

PURPLE ROOT DISEASE OF RUBBER : A NEW REPORT FOR INDIA

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The occurrence of purple root disease caused by *Helicobasidium compactum* Boedijn is reported for the first time on rubber in India. The attack is mainly on nursery plants occasionally leading to their mortality. The presence of distinct fruiting bodies girdling the collar region, purple coloured fungal growth on root surface and adventitious root formation are the distinguishing features of the disease.

Key words : *Hevea brasiliensis*, Purple root disease, *Helicobasidium compactum*, India.

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INTRODUCTION

Purple root disease caused by *Helicobasidium compactum* Boedijn has been reported from Africa, Asia, Australia and South America. It has been considered as an important tree pathogen in Europe. The fungus as a parasite can colonise a wide range of host plants belonging to various families. It was also found to grow saprophytically and living even on the underside of concrete blocks (Reid, 1975).

Purple root disease of rubber caused by *H. compactum* was first reported in 1921 (Snowden, 1921). Boedijn and Steinman (1930) observed development of the fruiting body of the fungus even on the tapping panel of a rubber tree in Dutch East Indies. An epidemic due to purple root disease was also reported from the region (Van der Goot, 1936). Severe incidence of this disease on rubber was noticed during 1935, 1938 and 1939 in Java and Indonesia (De Fluiter, 1939). Purple root disease is reported to

destroy rubber seedlings in isolated patches in El Palmar (Martin, 1947). In China, violet (purple) root disease is reported to be one of the major root diseases and is found to infect and destroy rubber plants of all age groups (Zhang, *et al.*, 1990; Zhang and Chee, 1989a and b).

The fungus, *H. compactum*, is a familiar pathogen in India attacking large number of weeds, shrubs and trees like *Asparagus* spp., *Centrosema pubescens*, *Chromolaena odorata*, coffee, tea and jack. Though the pathogen is quite common in rubber growing areas in India, it was not reported to cause any disease on rubber. The present paper is the first report of occurrence of the purple root disease on rubber in India.

SYMPTOMATOLOGY

The disease was noticed in a badly maintained nursery and it did not cause much harm to the plants in spite of its presence. Occurrence of sparse crowns and