

Balsam Woolly Adelgid



Balsam Woolly Adelgid



Adelges piceae

- Sucking insect (aphid-ish) about 1 mm
- Only hosts are true firs
- Introduced from Europe to NE USA and SE Canada around 1900
- Appeared on west coast in late 1920s
Likely introduce on nursery stock
- California: 1928 reference to collections in Golden Gate Park and Hillsborough

Female adults (there are no males)
covered with woolly stuff



Adult (after wool teased away) and
eggs (100-to-250 per adult)

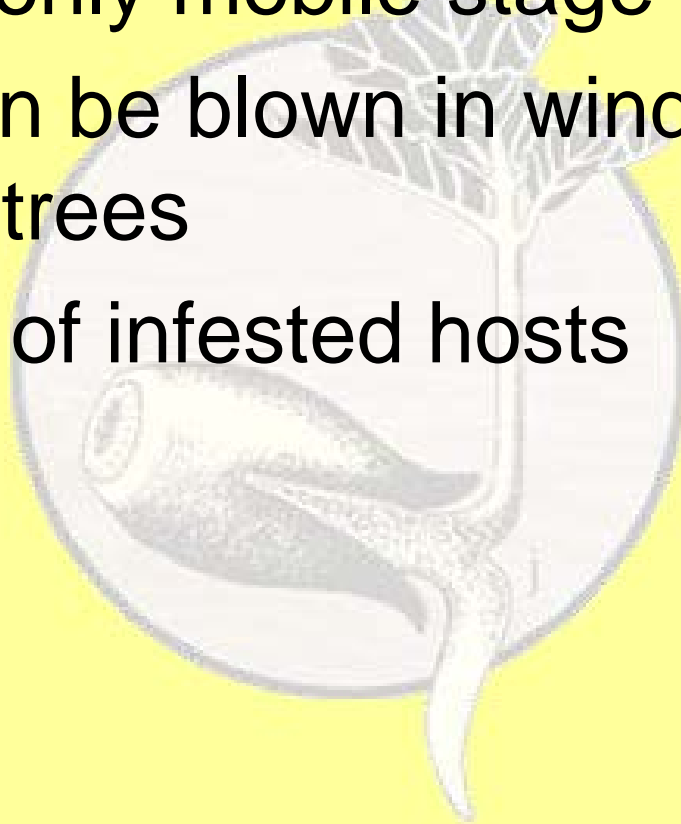


Crawler is only mobile stage.
These appear around bud break



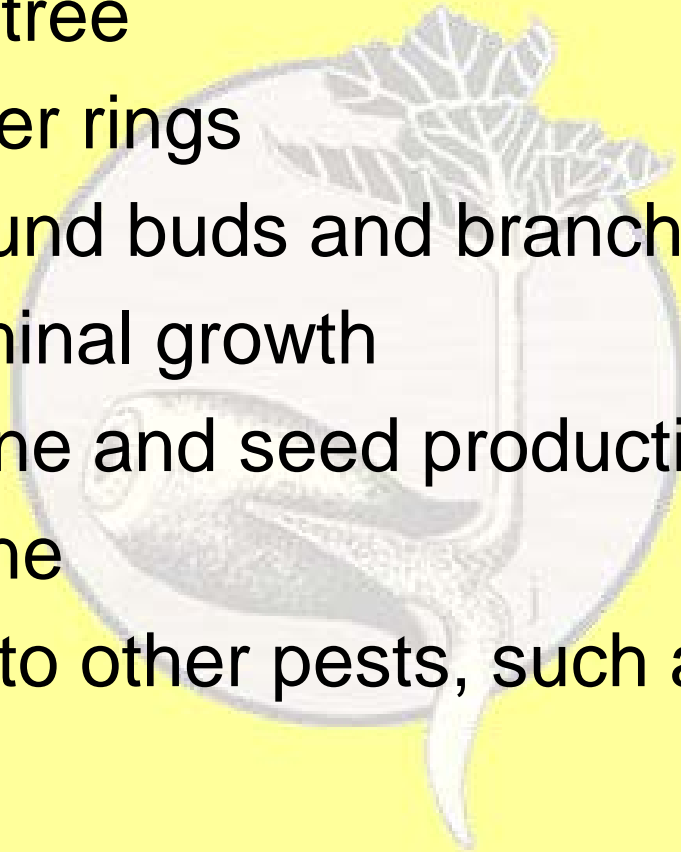
Spread

- Crawler is only mobile stage
- Crawler can be blown in wind within crown or to other trees
- Movement of infested hosts



Damage

- Adult injects substance that affects hormonal response of tree
- Irregular outer rings
- Gouting around buds and branch nodes
- Stunted terminal growth
- Reduced cone and seed production
- Crown decline
- Susceptible to other pests, such as fir engraver beetle



