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植物保护科学

亚洲玉米螟发生动态及释放松毛虫赤眼蜂防治效果

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摘要：

于2007年6月和9月对秦皇岛亚洲玉米螟在春玉米田间落卵量和亚洲玉米螟为害春玉米的严重程度及7月29日分别在春玉米地和夏玉米地释放松毛虫赤眼蜂防治第二代亚洲玉米螟效果进行了调查与研究，结果表明，亚洲玉米螟在该地区全年共发生两代，产卵高峰期分别发生在6月中旬和8月上旬，高峰期卵粒数分别达到了800粒和748粒；田间花叶率、百株蛀茎孔数、蛀茎株率和百株蛀穗孔数、蛀穗株率分别达到了78%、340个、96%和102个、74%；松毛虫赤眼蜂在春玉米地和夏玉米地卵块寄生率分别达到了80.00%和81.44%，在夏玉米地，放蜂区和对照区相比，蛀茎虫孔减退率为53.05%，蛀穗虫孔减退率为69.63%。通过本文分析得出亚洲玉米螟在秦皇岛地区发生及危害严重，释放松毛虫赤眼蜂防治效果较好。

关键词： 亚洲玉米螟 发生动态 松毛虫赤眼蜂 生物防治

Population dynamic of Ostrinia furnacalis and biological control on the pests by releasing Trichogramma dendrolimi in the corn fields

Abstract:

In this paper, it was investigated on Ostrinia furnacalis including number of eggs laid, damage degree of spring corn in the spring corn field from June to September of 2007 in Qinhuangdao and releasing Trichogramma dendrolimi in the spring and summer corn field to control second generation Ostrinia furnacalis as the biological control methods on July, 29th. The results were as follows.The occurrence of the Asian corn borer was two generation in the whole year. And peak stage of eggs laid were respectively occurred in the middle of June and the early August, meanwhile, numbers of egg masses were reached 800 and 748 separately.Furthermore, the percentage of damage leaves, damage stems and maize ears were up to 78%, 96% and74%, respectively. The numbers of hole were up to 340 and 102 in the damage stems and corn ears by the Asian corn borer. Through releasing Trichogramma dendrolimi in the spring and summer corn fields, the parasitization rate of eggs in the second generation Asian corn borer were 80.00% and 81.44%, and by comparison with CK , the reducing rates of hole of control groups in damage stems and corn ears were up to 53.05% and 69.53%, respectively.It was concluded that the population of Asian corn borer was large and the damage by the pest was heavy in the spring corn fields, and Ostrinia furnacalis had a good action in the control of Asian corn borer.

Keywords: Ostrinia furnacalis population dynamic Trichogramma dendrolimi biological control

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