



ALTERNATIVE FOODS FOR JUVENILE DEVELOPMENT AND SURVIVAL OF THE PREDATORY BUG *Orius insidiosus* (HEMIPTERA, ANTHOCORIDAE)
ALIMENTO ALTERNATIVO PARA O DESENVOLVIMENTO E A SOBREVIVÊNCIA DA FASE IMATURA DO PREDADOR *Orius insidiosus* (HEMIPTERA, ANTHOCORIDAE)

A.M.G. Bernardo¹, R.A. Oliveira¹, C.M. Oliveira¹, C.R. Dias¹, A. Pallini¹ & A. Janssen²

¹Department of Entomology, Federal University of Viçosa, Viçosa, Brazil; ²IBED, Section Population Biology, University of Amsterdam, The Netherlands.

The anthocorid *Orius insidiosus* is a generalist predator of small insect pests (e.g. thrips, aphids and spider mites), and, like other members of this genus, is economically important for biological control of pests that affect vegetable crops and ornamental plants. In order to improve pest control with this predator, its densities in the crop may be enhanced by the provision of alternative foods, especially when prey are scarce. Eggs of the moths *Ephestia kuehniella* and *Anagastra kuehniella* have been extensively used as alternative food and have been suggested to improve the biological control of pests by *Orius* sp. However, these eggs are expensive, precluding their commercial use. Our aim was to find cheaper alternative foods, and we therefore measured juvenile development and survival of *O. insidiosus* on five alternative foods: *Ricinus* sp. pollen, *Typha* sp. pollen, bee pollen, the acarid prey *Tyrophagus putrescentiae* and eggs of *Anagastra kuehniella*. A control treatment consisted of chrysanthemum leaflets without food. First nymphal stages of the predator were transferred individually to leaf discs of chrysanthemum (2.5 cm), which were kept in Petri dishes with agar at the bottom and one of the alternative foods, on which the predators could feed *ad libitum*. The juvenile development rate was significantly lower on diets consisting of *A. kuehniella*, *T. putrescentiae* and *Typha* sp. than on *Ricinus* sp., bee pollen and in the control. Juvenile survival was significantly higher when predators fed on diets consisting of *A. kuehniella*, *T. putrescentiae*, *Ricinus* sp., *Typha* sp. and bee pollen than in the control. These results demonstrate that alternative and cheaper foods can be used for juvenile development and survival of this predator.

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