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## Short Communication

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### RECORD OF TUSSOK MOTH ON COFFEE SEEDLINGS

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#### INTRODUCTION

Lymantriidae is a family of moths and many of its component species are referred to as "Tussock moths." The Tussock Moth caterpillars are known for their striking tufts of hair, or tussocks. The caterpillar, or larval, stage of these species often has a distinctive appearance of alternating bristles and haired projections (Schintlmeister, 2004). Like other families of moths, many Tussock Moth caterpillars have urticating hairs (often hidden among longer, softer hairs) which can cause painful reactions if they come into contact with skin.

The family Lymantriidae includes about 350 known genera and over 2,500 known species found all over the world, in every continent except Antarctica. They are particularly concentrated in Sub Saharan Africa, India, South East Asia and South America; one estimate lists 258 species in Madagascar alone (Schaefer, 1989). Apart from oceanic islands, notable places that do not host Lymantriids include New Zealand, the Antilles, and New Caledonia (Schaefer, 1989).

#### Description

Adult moths of this family do not feed. They usually have muted colours (browns and greys), although some are white, and tend to be very hairy. Some females are flightless, and

some have reduced wings. Usually the females have a large tuft at the end.



**Fig.1 Adult Moth emerged in captivity**

of the abdomen. The males, at least, have tympanal organs (Scoble, 1995, Schintlmeister 2004).

They are mostly nocturnal, but Schaefer (1989) lists 20 confirmed diurnal species and 20 more likely diurnal species (based on reduced eye size).

The larvae are also hairy, often with hairs packed in tufts, and in many species the hairs break off very easily and are extremely irritating to the skin (especially members of the genus *Euproctis*; Schaefer, 1989). Many species exhibit four

characteristic clumps of bristles on their backs, giving them the appearance of a toothbrush. Some have longer pairs of tufts near the head and rear. This highly effective defence serves the moth throughout its life cycle as the hairs are incorporated into the cocoon, from where they are collected and stored by the emerging adult female at the tip of the abdomen and used to camouflage and protect the eggs as they are laid. In others, the eggs are covered by a froth that soon hardens, or are camouflaged by material the female collects and sticks to them (Schaefer, 1989). In the larvae of some species, hairs are gathered in dense tufts along the back and this gives them the common name of **tussocks** or **tussock moths**. The Tussock Moth caterpillars, are voracious eaters capable of defoliating entire forests. (Wickman Boyd 1978)

Occurrence of the tussock moth caterpillar was noticed in the coffee nursery at the Regional Coffee Research Station Farm, Chundale during the month of June 2011. They were found feeding the leaves defoliating the seedlings. For further observation caterpillars were brought to the laboratory and placed in rearing cages.

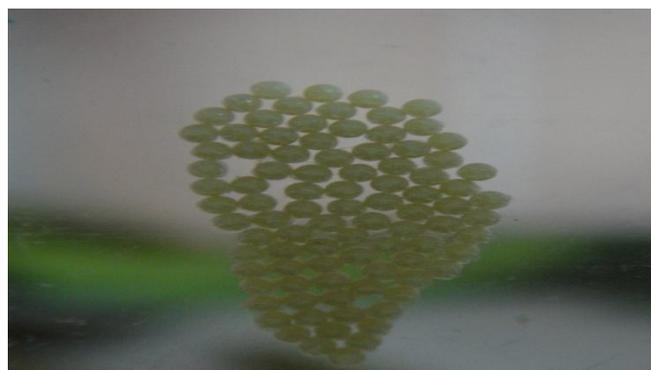


**Fig.2 Damaged seedlings in nursery**

These caterpillars were fed with coffee leaves and observed for further development. The caterpillars fed voraciously before entering pupation.



**Fig:3 Egg laying adult**



**Fig : 4 Eggs**



**Fig: 5. Eggs laid on coffee leaf**



**Fig. 6 Caterpillar of moth collected from the R.C.R.S nursery**



**Fig: 7 Pupal stage of Tussok moth**

Tussock Moth adults are often dull brown or white. Females are usually flight less and neither males nor females feed as adults. They focus on mating and laying eggs, dying within days.

Eggs are yellowish white dorso ventrally flattened and the female moth was found to lay eggs on the under surface of the leaves. Eggs laid in clusters but when the ovipositing female is disturbed while depositing eggs, the scattering of the eggs was found with eggs indiscriminately laid on the glass covering and muslin of the rearing cage. A control trial was conducted against this pest with two contact insecticides viz, Quinalphos 25 EC and Chlorpyrifos 20 EC and both the insecticides were found to be effective. (Vijayalakshmi et al., 2013)

#### REFERENCES:

1. Schaefer Paul: (Diversity in form, function, behavior, and ecology, In: USDA Forest Service (ed.): Proceedings, Lymantriidae: a comparison of features of New and Old World tussock moths: 1-19. Broomall, PA, 1989.
2. Scoble MJ: The Lepidoptera: Form, function and diversity (2nd ed.). Oxford University Press, 1992
3. Skinner, Bernard: Colour Identification Guide to Moths of the British Isles, 1984
4. Schintlmeister Alexander :The Taxonomy of the genus *Lymantria* Hubner, [1819] (Lepidoptera: Lymantriidae, 2004.
5. Wickman Boyd E: Phenology of tussock moth. In McGraw-Hill Yearbook of Science and Technology, p. 183-185. McGraw-Hill Book Co., New York, 1978.