

Management of white stem borer in coffee

May 23, 2013

Coffee white stem borer, *Xylotrechus quadripes*, is a serious pest of arabica coffee causing a yield loss up to 40 per cent in all coffee growing areas of India. It is a blackish brown coloured beetle measuring about 2 cm in size with three pairs of white stripes running obliquely across the wings. Alternate host plants of this beetle include rose sandal wood, teak etc.

Signs of infestation

The larvae enters the hard wood and burrows up to the roots. Infested plants show yellowing and wilting of leaves, presence of ridges on the stem, wilting of branches and occasional drying. In severe infestation a plant may have 20-25 grubs. Young plants succumb completely to the attack and older plants get damaged. Female beetle lays eggs in cracks and crevices of the bark of the main stem or the primary branches. Hatching takes place in 10-12 days and the grub first feeds on the bark and then bores into the woody tissue by making zigzagging tunnels, and tightly fills them with excreta. The grub stage lasts up to 10 months.

Control measures

Build good shade as the adults prefer coffee plant exposed to sunlight for egg laying. Every year look for ridges on the main stem and thick primaries to survey the level of infestation. Trace the infested plants and flight period of the beetles to contain further spread of the infestation. Prune infested plants or uproot them, if the borer has burrowed up to the root then burn the infested plants. Storing of infested stem in the estate will result in a continuous infestation. Remove the loose scaly bark of the main stem and thick primary branches by using coir gloves or coconut husk. Spray once in April-May and another spray at the end of October with chlorpyrifos 20EC at 600ml in 200 litre of water along with 200ml of wetting agent. Alternatively stems may be swabbed with carbaryl 50WP at 4kg diluted in 200 litres of water.

Contact

J. Jayaraj, Professor and N. Muthukrishnan,
Professor and Head, Department of Agrl. Entomology,
Agriculture College and Research Institute,
Madurai 625 104
email: agentomac@tnau.ac.in, Phone: 0452-2422956 Extn. No.214.