

Pest Profile



Photo credit: Robert Webster (Xpda), Wikimedia

Common Name: Orchard Mason Bee

Scientific Name: *Osmia lignaria*

Order and Family: Hymenoptera: Megachilidae

Size and Appearance:

	Length (mm)	Appearance
Egg	1.4 - 4 mm	<ul style="list-style-type: none">● Elongated and white.
Larva/Nymph	12 - 17 mm	<ul style="list-style-type: none">● Maggot-like and white.
Adult	11 - 14 mm	<ul style="list-style-type: none">● Metallic dark blue to blue-green.● Males with a patch of white hair on face, females without.● Males with long antennal segments used in identification.● Females identified by deep median emargination on clypeus (broad plate on head).● Body covered in pubescence.
Pupa (if applicable)	12 - 14 mm (female) 10 - 12 mm (male)	<ul style="list-style-type: none">● Dark brown, silkened cocoon.● Oval with nipple-like bump on the apical end.● Pupa within cocoon similar in appearance to adult, but without developed wings.

Type of feeder (Chewing, sucking, etc.): Chewing

Host/s: *Osmia lignaria* are important pollinators for a number of plants, including horticultural and agricultural crops. Crops include apple, pear, almond, blueberry, and cherry. The following plant families are pollinated by *Osmia lignaria*; Brassicaceae, Ericaceae, Fabaceae, Grossulariaceae, Hydrophyllaceae, Limnanthaceae, Liliaceae, Ranunculaceae, Rhamnaceae, Rosaceae, and Salicaceae.

Description of Damage (larvae and adults): While these bees do not cause damage, they nest in existing holes occasionally found on human structures. This can put them in contact with people and while they are not aggressive, they can sting if mishandled.

References:

Bosch, J., & Kemp, W. P. (2000). Development and emergence of the orchard pollinator *Osmia lignaria* (Hymenoptera: Megachilidae). *Environmental Entomology*, 29(1), 8-13.

Bosch, J., & Kemp, W. P. (2001). *How to manage the blue orchard bee as an orchard pollinator*. Sustainable Agriculture Network/National Agricultural Library.

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