



New Record

Record of *Dinarmus basalis* (Rondani) - a parasitoid of *Callosobruchus maculatus* F.

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The pulse beetle, *Callosobruchus maculatus* F. is an important pest of leguminous grains such as cowpea, lentil, greengram, blackgram and frenchbean (Talukdar and Howse 1994; Okonkwo and Okoye, 1996; Mulatu and Gebremedhin, 2000; Raja *et al.*, 2000; Park *et al.*, 2003). According to Shade *et al.* (1990) it infests cowpea before harvest and causes quantitative and qualitative losses to seeds in storage. In the present report Frenchbean, *Phaseolus vulgaris* seeds were procured from the seed store of Seed Technology and Production Centre of Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan. The seeds were stored in the plastic container of ½ kg capacity in which 5 pairs of *C. maculatus* adults were released covered with muslin cloth and were in the incubator at 27±1°C and 70 % RH for raising the culture. After two months of storage it was found that the several parasitoids emerged from the above culture indicating high parasitism of *C. maculatus* by *Dinarmus basalis* during August, 2008. The larva of *C. maculatus* is parasitized inside the seeds by *D.*

basalis (Dugravot *et al.*, 2002; Gauthier *et al.*, 2002). Quedraogo *et al.* (1996) reported that *D. basalis* is an ectoparasitoid larvophagous species which is also present in the granaries and represents 80-90 % of the bruchid larvophagous parasitoids in the cowpea fields and stores. Iloba and Umoetok (2007) reported that 99.41 % mortality of *C. maculatus* was obtained leaving only 0.59% to damage the grains. According to Dugravot *et al.* (2002), *D. basalis* is an efficient natural enemy which could be used for biological control. The record of *D. basalis* will facilitate bio-ecological studies and rearing of this parasitoid leading to proper management of bruchids. Thus, this parasitoid will be helpful in biological control programme of *C. maculatus*.

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