

研究报告

马缨丹总岩茨烯对小菜蛾和斜纹夜蛾幼虫的拒食作用

董易之; 张茂新; 凌冰

华南农业大学昆虫生态研究室, 广州 510642

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摘要

从马缨丹叶片中提取总岩茨烯,测定总岩茨烯对小菜蛾2龄幼虫和斜纹夜蛾1、2龄幼虫的拒食作用.结果表明,在非选择性试验中,1.6 mg·ml⁻¹的总岩茨烯对小菜蛾2龄幼虫和斜纹夜蛾1龄幼虫有拒食作用,48 h的拒食率分别为62.4%和31.1%;在选择性试验中,0.4 mg·ml⁻¹的总岩茨烯即对小菜蛾2龄幼虫有拒食作用,0.4、0.8和1.6 mg·ml⁻¹浓度处理下的拒食率分别为52.7%、55.5%和78.9%;总岩茨烯只有在高浓度(1.6 mg·ml⁻¹)时,才对斜纹夜蛾1龄幼虫有拒食作用,拒食率仅为33.0%.在选择性和非选择性试验中,总岩茨烯对斜纹夜蛾2龄幼虫均无拒食作用.

关键词 [马缨丹](#); [总岩茨烯](#); [小菜蛾](#); [斜纹夜蛾](#); [拒食作用](#)

分类号

Antifeeding effects of crude lantadene from *Lantana camara* on *Plutella xylostella* and *Spodoptera litura* larvae

DONG Yizhi, ZHANG Maoxin, LING Bing

Laboratory of Insect Ecology, South China Agricultural University, Guangzhou 510642, China

Abstract

In this study, crude lantadene was extracted from *Lantana camara* leaves, and its antifeeding effects on *Plutella xylostella* and *Spodoptera litura* larvae were tested. In no-choice test, crude lantadene at 1.6 mg·ml⁻¹ concentration had antifeeding effects on the 2nd instar *P. xylostella* larvae and 1st instar *S. litura* larvae, with the antifeeding rate being 62.4% and 33.1%, respectively within 48 h. In choice test, even a low concentration (0.4 mg·ml⁻¹) crude lantadene still had anti-feeding effects on the 2nd instar *P. xylostella* larvae, and the antifeeding rate at 0.4, 0.8 and 1.6 mg·ml⁻¹ concentration was 52.7%, 55.5% and 78.9%, respectively. Crude lantadene only at 1.6 mg·ml⁻¹ concentration had anti-feeding effects on the 1st instar *S. litura* larvae, and the antifeeding rate was 33.0%. For the 2nd instar *S. litura* larvae, crude lantadene had no antifeeding effects both in no-choice and in choice test.

Key words

[Lantana camara](#) [Crude lantadenes](#) [Plutella xylostella](#) [Spodoptera litura](#) [Antifeeding effect](#)

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