عنوان مقاله:

Investigation on Host Finding Behavior of the Two Parasitoids of Potato Tuber Moth in a Flight Tunnel

محل انتشار:

مجله علوم و فناوری کشاورزی, دوره 4, شماره 3 (سال: 1381)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Laboratory experiments were conducted to understand the influence of host-finding behaviour of Apanteles subandinus Blanchard and Orgilus lepidus Muesebeck, two endoparasitoids of the potato tuber moth (PTM) Phthorimaea operculella Zeller (Lepidop-tera: Gelechiidae), in a successful biological control of the pest. Responses of the two parasitoids to their host and to three host plants of the PTM were investigated in a wind tunnel individually. The results suggested that host-finding by both parasitoids is stimu-lated by a combination of chemicals. Females of both species discriminate between the volatiles of a mechanically damaged plant and those of PTM larvae-damaged plant. The combination of odours originating from plant host on which the host is feeding play a cru-cial role in the foraging behavior of these parasitoids. Developmental experience during larval stages and experience of adults to host plant influence their foraging for host. The implications of parasitoid response towards plant volatiles and their importance in bio-logical control are discussed. Additional experiments are necessary to isolate and identify the nature of the volatile chemicals released from the host-plant complex and use them to improve the biological control of the pest.

کلمات کلیدی:

Apanteles subandinus, Host-finding, Orgilus lepidus, Phthorimaea operculella