Gouting





Stem Infestation



Affect on wood rings



Tree and Stand Damage





Thanks to Linwood, Karen, and Tom



Adelges piceae

- Sucking insect (aphid-ish) about 1 mm
- Only hosts are true firs
- Introduced from Europe to NE USA and SE Canada around 1900
- Appeared on west coast in late 1920s
Likely introduce on nursery stock
- California: 1928 reference to collections in Golden Gate Park and Hillsborough

Female adults (there are no males)
covered with woolly stuff



Adult (after wool teased away) and
eggs (100-to-250 per adult)

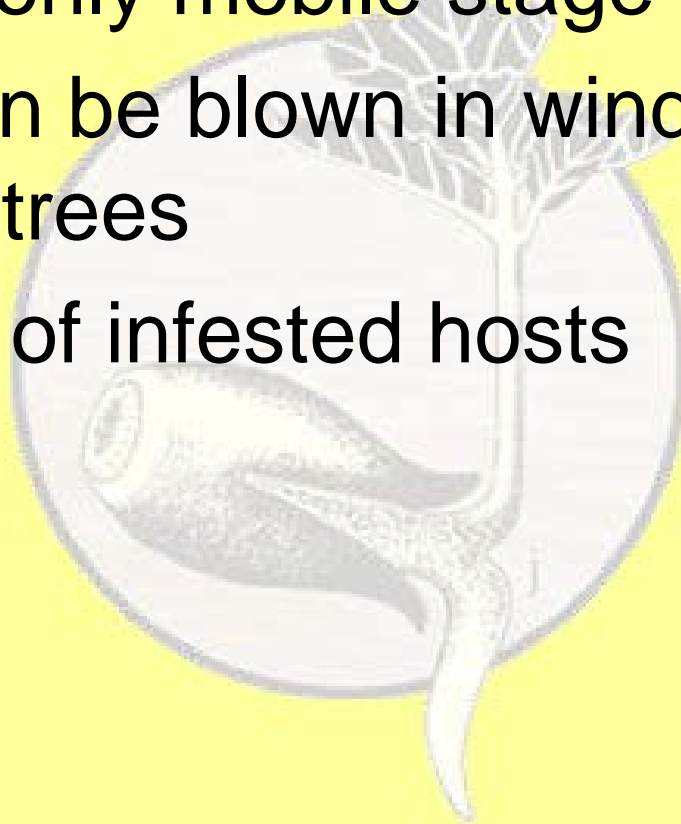


Crawler is only mobile stage.
These appear around bud break



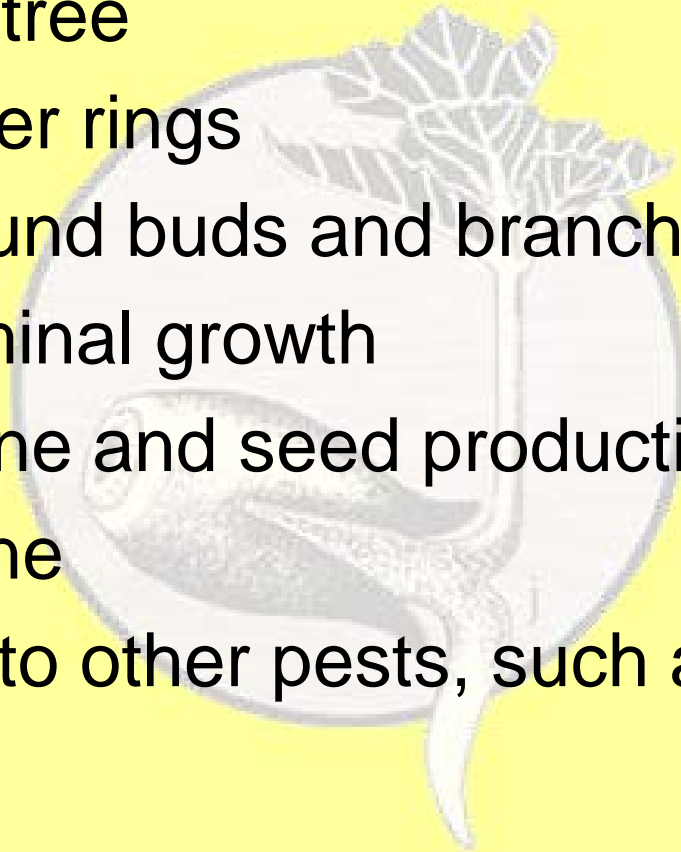
Spread

- Crawler is only mobile stage
- Crawler can be blown in wind within crown or to other trees
- Movement of infested hosts



Damage

- Adult injects substance that affects hormonal response of tree
- Irregular outer rings
- Gouting around buds and branch nodes
- Stunted terminal growth
- Reduced cone and seed production
- Crown decline
- Susceptible to other pests, such as fir engraver beetle



Gouting





Stem Infestation



Affect on wood rings



Tree and Stand Damage





Thanks to Linwood, Karen, and Tom

