# Know your pests II. Twig, shoot, and root feeders

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## Conifer root aphid White grub complex Pales / white pine weevils

## **Evidence of conifer root aphid infestation**



### Conifer root aphid = Woolly ash aphid Prociphilus americanus



Overwinters on *Abies* roots Multiplies in spring Most, but not all, migrate to ash Winged forms return to *Abies* 



### **Relationship with ants**



Yellow ant (*Acanthomyops* spp.) golden color and citronella odor when crushed



## Scarab adults





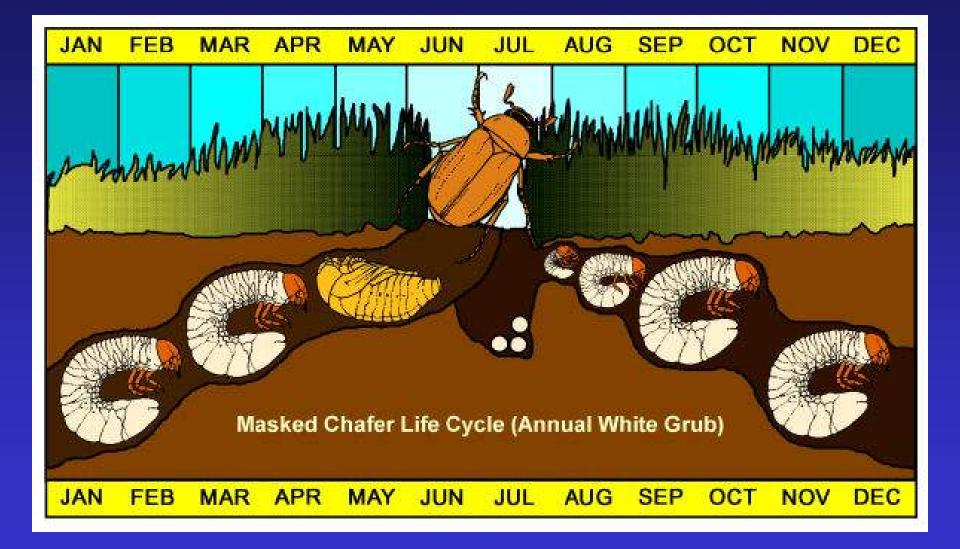
#### **Important species in New England**

## Asiatic garden beetle

#### **European chafer**



**Oriental beetle** 



White grubs not only thin the root system but also will directly kill trees by girdling them.

#### Untreated

#### **Protected**



### Untreated

#### Imidacloprid

Application of imidacloprid in the nursery can prevent extensive loss of plants and their roots from white grub feeding.

Photo taken August, 2000, 1 year post-treatment

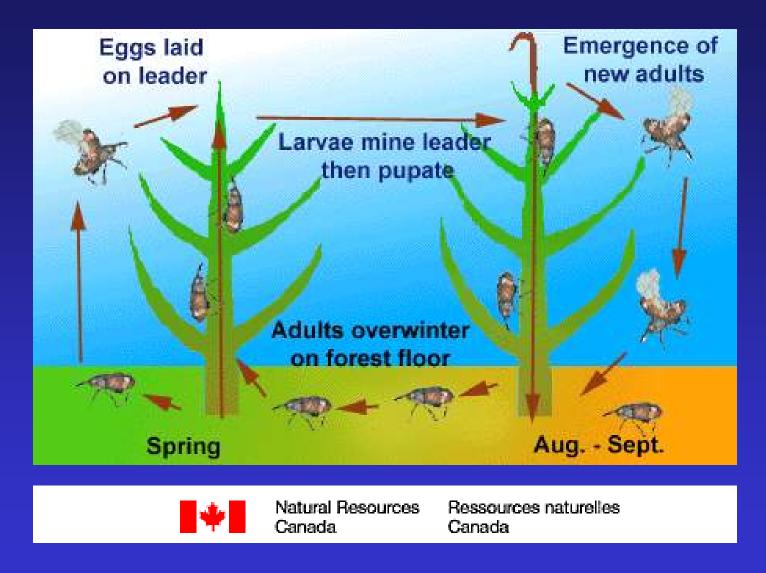
Root aphid and white grub management

Use Talstar F, 1 fl oz per gallon, in a root dip at the time of planting

For established trees, apply Admire Pro in a banded application in the spring immediately before or during a rain event

## Pales and white pine weevils

### White pine weevil life cycle









#### Photos: Whitney Cranshaw

Photo: Dave Powell USDA Forest Service

## Forsythia as an indicator plant:

## Look for first sign of yellow on buds





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#### PYRAMID TRUNK TRAP (Tedder's Trap)

New design helps increase effectiveness of catching first emergence of plum curculio and pecan weevils. This 4 foot high stand alone trap for the pecan weevil, works without bait to give you early warning of pest emergence. Works best when placed near target trees that have trunks painted white. When baited with ethyl alcohol and gum turpentine, these traps capture white pine weevil.

\*NEW-Mini Pyramid trap stands 2 feet high. Used for monitoring citrus weevil.

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Infested tissue must be removed below the point where any feeding larvae remain, or else damage will continue.







Pales weevil adults feed after emergence (mid-August - Sept.) and the next spring.

### 1 year-old damage

Seedlings interplanted among stumps are most susceptible.

Feeding can girdle and kill leaders

Fresh damage

#### Effective insecticides

Pyrethroids, bifenthrin = Talstar, Onyx Pro, Biflex lambda-cyhalothrin = Scimitar cyfluthrin = Tempo esfenvalerate = Asana

diflubenzuron = Dimilin (IGR, disrupts egg laying)

The pales and white pine weevil spray should be applied at the same timing.

One walk-through before forsythia bloom would be sufficient for control.