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BIOCONTOL EFFICACY OF *ZYGOGRAMMA BICOLORATA* PALLISTER (COLEOPTERA : CHRYSOMELIDAE) AFTER FIELD RELEASE IN DISTRICT SAHARANPUR

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ABSTRACT – ***Z.bicolorata*** **Pallister is a potential biocontrol agent of** ***Parthenium hysterophorus*****, which is an obnoxious weed is commonly called as congress grass, carrot weed, white top and hydra headed grass. It has been spreaded like a wild fire in district Saharanpur and adjacent area. Field trials were made of the release of this Mexican beetle in Saharanpur district at different sites. After the release of beetles, its population was established very rapidly. After 25 days of release all stages of** *Z. bicolorata* **(eggs, larvae and pupae) were observed at each site.Firstly beetle and their larvae ate only soft part of leaf and buds after that hard and main stem was eaten. It was also observed when half plants were damaged, most of adult beetles migrated to near by vicinity while larvae fed on the left over parts of the plants till these were fully damaged. Beetle damaged seed formation ability of the plants by feeding on inflorescence and flower. After about a month of release, 50 to 90 percent plants were damaged and after 35 to 85 days of release all the plants were found fully damaged at different site, leaving behind no trace except stub. Both adults and their larvae are voracious feeder. A group of 6 adult beetles and 6 larvae took only ten days to damage a healthy caged potted plant. The weed is spreading in the near by forest area of Uttarakhand. Hence release of this beetle in these areas is also needed.**

Key words : *Zygogramma bicolorata*, *Parthenium hysterophorus*, field trials, Saharanpur, biocontrol efficacy.