

Socio-Economic Analysis of Smallholder Coffee Farms with Reference to Integrated Management of White Stem Borer in Karnataka, India

**M. C. BASAVARAJ¹, K. SREEDHARAN¹, K.P.K. VINOD¹, S.T. MURPHY²,
R. NAIDU¹**

¹Central Coffee Research Institute, Coffee Research Station-577 117, Karnataka, India

²CABI Bioscience, Silwood Park, Buckhurst Road, Ascot, Berks SL 5 7TA, UK

SUMMARY

Coffee white stem borer, *Xylotrechus quadripes* is the most destructive pest of arabica coffee in India, causing severe economic losses. In this context, a socioeconomic survey of 340 growers, randomly selected over three principal arabica coffee growing districts in Karnataka was carried out during 2003-04 cropping season. The study investigated farmers' perceptions of the importance of stem-borer and farm practices influencing the pest. All the growers rated white stem borer as the major constraint in arabica cultivation by all growers. Unable to bear the economic burden, several small plantations have been left neglected, without use of any inputs like fertilizers and plant protection measures. Lack of proper shade because of the extraction of timber to sustain themselves, prolonged drought since three years and poor management have increased the borer problem in the holdings. Many farmers expressed that BHC was more effective than other plant protection chemicals against borer. The major constraints faced by the growers in arabica coffee cultivation are severe incidence of WSB causing reduced yields (93.57%), low prices (90.71%), higher labour wages & lower level of work efficiency (45.71%), lack of skilled labours (12.14%), high cost of fertilizers and plant protection chemicals (74.29%), failure of rainfall (87.14%) and high rate of interest on borrowings (42.86%). Growers adopt mainly mechanical control measures like tracing and uprooting, swabbing lindane during April-May and September-December. The growers want newer technologies like acoustic detectors/sensors for the exact identification of borer-infested plants and also for better management of the pest.