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A NOTE ON THE EARLY GROWTH AND PERFORMANCE OF SIX VARIETIES OF PEPPER IN THE MULTISTOREYED CROPPING PROGRAMME IN COCONUT GARDENS

Economic exploitation of vertical space is a recent innovation in scientific agriculture. Based on intensive studies on various crop combinations for this type of multistoreyed cropping programmes Nelliath, *et al.* (1973) suggested pineapple as the floor crop, cocoa as the first storey crop and pepper as the second storey crop in coconut plantations. Pineapple and cocoa being inherently shade loving crops any variety of these crops will come up well in coconut gardens. Since adaptability to shade is a varietal character experimentation is necessary to spot out the variety of pepper most suited for selection in the multistoreyed cropping programme. Hence with this objective an experiment was laid out at the Coconut Research Station, Pilicode. The farm is situated 8.23 M above M. S. L. The soil is lateritic with a pH of 5.5. The experiment was carried out under rainfed conditions. The performance of six varieties of pepper viz. "Panniyur-1", "Karimunda", "Kalluvalley", "Balankotta", "Kottanadan" and "Naranyakodi" were tested. 24 vines of each variety were planted in July, 1976, one metre away from the base of the palm. Cocoa and pineapple were planted in September, 1976. Observations on vine survival, height of plant, number of functional leaves and internode length, 20 months after planting were recorded and are presented in table 1.

Table 1 Growth characters of the pepper varieties

	No. of plants survived (%)	Average height of the plant (cm)	Average Internode length (cm)	Average number of leaves per plant
Panniyur-1	91.6	201.3	2.11	95.5
Karimunda	83.3	235.1	2.11	113.5
Kalluvalley	16.6	161.8	4.18	38.7
Balankotta	50.0	265.6	3.18	83.6
Kottanadan	41.6	76.4	2.38	32.1
Naranyakodi	54.1	115.6	2.31	50.0

Results show that "Panniyur-1" and "Karimunda" recorded the highest percentage of survival in that order and in height and number of leaves in the reverse order. "Kalluvalley" was the poorest among the lot and recorded only 16.6 per cent survival whereas in respect of growth and number of functional leaves "Kottanadan" was the poorest. However there was not much of a difference between the different varieties in respect of internodal length. Thus on the whole the results show that, judged on the basis of early growth and vigour and survival percentage "Karimunda" and "Panniyur 1" are better varieties than the rest of the varieties tried. In the laterite soils, under rainfed conditions.

സംഗ്രഹം

തെങ്ങിൻ തോപ്പുകളിൽ വളർത്താൻ പറ്റിയ കരുമുള്ളകിന്റെ ഇനങ്ങളെ കുറിച്ച് പിലിക്കോട്ട കേരളവേഷണ കേന്ദ്രത്തിൽ പരീക്ഷണങ്ങളിൽ നിന്നും ആദ്യത്തെ വളർച്ചയുടെയും ഉണങ്ങി നഷ്ടപ്പെടുന്നതിന്റെയും അടിസ്ഥാനത്തിൽ 'കരിമുണ്ട' 'പന്നിയൂർ 1' എന്നീ ഇനങ്ങളാണു മെച്ചമെന്നു തെളിഞ്ഞു.

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