

The hover-fly *Allograpta javana* (WIED^EMANN), predacious on the Jowar shoot-bug
Peregrinus maidis (ASHMEAD) together with its recorded hosts from India

The shoot-bug *Peregrinus maidis* (ASHMEAD) (Homoptera: Araeopidae), is known to attack jowar seriously in Orissa, moderately in Andhra Pradesh and Maharashtra, mildly in Gujarat, Tamil Nadu and Madhya Pradesh, and only negligibly in Mysore¹. However, in some seasons, the bug was found in large colonies in the central folded leaves of jowar (sorghum), especially in summer on the ratoon crop, in Bangalore district. It is also reported to attack maize in moderate numbers in most Indian States.²

Several predators and parasites of this pest are recorded from India^{3,4} and other parts of the world⁵. The only report of a syrphid predator of *P. maidis* is that of *Mesogramma subannulatum* Loew from Cuba⁵. There are no records of syrphid predators of the shoot-bug from India but Chelliah and Basheer³ observed some unidentified flies of the family Syrphidae being attracted to the copious honeydew produced by the bugs.

During September 1971, the author found a number of green maggots of a syrphid feeding on nymphs of *P. maidis* infesting central leaf whorls of ratoon sorghum near Bangalore. The maggots were reared in the laboratory on shoot-bug nymphs and the emerging adult flies were later identified as *Allograpta javana* (Wiedemann).

In India, larvae of *A. javana* have previously been reported to feed on the psyllid *Ctenophalara elongata*⁶, on nymphs of the mealy bug *Ferrisia virgata*⁷, and on the aphids *Aphis laburni*⁸, *Myzus persicae*⁹, and *Aphis gossypii*¹⁰. The author has observed and reared larvae feeding in nature on the aphids *Therioaphis maculata* on lucerne, *Rhopalosiphum maidis* on maize, and *Toxoptera odinae* on mango, all of which are new host records.

This syrphid species, widely distributed in the Oriental region, has previously been placed in the genera *Sphaerophoria* Lepeletier and Serville, and *Xanthogramma* Schiner by various authors. Vockeroth¹¹ recently transferred it to the mainly New World genus *Allograpta* Osten Sacken as a result of his studies on the male terminalia and external morphology of the species.

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