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**Chlorantraniliprole 0.4 GR: Featuring a novel mode of action against grape stem borer, *Celosterna scabrator***

Grape stem borer, *Celosterna scabrator* is an important production constraint in grapes in India. It is a major pest of grapes in Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu states causing major damage in the field. The insect is a borer, the grub bores in to stem and branches and causes drying and withering of affected branches. Initially reddish sap oozes from wounds, chewed particles of wood are seen on the ground just below the site of damage. Wood dust and faecal matter at the base of the vine is indication of the borer activity. The leaves turn yellow in patches that resemble micronutrient deficiency, which ultimately dry and drop down. There are only few management strategies for the pest. Injecting dichlorvos solution into the hole followed by sealing with mud is a present management practice which controls the activity of the pest only up to 15 days. The proposed formulation of chlorantraniliprole (Ferterra 0.4 GR) is belonging to a new class of selective insecticides (anthranilic diamides) featuring a novel mode of action as it is taken up through plant roots and translocated throughout the plant tissues and growing points providing protection to developing plants. A two years study (2014-15 and 2015-16) revealed that chlorantraniliprole (Ferterra 0.4 GR) @ 15 g/vine applied at the root zone of the grape plant is found effective and economical for the management of grape stem borer. The insecticide has ceased the activity of the insect even up to 60 days after application which is evident from the lesser amount of frass collected from the live holes and higher number of live holes turning in to dead holes. Thus, chlorantraniliprole (Ferterra 0.4 GR) @ 15 g/vine can be effective means in managing the stem borer which reduces the cost on plant protection and increases the returns.

**Biography**

D N Kambrekar is an Assistant Professor of Agricultural Entomology in Department of Agricultural Entomology at University of Agricultural Sciences, Dharwad, India. He has worked on "Bio-pesticides mainly on viral pesticides and their utilization in the IPM of pod borer, *H. armigera* in different crops". Presently, he is operating a project on integrated management of grape stem borer.

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