

## **EFFECT OF DIFFERENT INSECTICIDES ON SOLENOPSIS MEALYBUG PARASITOID, *A. BAMBAWALEI* (HAYAT)**

**MEENU & PALA RAM**

Chaudhary Charan Singh Haryana Agricultural University, Hisar, Haryana, India

### **ABSTRACT**

In spite of the success of the biological control, chemical control is still being largely used as an important component of integrated pest management (IPM) and is used in conjunction with the biological control. But pesticides when used along with natural enemies may limit the efficacy of these biocontrol agents and have deleterious effects on parasitoids such as *A. bambawalei*. Although all pesticides may not have a specific site of action on the beneficial organisms, but they can induce sub lethal effects on reproduction and other biological functions (Manzoni *et al.*, 2006; Junior *et al.*, 2008). Results of augmentative releases of parasitoids have been variable and at least some of the variability has been attributed to the use of broad spectrum insecticides (Stinner *et al.*, 1974). Hence, any pesticide applied during the crop growing season has the potential to disrupt biological control. The efficacy of parasitoids is also influenced greatly by the insecticide spray schedule before and after the parasitoid release. Pesticides may also interfere with the searching behaviour by acting as repellent, feeding inhibitor or even reducing the olfactory capacity in addition to resulting in direct mortality of the parasitoid (Desneux *et al.*, 2007). The conservation and inoculative release of the parasitoid is considered as an economically feasible and environmentally safe option for the control of *P. solenopsis*.

**KEYWORDS:** Insecticides, Solenopsis Mealybug Parasitoid