ELEPHANT WEEVIL

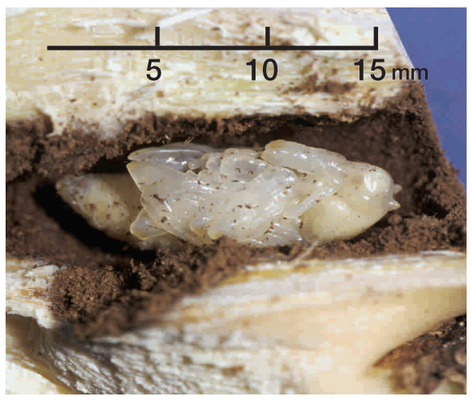
(Orthorhinus cylindrirostris)

Observations from the Langhorne Creek wine region

VISUAL IDENTIFICATION OF LIFECYCLE

Larva → Pupa → Emergence Hole → Mature Weevils

larva : approximate length 16mm similar in appearance to witchetty grubs, soft and fleshy, creamy yellow and legless with brown head



pupa : approximate length 20mm larva starting to pupate, developing wing covers

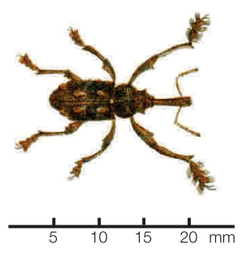
Elephant Weevil emergence hole : diameter 5-6mm

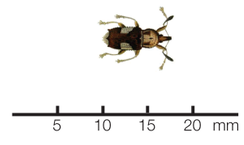
adult Elephant Weevil :
- length 8-20mm
- colour - brown/grey
- long slender snout
- very long forelegs

adult Vine Weevil :
- length 5-8mm
- colour - distinct white stripe on side of body
- proportionately shorter snout and forelegs compared to Elephant Weevil

(1)

Elephant Weevil
(Orthorhinus cylindrirostris)





(2)

EVIDENCE OF ELEPHANT WEEVIL IN VINEYARDS

Stunted growth

Weakened structure

Frass, larva and tunnelling

Emergence holes

Observations cited in literature review (not necessarily sighted at Langhorne Creek)

- signs of activity from chewing on buds and bark. (4) (5) (6)
- attacks weaker vines (6)
- ringbarking of trunk (3) (4) (6)
- emergence holes in trunk and/or cordon generally within 30cm above soil surface (4) (6)

Other possible host plants

- Blueberry bushes (5)
- Citrus (7) (8)
- Eucalyptus (5)
- Stone fruits (5)

Control Measures

- taken at Langhorne Creek:

- cut out affected cordon
- remove from vineyard
- burn removed wood
- re-train vines

Bibliography
1) Ecowatch: a partnership between Bookmark Biosphere, 5 Riverland schools and CSIRO Entomology; www.ento.csiro.au/Ecowatch/Coleoptera/Coleoptera.htm 2) CSIRO Entomology and Department of Agriculture, Fisheries, & Forestry Australia; www.ento.csiro.au/aicn/ **3)** Goodwin, S, Haywood, C & Wellham, T (1998), Controlling persistent borer problems in Hunter Valley vineyards, *Australian Viticulture*, July/August, pp51-52 **4)** Goodwin, S & Petit, M (1990), Insect borers in Hunter Valley Vineyards, *Australian Grapegrower & Winemaker*, April, pp 7-15 **5)** Hely, P C, Pasfield, G & Gellatley, J G (1982), **Insect pests of fruit and vegetables in NSW - The Australian Landscape**, Incarta press, Clayton, Victoria **6)** Nicholas, P, Magarey, P & Wachtel, M (1994), **Diseases & Pests**, Winetitles, Adelaide, p 69 **7)** Seeman, O, Farquhar, D & Domeney, P (2002), Towards understanding weevils in vineyard ecology, *The Australian & New Zealand Grapegrower & Winemaker*, 464, pp36-40 **8)** Smith, D, Beattie, G.A.C. & Broadley, R (1997), **Citrus pests and their natural enemies - Integrated pest management in Australia**, DPI Queensland, Brisbane *Photographs courtesy*: M Gemmell, M Keller, M Tummel, J Witherspoon, F Wood

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p: 08 8537 3362 email: info@langhornewine.com.au

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