

New Report of *Chrysonotomyia* species (Hymenoptera: Eulophidae: Entedoninae), Larval Parasitoid on the Rice Hispa, *Dicladispa armigera* (Oliver) (Coleoptera: Chrysomelidae) in Himachal Pradesh

Ajai Srivastava^{1*}, Urvi Sharma¹ and Chitra Shanker²

¹CSK HPKV Rice and Wheat Research Centre, Malan, Kangra H.P.

²ICAR-Indian Institute of Rice Research, Rajendranagar, Hyderabad

*Corresponding author: ajai_mustard@rediffmail.com

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Rice (*Oryza sativa* L.) is one of the world's most important sources of food among cereals and ranks first position in acreage and total production. In Himachal Pradesh, rice occupies third position in acreage after wheat and maize with 75.20 thousand ha area under its cultivation and total production of 128.92 thousand metric tonnes (Anonymous, 2011). Rice crop has relatively a large number of insect pests which limits its production. More than 100 species of insects attack and feed on rice crop from nursery to maturity stage and also in storage. The rice hispa, *Dicladispa armigera* (Oliver) (Coleoptera: Chrysomelidae) which was earlier known to be a sporadic pest of paddy is now emerging as an important pest of grave concern. It is now a major pest of rice in southern Asia and Australia, more particularly in Bangladesh, India and Nepal (Polaszek *et al.*, 2002). Yield loss caused due to *D. armigera* attack has been estimated as 28 per cent in India (Nath and Dutta, 1997), 20 -30 per cent in Nepal (Dhaliwal *et al.*, 1998) and up to 52 per cent in deepwater rice in Bangladesh (Islam, 1989). In India, in the past few years, it has also gained major pest status, particularly in states of Assam, Bihar, Uttar Pradesh, Himachal Pradesh and Odisha causing considerable economic loss to the farmers. Scant information is available on the native parasitoids of *D. armigera*. Despite the promising results of some recent studies in Bangladesh (Islam and Rabbi, 1998; Polaszek *et al.*, 2002; Polaszek, 2004) no work has been initiated on the biological control of this pest. Survey for natural enemies in Assam revealed the presence of *Trichogramma* and *Oligosita* sp. on eggs of hispa.

Hispa damage was observed at the Rice and Wheat Research centre, Malan in Kangra District of Himachal Pradesh during 2015. A maximum of 68 per cent leaf damage was observed during September, 2015 with a mean of 37.36 % leaves being damaged. Natural parasitisation of grubs was observed during this period in the field. The parasitoids

were reared to adults in the laboratory and were tentatively identified based on keys described by Hansson (1990) and Gumovsky (2001). The key identification features were forewing with one hairline, ascending from stigma vein, body extensively dark and metallic green body. The eulophid, *Chrysonotomyia* species has been reported as larval parasitoid on the rice hispa, *D. armigera* in Himachal Pradesh for the first time. It was earlier reported from Bangladesh and West Bengal along with another species *Bracon hispae* (Bhattacharyya *et al.*, 2000).

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Parasitized and healthy grub



Adult parasitoid