

## VARIETAL REACTION TO COCONUT STEM BLEEDING DISEASE

Stem bleeding is a serious disease found to occur in the northern parts of Kerala State. The cause of the disease is not yet properly established and now the disease is grouped under "diseases of unknown etiology". Petch (1908) reported that the disease is caused by *Thielaviopsis paradoxa* (de Seynes) von Honel while Briton Jones (1940) considered the fungus as an incitant and not as the primary cause of the disease. Salgado (1942) attributed the disease due to heavy fertilisation and Child (1964) stated that the disease was due to excessive development of sap. Potty and Radhakrishnan (1979) attributed the disease due to disproportionate accumulation of phosphorus in the rhizosphere in relation to other major nutrients. Information on the reaction of different varieties to this disease might be of considerable value in checking the disease and the present study was carried out with this desideratum.

The susceptibility of different varieties in the germplasm collection of the Coconut Research Station, Pilicode to incidence of the disease was recorded.

Data on varietal reaction to the disease, net yield and oil recovery are presented in Table-1. The data show that the varieties vary widely in susceptibility to the disease. Among the seven indigenous varieties, Mysore and Godavari were the least susceptible and West Coast Tall was the least resistant.

Table-  
Susceptibility of coconut varieties to infestation by the stem bleeding disease

Sl. No.	Varieties	Percentage infection	Yield of nuts/ anum tree	Oil recovery (%)
1	Omaller	27.2	58	69.32
2	Kulithalai	16.6	102	66.31
3	Indupali	40.0	85	69.58
4	Godavari	12.5	46	62.3
5	Fiji	31.5	52	70.25
6	Strait settlement	20.0	52	70.25
7	New Guinea	26.5	46	65.49
8	Andaman Ordinary	16.6	50	67.68
9	Laccadive Small	28.5	111	75.28
11	Mysore	0	77	68.62
12	Cochin China	100	56	66.21
13	Java	40.0	54	66.27
14	Philippines	45.0	61	69.01
15	West Coast Tall	40.0	52	68.6

Among exotic varieties, the Philippines variety showed 45% infection and the Java variety showed 40% infection. Among the exotic varieties, Cochin China, Andaman Ordinary and Laccadive Ordinary were found to be the least susceptible, the percentage infestation being 10, 16 and 18 respectively. In the case of Godavari, only 12% plants showed signs of infection, but this variety had relatively poor yield and low oil recovery.

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### സംഗ്രഹം

വിവിധയിനം തെങ്ങുകളിൽ ചെന്നീരൊലിപ്പുരോഗം പ്രത്യക്ഷപ്പെടുന്നതു സംബന്ധിച്ച നിരീക്ഷണങ്ങളിൽ *rao5* ഇനങ്ങളിലും കൊച്ചിൻ പൈന, ആൻറോൺ ഓർഡിനറി, ലക്ഷദ്വീപ് ഓർഡിനറി എന്നീ വിദേശീയ ഇനങ്ങളിലും അഗ്രാബാധ താരതമ്യേന കുറവാണെന്നു കണ്ടു.

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