

عنوان مقاله:

Effects of imidacloprid, indoxacarb and endosulfan on egg, third-instar larva and pupa of green lacewing *Chrysoperla carnea* (Neu.: Chrysopidae)

محل انتشار:

نامه انجمن حشره شناسی ایران، دوره 31، شماره 1 (سال: 1390)

تعداد صفحات اصل مقاله: 14

نویسندگان:

غلامرضا گلمحمدی

میرجلیل حجازی

شهرزاد ایرانی پور

سید ابوالقاسم محمدی

خلاصه مقاله:

The common green lacewing is a known biocontrol agent because of its wide geographical distribution, high compatibility with different agricultural systems, high searching ability and ease of rearing. Adults and larvae were reared on artificial diet and eggs of *Anagasta kuehniella* (Zell.) respectively. The toxicity of insecticides was assessed on eggs (dipping method), third-instar larvae (contact method), and pupae (topical application) of *Chrysoperla carnea* Stephens. In order to study the sublethal effects, the third-instar larvae were treated with recommended field rate of each insecticide. The effects of the insecticides were assessed using demographic toxicology methods. Rearing conditions were $26 \pm 2^{\circ}\text{C}$, $60 \pm 10\%$ relative humidity and a photoperiod of 16: 8 h (L: D). The results revealed that the insecticides did not affect eggs even at doses higher than recommended field rates. The LD_{50} values, of endosulfan, imidacloprid and indoxacarb for pupal stage were estimated to be 144, 33, and $21 \mu\text{g ai/insect}$ respectively. Since the insecticides did not affect the third-instar larvae at the recommended field rate, the LC_{50} was not estimated for this stage. The results showed that, only net reproduction rate (R_0) was significantly affected by treatments. The highest and lowest amounts of R_m were 0.176 and 0.152 for control and indoxacarb treatments respectively. Based on both acute toxicity and demographic toxicology methods, the rate of toxicity of the tested insecticides was as follows: indoxacarb > endosulfan > imidacloprid.

کلمات کلیدی:

بالتوری سبز، اثرات کشندگی و زیرکشندگی، سمشناسی دموگرافیک

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1588455>

