Alfalfa Snout Beetle Survey 2008

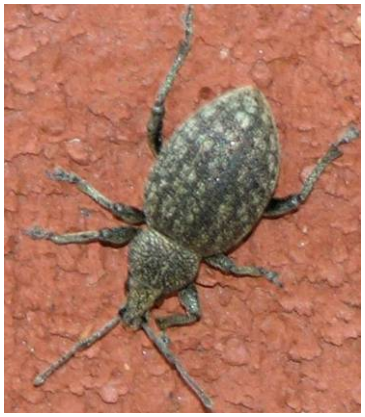
Purpose:

To monitor for the presence of a new invasive species, Alfalfa Snout Beetle (ASB), *Otiorhynchus ligustici* in Eastern Ontario.

Alfalfa Snout Beetle is an insect species native to central and northern Europe. In North America, it was first detected in New York State where it currently infests approximately 200,000 hectares in eight counties. Until recently in Ontario, ASB only infested a narrow area bordering the St. Lawrence around Prescott/ Brockville and Wolfe Island. ASB has a two-year life cycle spent mostly underground as a larva. The larval stage of the insect causes the greatest economic damage by feeding on the roots of alfalfa plants. ASB larvae have the capacity to decimate healthy alfalfa fields within 1-3 years of the initial infestation. The insect is flightless and all adults are fertile females.

Figure 1. Life Stage of the Alfalfa Snout Beetle

ASB Adult



ASB Larva

Larval feeding on alfalfa root

Methods:

Alfalfa fields in the counties of Grenville, Leeds, Dundas, Russell and the city of Ottawa were scouted for the presence of ASB (larvae and adults) between May and November 2008. Over 100 fields were scouted with a sweep net for the presence of adults in May and June or by digging alfalfa roots in the fall to check for the presence of larvae.

Results:

Survey results confirmed the persisting presence of ASB's at previously infested sites. Additionally, ASB adults and/or larvae were detected at three new locations:

1. 2-4 km S/SW of Kemptville on Bedell Rd., West of Regional Road #44
2. 8 km W of Blue Church Rd at Bisseltown
3. 20 km W/SW of Blue Church Rd at Tincap (NW of Brockville)

The Kemptville areas infestation is approximately 16 Km^2 in size, while the Brockville - Prescott area, along the waterfront is approximately 140 Km^2 in size.

Summary:

Alfalfa Snout Beetle infested areas have grown from a few Km^2 20 years ago to over 150 Km^2 to date. Monitoring for the presence of ASB enables us to respond quickly to minimize both the spread of ASB and the damage to the alfalfa crop.

Next Steps:

Extension efforts in and around the infested areas will help minimize the spread of ASB and allow growers to implement cultural production strategies to minimize alfalfa loses due to ASB in infested areas.

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Location of Project Final Report:

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