

BORER BEETLE CONTROL ON RUBBER TREES USING INSECTICIDES

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Borer beetle infestation was observed on partially dried bark of standing rubber trees. Swabbing of a mixture of carbaryl (0.5%) + quinalphos (0.25%) on the beetle infested region of the bark three times at an interval of one week was highly effective and resulted in 99 per cent control when observed after two months.

Key words: Borer beetle, *Hevea brasiliensis*, Insecticide, Pest control.

INTRODUCTION

Rubber (*Hevea brasiliensis*) is a less preferred host plant for insect pests. Partial drying of the tree bark is often caused by various maladies such as tapping panel dryness, pink disease, root disease, sun scorch, drought, canker and lightning scorch. Such partially dried rubber trees are attacked by different types of borer beetles. They bore into the wood to make runnels and lay eggs inside them. The grubs that hatch from the eggs feed on the starch contents of the wood. The beetles, which emerge out also bore holes towards the outside and expel wood powder. The bore holes with ejecting string of wood dust is the symptom of borer beetle infestation. Such holes, considered as live bore holes, may contain various stages of beetles or grubs. Sometimes the adjacent live bark may also be punctured in the process and latex exudes through such holes. Though the borer beetle infestation has been observed on tapping trees for many years, an increasing trend in infestation is observed recently. The infested rubber trees break off

during wind causing loss of valuable timber. Petch (1921) described borer beetle attack (*Xyleborus perforans* and *X. parvulus*) on rubber in Ceylon and Malaya. The borer beetle species which are reported to cause damage to rubber trees are mainly members of family Bostrichidae namely *Heterobostrychus aequalis*, *Sinoxylon conigerum* (Tisseverasinghe, 1970), *Dinoderus bifoveolatus* (Norhara, 1981), *Sinoxylon anale* and *Xylothrips flavipes* (Mathew, 1987). *Platypus latifinis*, *P. solidus* belonging to Platipodidae and *Xyleborus similis* (Mathew, 1987), *X. perforans* belonging to Scolytidae (Jose *et al.* 1989) and *Minthea rugicollis* belonging to Lyctidae (Norhara, 1981) are other reported species of borers.

Control of borer beetle infestation on rubber trees has not been attempted earlier. However, preservation of sawn planks of rubber wood by means of diffusion treatment as well as vacuum pressure impregnation with boron or copper containing preservatives have been attempted to ward off borer beetles (Jose *et al.*, 1995).