 cm.

Thus, from the trials conducted at the Agricultural College, Vellayani it was found that the yield of green pods in Co. 1 lab-lab was not influenced by graded doses of phosphorus and potash and variation in spacing.

Table 1
Mean yield of green pods in kg/ha (Total of eight harvests)

P_2O_5 (kg/ha)	0	25	50	75	Mean
Spacing					
40 X 15 cm	2343.082	2617.378	2354.679	2626.745	2485.454
40 X 25 cm	2364.840	2461.426	2431.583	2448.092	2426.485
40 X 35 cm	2058.726	2090.079	2501.269	2163.888	2203.490
K20 (kg/ha)					
0	2185.474	2233.174	2205.079	2313.174	2234.225
15	2286.269	2463.412	2818.649	2365.950	2483.570
30	2294.840	2472.297	2263.807	2559.602	2397.636
Mean	2255.527	2389.627	2429.177	2412.908	
K_2O (kg/ha)					
	0	15	30	Mean	
Spacing					
40 X 15 cm	2084.284	2671.664	2700.411	2485.454	
40 X 25 cm	2162.793	2636.007	2430.650	2426.485	
40 X 35 cm	2455.593	2143.031	2011.841	2203.490	
Mean	2234.225	2483.570	2397.636		
S. E. for levels of P				± 139.009	
S. E. for levels of K or S				+ 120.385	
S. E. for combinations of P & K or combinations of P & S.				± 240.776	
S. E. for combinations of K & S.				* 208.514	

REFERENCES

Sen, A. J., Deb, B. C. and Bose, S. K. 1949. Phosphate manuring of legumes and their residual effect on a succeeding cereal crop. *J. Res. Punjab Agric. Univ.* 3 (4): 350-355

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