

DIVERSITY ANALYSIS & COMPETITION EFFECT INVESTIGATION (CEI) FOR FOOD SEARCH IN MAIZE PEST MANAGEMENT TO EXPLORE THE POTENTIAL BIOLOGICAL CONTROL AGENT.

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**Received: 20.7.2013
21.12.2013**

Revised: 19 11 2013

Accepted:

ABSTRACT

Indiscriminate use of pesticides for the past 40 years has almost eliminated natural enemies from many crop ecosystems. An experiment has been carried out in the field & laboratory to determine the diversity index to explore the effects of predators on prey in food searching in the stalk borer *Chilo partellus* (Swinhoe) pest management during 2004-2006. During the field collection it was experienced that in most of field the grubs of predators were present but the Diversity Index Value of *Coccinella septempunctata* was higher than the *Chrysopa* spp. The *Chrysopa* larvae were found 8-20% more effective and fast prey searching capacity than *Coccinella* species. On the basis of present findings it was suggested that *Chrysopa* spp. is a good competitors in Stalk borer pest management.

KEY WORDS: Biocontrol, maize crops

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