PEST FACT SHEET

Trimen's false tiger moth

Agoma trimenii

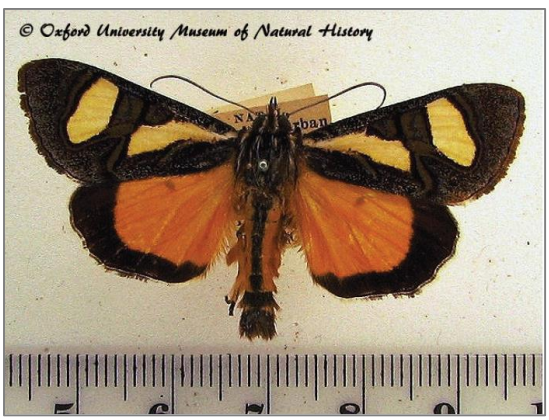
Higher taxon: Lepidoptera: Noctuidae: Agaristinae
Synonyms: *Aegocera trimenii*, *Aegoceropsis trimenii*, *Mitophrys agoma*, *Aegocera elegulata*, *Mitophrys halans*, *Tuerta ovifera*, *Aegocera tricolor*

Trimen's false tiger moth is a poorly understood moth which has recently been confirmed as a pest of grapevines in South Africa. It is native and widespread in southern Africa. Trimen's false tiger moth is predominantly a pest in grape growing regions along the Orange River in the Northern Cape, in Brits, North West Province, and Groblersdal, Limpopo Province.

Larvae seem to be specific to indigenous and introduced grapevine hosts and cause damage by eating grapevine leaves. During sporadic outbreaks, which are becoming more common, defoliation can reach large-scale levels.

To date (Oct 2017), no insecticides are registered against Trimen's false tiger moth, no natural enemies have been identified and no integrated control measures have been developed. This pest requires a great amount of research into its biology and control.

Trimen's false tiger moth, *Agoma trimenii*, larva.



Trimen's false tiger moth, *Agoma trimenii*, adult. From: . http://www.africanmoths.com/pages/NOCTUIIDAE/AGARISTINAE/agoma%20trimenii.htm

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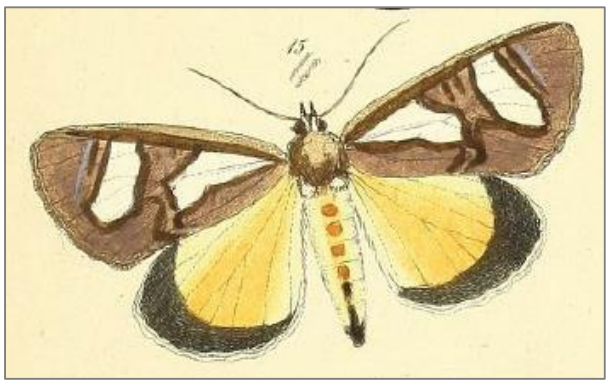
BIOLOGY

Trimen's false tiger moth is a typical noctuid moth. Adults fly at night and are attracted to light. Females lay eggs singly on vine leaves. These hatch after approximately three days and larvae can often be seen suspended on silken threads from vine leaves. Larvae drop to the ground and pupate in the soil. Since this pest has not yet been studied in detail, it is unknown which factors affect the distribution or abundance of this pest in vineyards. Similarly, little is known about development thresholds or generation lengths.

ECONOMIC IMPORTANCE

Since 2005, Trimen's false tiger moth has become an increasingly harmful pest on table and wine grape vineyards in South Africa. Larval feeding on grapevines can lead to extreme defoliation of vines and populations peak between October and March. Outbreaks of the pest in Northern Cape wine and table grapes began in 2008 and occur most often in January, when wine grapes are harvested. In Groblersdal, Limpopo, outbreaks occur most commonly in December.



Trimen's false tiger moth, *Agoma trimenii*, adult illustration, pale morph. From: Wien, K.K. (1861-1875).

HOST PLANTS

The only known larval food plants of Trimen's false tiger moth are native and introduced species of grapevines.

Common name	Scientific name	Family
Grapevine	*Vitis* spp.	Vitaceae
Wild grape	*Cissus quadrangularis*	Vitaceae
Creeper	*Cyphostemma cirrhosum*	Vitaceae
Wild grape	*Rhoicissus digitata*	Vitaceae

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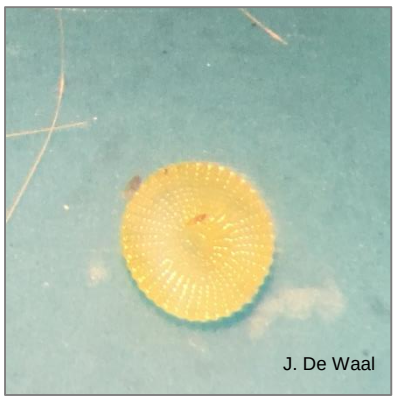
IDENTIFICATION

Egg

Size: 0.7 mm diameter

Duration: 3 days

When first laid, eggs are yellow but become cream-coloured with brown markings as they mature. Laid singly on the leaves of grapevines.



