黃曲條跳甲的防治 Control of Striped Flea Beetles

簡介 Introduction

黃曲條跳甲俗稱狗蝨仔,體形小,善跳躍,咬食菜心、芥蘭、蘿蔔等十字花 科作物的葉片。由於繁殖快和容易對化學農藥產生抗性,被本港農友列為頭

Striped flea beetles (Phyllotreta striolata) are small and good at jumping when disturbed. They chew on leaves of cruciferous crops such as Chinese flowering cabbage, Chinese kale and radish. Since they reproduce fast and quickly develop resistance to chemical pesticides, they are ranked as No. 1 pest by local farmers.







Radish

防治方法 Control Methods

輪作 - 由於青豆和蕃茄不是跳甲的宿主作物,牠們會因為缺乏食物 而導致數目急劇下降。

Crop Rotation - Since bean and tomato are not host plants of striped flea beetles, a lot of them would starve to death.



昆蟲病原線蟲 - 種植前噴灑施氏線蟲製劑可有效地殺死跳甲幼蟲。 Entomopathogenic nematodes - Application of Steinernema spp. into soil can effectively kill larva of the pest.



The nematodes under microscope



跳甲幼蟲 A larva of flea beetle



被線蟲殺死的跳甲幼蟲 A larva killed by infection of the nematod

吸蟲機 - 利用跳甲受驚時往上跳的特點,用吸風捕殺。 Bug-sucking machine - Use sucking power to capture the adults as they jump up when disturbed.



用吸落葉機改裝

sucking machine



化學防治 - 噴灑天然植物的提取液或化學合成農藥。 Chemical control - Application of extract of pesticidal plants or chemical pesticides.



魚藤根 Derris roots



Squeezed



Collect extract



Dilute and spray

覆蓋苗期作物 Cover seedlings with nets



Direct covering



Covering with support

結 語 Conclusion

綜合使用耕作技術、物理方法、生物農藥和化學農藥是成功防治任何作物 害蟲的不二法門。根據跳甲善跳的特點,我們發明了吸蟲機並結合其他方 法,成功地控制了此害蟲在本港的肆虐。

Combination of horticultural techniques, physical methods, bio-pesticides and chemical pesticides is the key to control any pests. Based on the fact that flea beetles jump up when disturbed, we have invented Buck-Sucking Machine. When the machine is used together with other methods, local farmers can suppress the pest successfully.