

9. A NEW WOOD ROT IN THE UPCOUNTRY TEA PLANTATIONS

A. BALASURIYA AND N.K.B. ADIKARAM

Plant Pathology Division, Tea Research Institute of Sri Lanka and Department of Botany, Faculty of Science, University of Peradeniya.

Hypoxylon vestitum (Syn. *Nemania diffusa*) was first observed on a tea stem from Nuwara Eliya District by Petch in 1906. The first descriptive report of *Hypoxylon* wood rot disease of tea (*Camellia sinensis*) in Sri Lanka was by Arulpragasam and Balasuriya (1991). This is confined to a few tea estates in the Nuwara Eliya and few other districts lying above 1500 m. However, wood rot in tea caused by *Hypoxylon* spp.; have been reported in S.India, Kenya, Malawi and Zimbabwe for many years. Some of the recorded species are *H.serpens*, *H.asarcodes*, *H.nummularium*, *H.truncatum* and *H.investiens*.

Usually the characteristic symptoms appear when the bushes are about 15 to 20 years old. There is also a distinct affinity of the fungus to certain clones in preference to others under identical growing conditions. In the few estates where the disease is causing heavy damage, the total number of infected bushes has reached 85 - 100%. The causal organism is now confirmed as *Nemania diffusa* (Syn. *H.vestitum*). The fungus appears to disseminate through pruning knives and the infection takes place through pruning cuts during wet weather.

Anatomical studies have revealed that the type of rot represents what is now known as 'soft rot', which has drawn much attention in the recent times. This condition was confirmed by comparisons of the wood anatomy of a *Hypoxylon*-affected tea stem with the symptoms of soft rot caused by *Chaetomium globosum*, a typical soft rot fungus.