

POTATO TUBER MOTH (*Phthorimaea operculella*)

This has been a pest in South Africa since 1985 and can be found in all the provinces. It is a problem in warmer areas where potatoes are cultivated during summer and where the rainfall is relatively low.



The moth is about 7 mm long and represents the mature stage. The wings are gray with dark gray spots. The moth is mostly active during the night. Moths live for approximately 2 weeks and females can produce up to 250 eggs. The eggs are laid on the plant and on the soil beneath the plant. Eggs are white at first and become yellow and later black just before hatching.

The larvae are miners and this is the harmful stage that attacks all parts of the plant.



The fully grown larvae have dark brown heads and the abdomen is greenish or pinkish.

The miner larvae is very active and tunnels between the upper and lower leaf surface or beneath the tuber skin.



Breeding takes place throughout the year, slowly in winter and extremely rapid in summer, when a generation can be completed in less than one month. The larvae complete their development within the plant tissue, then leave and pupate in debris at ground level, between potatoes in storage or niches in the stores.

Optimal conditions for damage

The moths attack potatoes in the field as well as in stores. Damage is severe in warm, dry conditions and even more severe in stores in the absence of control measures.