In any developing country, like India, forests are of great national economic importance as sources of various valuable raw materials including timber. India is very rich in tropical flora including various fruit trees. There are several fruit trees which are also economically important as timber yielding plants. The mango (*Mangifera indica* Linn.) is one of the most important fruit trees of India and besides its fruit yielding capability, it is a very good timber yielding plant also. It covers as much as seventy percent (70%) of the total area under fruit crops in India and is able to grow in almost all regions except in an altitude above 3,000 feet (Gangolly et al., 1957). In West Bengal it is cultivated widely in almost all the districts.

The mango trees are often found to be heavily infected by wood-rotting basidiomycetous fungi. Obviously these types of diseases reduce the yield of fruits and also quality of the timber appreciably. The infected trees are readily distinguishable in the field showing dried up branches among the evergreen lustres. The infected branches bear basidiocarps on them and their butts appear to be severely cracked.

1966). Bagchee et al. (1951, 1953, 1954, 1955, 1960), Bakshi (1957, 1961), Puri et al. (1968) and Ghosh (1971) studied some of the important tree diseases in India. From the literature it appears that until now very little work has so far been done on diseases of Mangifera indica caused by wood-rotting basidiomycetous fungi. The present author encounters infected trees of M. indica by Hexagonia polygramma, Mont. and Trametes corrugata (Pres.) Bres., just after the rainy season in and around Calcutta and other parts of West Bengal. As there are no available data on these types of disease complexes it is rather difficult to make any definite statement about the control measures of these diseases. As such to throw some light on these important disease complexes in order to evaluate suitable control measures the present investigation has been taken up in August, 1975. The observations of these investigations are presented in the subsequent chapters.