## Temporal Variations in the Abundance of Three Important Insect Pests of Coffee in Kilimanjaro Region, Tanzania

F.L. MAGINA<sup>1</sup>, R.H. MAKUNDI<sup>2</sup>, A.P. MAERERE<sup>3</sup>, G.P. MARO<sup>1</sup>, J.M. TERI<sup>1</sup>

<sup>1</sup>Tanzania Coffee Research Institute (TaCRI), P. O. Box 3004, Moshi, Tanzania.

E-mail: tacriced@kicheko.com

<sup>2</sup>Pest Management Centre, Sokoine University of Agriculture (SUA) P.O. Box 3110,

Morogoro, Tanzania

<sup>3</sup>Department of Crop Science and Production, Sokoine University of Agriculture (SUA),

P.O. Box 3005, Morogoro, Tanzania

## **SUMMARY**

Temporal variation in abundance of white coffee stem borer (WCSB), antestia bug and coffee berry borer (CBB) were investigated between September 2007 and August 2008 at medium altitude (1200-1600 m.a.s.l) and high altitude (1600-2100 m.a.s.l) areas in Kilimanjaro region. A multistage random sampling method was used to select farms and trees for sampling in the two locations making a total of 810 trees. Insects were counted every month to establish the population size. High populations of antestia bugs and CBB were recorded during the short and long rains, during flowering and fruit development. WCSB increased gradually during short and long rains. Populations of WCSB were high at high altitude compared to medium altitude and occurrence of CBB at medium altitude was observed where it was not common in the past. Since the population size of WCSB was high in all locations and it is the most damaging insect pest, it is recommended that more attention should be focused on management of this pest.