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OCCURRENCE OF *ANTHERAEA MYLITTA* DRURY (LEPIDOPTERA: SATURNIIDAE) IN NORTH EASTERN INDIA: DISTRIBUTIONAL SIGNIFICANCE

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ANTHERAEA MYLITTA Drury is confined to the tropics, mainly to the dense, humid tropical forests of the central and southern plateau of India¹ and hence known as tropical tasar. The larvae produce the tasar silk. Sporadic occurrence of *A. mylitta* in eastern India² and western Rajasthan³ was recently reported.

During a survey for wild sericigenous insects in north-eastern India, *A. mylitta* was found frequently on its natural food plants, viz *Ziziphus jujuba* L and *Shorea robusta* Roxb throughout Assam and Meghalaya, mainly at Boko (90° 21'E: 26° 18'N), Hahim (91° 18'E: 26° 03'N), suburban areas of Gauhati (91° 75'E: 26° 20'N), Dhupdhara (91° 10'E: 25° 90'N) and Titabar (94° 40'E: 26° 44'N) in Assam and Resubelpara (90° 56'E: 26° 05'N) and Adokgiri (91° 25'E: 25° 85'N) in Meghalaya. *A. mylitta* found in north-eastern India is mainly trivoltine. The first (May–June–July) and second (July–August–September) generations are non-diapausing and the third (October–April) generation usually undergoes pupal diapause from November to March (145–160 days). The egg-to-egg development of *A. mylitta* lasts 65–75 days in non-diapausing generations (7–10 days egg stage, 30–34 days prepupal stage, 22–26 days pupal stage, 6–7 days adult stage in male and 8–10 days in female) and 200–210 days in diapausing generation (10–12 days egg stage, 42–46 days larval stage, 2 days cocoon spinning stage, 10–12 days

prepupal stage, 145–160 days pupal stage, 6–7 days adult stage in male and 8–10 days in female).

The wide distribution of *A. mylitta* from the hotter areas of Rajasthan, and tropical areas of central and southern India to sub-tropical areas of north-eastern India indicates the adaptability of the tasar silkworm to climatic extremes leading to variations in the natural populations. Natural populations that are geographically isolated in course of time develop into distinct races by accumulating genetic differences leading to reproductive isolation⁴. The natural populations of *A. mylitta* of southern and central India form one breeding population and it is widely separated from those of western Rajasthan and north-eastern India and hence reproductively isolated. Unlike *A. yamamai* Guerin, *A. assama* Westwood, and *A. sivalika* Drury which are endemic species and confined to restricted area in Japan, Brahmaputra valley of Assam (India) and Deccan plateau of southern India, *A. mylitta* is widely distributed and also the different natural populations are widely separated. In course of time, these geographically/reproductively isolated populations of *A. mylitta* will evolve into distinct races/biotypes through natural selection. Isolation is an important element in the modification of species through natural selection and largeness of area is still more important especially for the production of species capable of enduring for a long period⁵.

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