Trimen's false tiger moth egg.

Larva

First instar size: 3 mm long

When first hatched, creamy-white in colour. Later instars have bright black and yellow transverse bands along the thorax and abdomen. Head and hump at abdominal end of body are both orange. Long pale hairs emerge from all over body. Late instar caterpillars may also be predominantly black.

Trimen's false tiger moth. Larvae instars and colour morphs

Pupa

Dark-coloured, in soil.

Trimen's false tiger moth pupa.

Adult

Size: 54 mm wingspan

Forewings greyish-black with a cream-coloured oval patch near the tip and a triangular cream patch near the base. Hind wings yellow to orange with a black band along the margin. Abdomen orange with a black stripe along the center line.

Trimen's false tiger moth adults.

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MANAGEMENT

Monitoring

Monitoring for Trimen's false tiger moth should be conducted in conjunction with monitoring for other pests in South African vineyards in accordance with widely practiced protocols.

Prevention

There are no known prevention measures which can deter this pest. As for all pests, diversity and abundance of natural enemies should be encouraged as best as possible by augmentation of parasitoids and avoiding over-utilization of pesticides.

Control measures

No insecticides are registered for control of Trimen's false tiger moth, but trials have been conducted using products containing bacterial agent *Bacillus thuringiensis*. Control products used against other moth pests will be hopefully prove effective against this species as well. Insecticidal treatments should be avoided as they may lead to outbreaks of secondary pests. Rotation of insecticides should also be utilized as much as possible to deter development of insecticidal resistance.

Natural enemies (biological control)

No information is available on natural enemies of the Trimen's false tiger moth, but it is hoped that generalist parasitoids of Noctuidae may be effective against this pest as well.

Attractants and trapping (pheromonal control)

No pheromone has been isolated for this pest.

Trimen's false tiger moth damage.

Trimen's false tiger moth damage.

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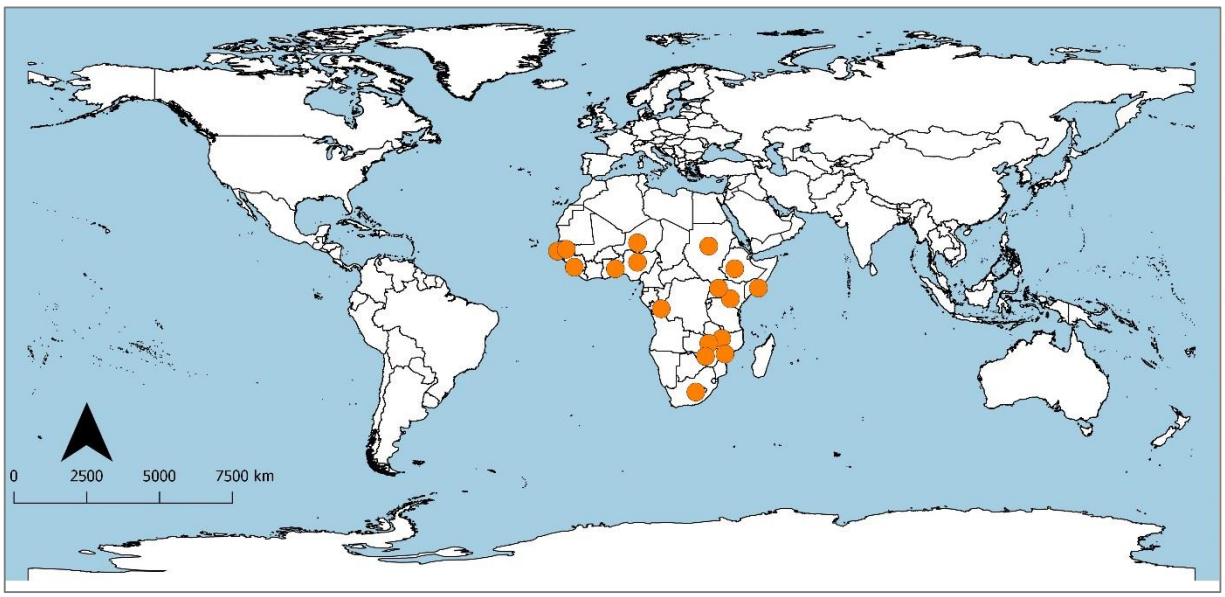
QUARANTINE REGULATIONS

Trimen's false tiger moth is not recognized as a pest of quarantine importance anywhere in the world.

DISTRIBUTION

Trimen's false tiger moth is native to and widespread throughout southern Africa. It is also found to a lesser extent in Central, West and East Africa. In South Africa, it has been reported on grapes along the Orange River in the Northern Cape and from Brits, North West Province, and Groblersdal, Limpopo Province.



Trimen's false tiger moth, *Agoma trimenii,* distribution. Data from www.africanmoths.com. Map drawn by C.S. Bazelet.

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