

## **A Herbal swabber for the management of white stem borer *Xylotrechus quadripes* in coffee (organic)**

### **B. Booster for boosting plant health in coffee (not for certified organic coffee)**

#### **Technology Description**

Coffee stem borer, *Xylotrechus quadripes*, selectively attack the Arabica coffee. The present technology acts as an ovipositional repellent for *X. quadripes*. When applied during the premonsoon and post monsoon season (coinciding with flight period where the adults oviposit maximum eggs) the adults can be easily managed. This is recommended as a prophylactic and curative method.

#### **Background**

Adults of *Xylotrechus quadripes* are active cerambycid beetles. They emerge during the sunny period, during premonsoon (April-May) and post monsoon (October – November) from their pupal period and mate and lay the eggs on the trunk of the Arabica coffee plants. Larvae which emerge from the eggs tunnel into the trunk and start feeding the xylem portion damaging the conductivity of water and nutrition. Ultimately the infested tree is killed. However, one major problem is that infestation cannot be identified like other borer infestation, as there is no frass or ooze. The present technology was found to reduce the oviposition there by reducing the damage. However, four consecutive application is suggested in the same plot for effective results.

#### **Benefits /Utility**

The plant-based formulation is organic. An inorganic micro nutrient spray is also recommended where organic farming is not practiced along with this formulation which increased the yield of coffee beans by 10-15%. This technology is commercialized to one firm.

#### **Scalability, business & commercial potential**

The technology can be extended to any scales. The formulation is greatly in demand.

#### **Target Market/Customer**

- Farmers
- Small Scale industries
- Self-help groups

#### **Social Impact of the Technology**

- The technology is being adopted by coffee growers in Chikmagalur and Kodagu districts.