

New Pest Response Guidelines *Pissodes castaneus*

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New Pest Response Guidelines (NPRG)

- Pest Information
- Identification
- Survey Procedures
- Regulatory Procedures
- Control Procedures
- Environmental Compliance
- Pathways
- References
- Other

Pissodes castaneus – Pest Information: Historical Information and Classification

Major cause of pine dieback

Secondary pest responsible for death of pines

High plasticity and adaptive ability

Table 2-1 Classification of Pissodes castaneus (DeGeer)

Phylum	Arthropoda
Class	Insecta
Order	Coleoptera
Family	Curculionidae
Genus	Pissodes
Full Name	Pissodes castaneus (De Geer)
Preferred Common Name	Small Banded Pine Weevil



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Pissodes castaneus – Pest Information

Distribution

- Europe throughout
- Asia Turkey and Siberia
- Africa Algeria, Morocco, Madeira Islands, Canary Islands
- South America Uruguay and Argentina

Pissodes castaneus – Pest Information: Hosts

Hosts

Pinaceae

- ► Abies spp. fir
- Larix decidua common larch
- Pinus spp. pines (ex. P. pinaster)

Taxaceae

Taxus baccata – English yew (CABI, 2011)

stressed or young trees prefentially

Pissodes castaneus – Pest Information Life Cycle (and Identification)



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Beentree, Gomez and Hartel, 2009 Maja Jurc, University of Ljubljana, Bugwood.org

High Phenological Variability

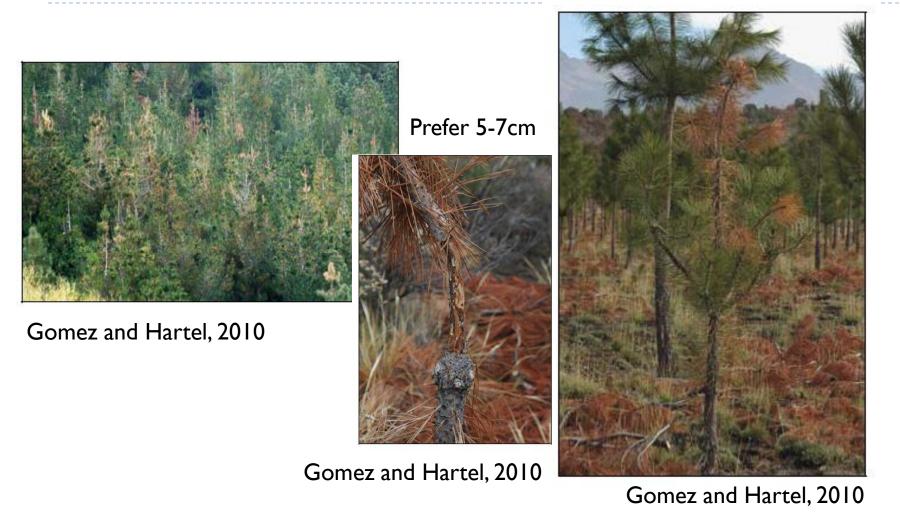
- One generation/two years to three generations per year
- Two types of development: 11-12 months and 2-3 months
- Adults and mature larvae overwinter



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Gomez and Hartel, 2010

Pissodes castaneus – Pest Information Symptoms



Pissodes castaneus – Pest Information Symptoms



Gomez and Hartel, 2010



Gomez and Hartel, 2010



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Pissodes castaneus – Symptoms



Milan Zubrik, Forest Research Institute - Slovakia, Bugwood.org



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Pissodes castaneus – Survey

- Trap logs
- Pheromone Lures



Zaleski, 2009



Pissodes castaneus – Control

Keep trees unstressed

Natural enemies

- High levels of parasitism
- Parasitoids
- Entomopathic Fungi



Zaleski, 2009

Pissodes castaneus - Pathways

Current location and possibility for natural movement.

Wood shipments



Gomez and Hartel, 2010

Pissodes castaneus – Association with Pathogens

- Which comes first pathogen or weevil?
 - Cronartium flaccidum prefers to lay on edge of rust but avoids actual rust
 - Aleppo Pine Knot Disease In presence of P. castaneus, knots form. Without P. castaneus, no knots form.
 - <u>Blue-stain fungus Leptographium serpens</u> in presence of fungus,
 P. castaneus adults emerge earlier and in greater numbers.
 Prefer trees with the fungus. Not a vector for the fungus.



THANKS

PestLens