

# NOTES ON TANAOC TENOTA DUBIA PHILPOTT (LEPIDOPTERA : ? HYPONOMEUTIDAE\*)

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## SUMMARY

**Tanaoc tenota dubia** (Lepidoptera : ? Hyponomeutidae) has been rediscovered around the city of Auckland. The larva of this little-known species bores in the terminal green shoots of **Coprosma robusta** (Rubiaceae). Localities and some details of life history are given.

**Tanaoc tenota dubia** Philpott (1932) was described on a unique male specimen collected by C. E. Clarke in Auckland. A second male specimen was collected also in Auckland by D. D. Milligan (Hudson 1939). Hudson (1939 : p.441) figures the holotype. No further records of the species have been found.

The writer has found the larvae, pupae, or the distinctively damaged green terminal shoots of **Coprosma robusta** (Rubiaceae) in the following localities from January, 1965, to March, 1966: Waiuku State Forest (Waikato River estuary); eastern Hunua Range; Castor Bay; Hobsonville; Riverhead State Forest; Waiheke Island. No damaged **C. robusta** were seen at Woodhill State Forest, Maramarua State Forest, or along the Coromandel Peninsula. The writer concludes that **T. dubia** is restricted to the eastern side of the Auckland isthmus with a southwesterly extension to Waiuku. J. Dugdale (pers. comm.) saw no trace of damage at Waipoua.

The larva, which superficially resembles plume-moth larvae in possessing elongate, slender abdominal prolegs, is a stem borer, hollowing out most of the live tissue in the terminal or penultimate internode. The larvae packs its tunnel with frass. The time spent tunnelling was not ascertained. The foliage and stem above the entry point (which is not always associated with a stipular area) wilt and then turn black. This damage is distinctive and sometimes nearly all the terminal shoots on a shrub may be damaged. However, shrubs severely damaged in the past recover. From the size of the exit holes it is concluded that one larva will kill more than one twig. Plants growing in the shade of other trees are preferred to those in direct sunlight.

The larva when full grown leaves the dying (or dead) terminal twigs and finds a somewhat curled green leaf, making a white silk cocoon of three layers on the concave surface (usually the lower surface). On the host plant these cocoons are quite conspicuous. The larva will also pupate on any suitable leaf of other plants in the vicinity of the host. **Melicytus ramiflorus** (Violaceae) and **Myrsine australis** (Myrsinaceae) have been recorder. These plants are not damaged by **T. dubia**.

The pupa is pale green, except during the last few days, when the fawn-grey adult colouration shows through. Both larvae and pupae have been found from October through to March. No adults were found during the day so **T. dubia** is probably nocturnal. J. Dugdale (pers. comm.) records that in the laboratory reared adults were reluctant to fly and often dropped to the bottom of the rearing container during the day. The writer observed **Cermatulus nasalis** (Pentatomidae) sucking the contents of a full grown larva partly emerged from its exit hole.

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#### REFERENCES

- HUDSON, G. V., 1939: "A Supplement to the Butterflies and Moths of New Zealand," pp. 388-481, Ferguson and Osborn Ltd., Wellington.
- PHILPOTT, A., 1932: Notes and Descriptions of N.Z. Lepidoptera. **Trans. Proc. N.Z. Inst.**, **62**: 26-36.
- \***Note:** The family position of **T. dubia** and its Australian relatives, is in doubt (I. F. B. Common, pers.). **T. dubia** may at present be regarded as a Hyponomeutid, and superficially similar to species of the genus **Aetherastis** Meyrick from Ceylon (see Gates Clarke, 1965, "Meyrick's Microlepidoptera", vol. 5, p. 267). J. S. Dugdale.