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COMPARATIVE PERFORMANCE OF SOYBEAN VARIETIES IN RICE FALLOWS

Soybean (*Glycine max* Merr.) is a potential source of protein and oil. The information available on the performance of the varieties under the different agro-climatic regions of the state is limited. Saxena *et al.* (1967) reported that the performance of some imported varieties of soybean is satisfactory under Indian conditions. However, all these varieties cannot be expected to perform well under Kerala conditions.

Considering the vast areas of summer rice fallows in Kerala, it was thought worth while to study the the performance of five soybean varieties under such conditions during summer season with the objective of selecting the most promising type.

With this desideratum, studies were undertaken during the summer season (February 1977 to May 1977) in the sandy clay loam soils of the Instructional Farm and Research Station of the College of Agriculture, Vellayani. The soil of the experimental site contained 0.1003 per cent of nitrogen, 0.0017 per cent of available phosphorus and 0.0021 per cent of available potash with a pH of 5.1. The treatment consisted of five varieties of soybean, namely, Pelecon, EC 39824, JN 670, UPSM 229 and EC 2581. The experiment was laid out in Randomized block design with five replications. The seeds were sown at a spacing of 25 cm x 15 cm. Uniform doses of 20 kg of nitrogen, 80 kg of phosphorus and 20 kg of potash per hectare in the form of ammonium sulphate, super phosphate and muriate of potash respectively were applied in all the plots as basal dressing. Prophylactic plant protection measures were taken to protect the crop.

The data on the mean yield of grain obtained from each variety are given in Table-1.

Table - 1

Mean yield of grain in (kg/ha) of Soybean varieties

Varieties	*Grain yield kg ha*
Pelcon	1593
EC 39824	2233
JN 670	540
UPSM 229	546
EC 2581	333
SEm	**+234**
CD (0.05)	710
CD (0.01)	965

It is seen from the data that the variety EC 39824 has given the highest yield of 2223 kg/ha and this is significantly superior to all the other varieties, followed by Pelecon, with an yield of 1593 kg/ha. The lowest yield of 333 kg/ha was given by the variety EC 2581 Krishnamurthy *et al.* (1969) and Rao and Pathak (1972) also reported similar varietal differences in soybean. From the study it can be concluded that the variety EC 39824 can be successfully used for cultivation in the rice fallows.

സംഗ്രഹം

കേരളത്തിലെ ഒന്നാംവയലുകളിൽ ഒരു വേനൽക്കാല വിളയായി കൃഷിചെയ്യുന്നതിനു യോജിച്ച സോയാബീൻ ഇനങ്ങളിൽ EC-39824 എന്നയിനം, ഏറ്റവും കൂടുതൽ വിളവ് (ഹെക്ടറൊന്നിനു 2233 കിലോഗ്രാം) നൽകിയതായികണ്ടു.

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