

Lemon bud moth

Prays parilis

Fact sheet

Rachelle Johnstone, WA DPIRD, 2024

Table 1. Risk and monitoring period for lemon bud moth activity.

Flowering			Fruit drop		Golf ball			Colour break		Maturation		
Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	

Description

Larvae: lemon bud moth larvae are yellow to reddish-brown and grow up to 10 mm long. They are usually found within the buds of unopened lemon flowers, especially in summer and autumn lemon blossoms (Figure 1).

Adults: adults are beige with brown markings and have a wingspan of about 10 mm (Figure 2).

Life cycle

Female moths lay up to 20 eggs on developing flower buds with one larva surviving per bud. The hatched larvae then bore into the developing flower buds, feeding on the internal parts and ovary. Two weeks after hatching, larvae leave the bud to form a lace-like cocoon (Figure 3), often at the edge of a curled leaf or on flowers. The complete life cycle takes 3 weeks in summer but longer in autumn with the cooler temperatures. There are 6–7 generations per year.

Damage

Damage to flowers and developing fruit caused by feeding larvae can reduce fruit set or cause misshapen fruit. All varieties are attacked but more commonly lemons. Damaged flowers can be identified by a small hole in the developing flower bud (Figure 4). The flower buds are full of frass and webbing and are readily invaded by fungal pathogens (such as grey mould) in suitable conditions.

Threshold: 50% or more flower buds or flowering shoots infested. If flowering is poor, reduce the action level.

Risk period: flowering, particularly summer and autumn (Table 1).

Monitoring

Monitor fortnightly during flowering, particularly in summer and autumn. Check 5 random flower shoots per tree for webbing on flowers or small holes (Figure 4).

Management

Very little research has been done on this pest in Australia. Chemical control is difficult as there are currently no registered chemicals for lemon bud moth in citrus.

More information

Smith D, Beattie GA and Broadley R (1997) *Citrus pests and their natural enemies: integrated pest management in Australia*, Queensland Department of Primary Industries. <http://hdl.handle.net/10462/pdf/9446>



Figure 1. Lemon bud moth larva.

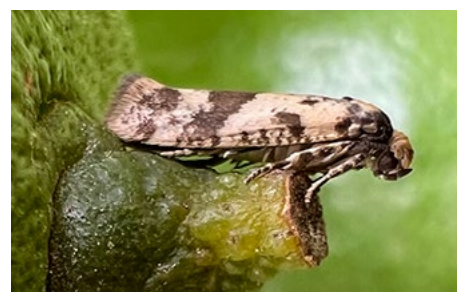


Figure 2. Adult lemon bud moth.



Figure 3. Lemon bud moth pupae within a silken mesh cocoon.



Figure 4. Flower buds damaged by lemon bud moth, identified by a small hole.

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