UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD AGRICULTURAL RESEARCH STATION, SANKESHWAR AGRICULTURAL ENTOMOLOGY

Research Highlights - 2014-15

I) Survey of insect pests of sugarcane :

During 2014-15 incidence of early shoot borer (17%) was recorded, while the other borer *viz.*, root borer (*Emmalocera depressella*) was recorded to the tune of 22%. Among the sucking insect pests white fly (*Aleurolobus borodensis*) (10%) is observed at Bilhongal and Khanapur talukas, however the incidence of wooly aphid (SWA) has never reached the 4th grade, the natural enemies *viz.*, *Encarsia flavoscutellum* (8%), *Micronus igorotus* (7 – 9/cane) and *Dipha aphidivora* (2-3 / cane) were recorded during October - December monthS. Incidence of root aphid (*Tetraneura javensis*) is recorded in almost all the talukas except Belagavi and Khanapur talukas except Khanapur. The incidence of wireworm (*Aqruiotis spp*) is noticed both in July-Aug and October – December planting.

II) Evaluation of Sugarcane varieties for their reaction against insect pests of sugarcane

- I) Initial Varietal Trial (Early): Out of 16 entries including three checks screened against ESB, INB, SWA and white fly, two entries *viz.*, Co 11004, Co 11018 were found promising against both ESB and INB, where as Co 11001 was found relatively free from white fly iinfestation however none of the entries screened were found promising against SWA.
- II) Advance Varietal Trial (Early PC-I): Among the six entries including three checks screened the entry viz., Co 09004 was found promising against both ESB abd INB., as compared to other entries including checks and none of the entries were found promising against both SWA and white fly.
- III) Initial Varietal Trial (Midlate): Sixteen entries including two checks, screened against ESB, INB,SWA and white fly, the entries *viz.*, Co 11020, Co 11022 and Co 11024 were found promising against ESB, by recording lower percent dead heart (11%) where as for INB the entry Co 11012 was found promising as compared to the remaining entries, but none of the entries (including checks) were found promising against both SWA and white fly

III) Monitoring of SWA fluctuation in sugarcane eco system

Sporadic incidence of SWA was noticed during the month of July(1-2 grade) and reached its peak during October (3 grade) and has never crossed 3rd grade., due to the presence of natural enemies *viz.*, *Dipha aphidivora* (1-2/cane) <u>Micronus igorotus</u> (4-6/cane and *Encarsia flavoscutellum* (10%) during October – December months.

treatment with chlopyriphois 20 EC @ 2 ml/L, in term of percent protection against wireworm