76. ROOT (WILT) DISEASE OF COCONUT : CURRENT STATUS

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Coconut root (wilt) disease was first reported following a deluge in 1882 in south Kerala, India. Since then it has spread to newer areas and occurs more or less in a contiguous manner in 4,10,000 ha in the eight southern and in isolated pockets in northern districts of Kerala and in adjoining areas in Tamil Nadu. The disease is non-lethal but debilitating, causing an annual loss of about 968 million nuts. The diagnostic symptom of the disease is the characteristic bending of leaflets termed flaccidity. Yellowing and necrosis are other associated symptoms. Serodiagnostic and physiological tests for the early detection of the disease have been standardised. Although the involvement of fungi, bacteria, virus, nematodes, physiological and nutritional factors in the incidence of the disease were suspected, their role in the etiology has been ruled out. Consistent association of mycoplasma-like organism with the disease and its absence in healthy palms has been established. Light microscopic staining techniques for early detection of the disease has been standardised. Vector role of lace bug in transmission of the disease has been proved. MLOs also could be transmitted to *Catharanthus roseus* through dodder laurel *Cassytha filiformis*. The organisms could not be cultured in cell-free media but could be maintained in coconut tissues in culture. Remission of symptoms observed in significantly higher number of tetracycline-treated palms further confirms the role of MLOs in the etiology of the disease.