A migration of *Tirumala hamata hamata* (Macleay, 1827) in Queensland, Australia

(Lepidoptera, Nymphalidae, Danainae)

by

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**Summary:** A southerly migration of *Tirumala hamata* (Macleay, 1827) with an estimate of at least 50,000 individuals involved, together with a small number of *Cressida cressida* (Fabricius, 1775), was observed along the coast of Queensland/Australia on 30 April 1995.

**Zusammenfassung:** An der australischen Küste bei Cairns/Queensland konnte am 30. April 1995 eine südwärts gerichtet Wanderbewegung von *Tirumala hamata* (Macleay, 1827) beobachtet werden, an der schätzungsweise mindestens 50.000 Falter beteiligt waren, zusammen mit einer geringen Anzahl von *Cressida cressida* (Fabricius, 1775).

On a flight from Germany to Papua New Guinea the author made a one-day stopover in Cairns/Queensland on 30 April 1995 where he happened to witness a large migration of the blue tiger *Tirumala hamata hamata* (Macleay, 1827). The migration was first noted at Holloways Beach north of Cairns at 9.30 a.m. The butterflies were flying along the beach in southerly direction against a light southeast wind in otherwise hot und sunny weather conditions. Their flight was mostly straight or zigzag line, close to the ground or up to about 4 metres above the ground. Some interactions between individuals could be observed which caused deviations from the flight course, but no butterfly was seen settling on the ground or on flowers. Together with *T. hamata* a few specimens of the swallowtail *Cressida cressida* (Fabricius, 1775) were seen migrating in the same direction, whereas the only other butterfly present at the beach, *Hypolimnas bolina* (Linnaeus, 1764), showed stationary behaviour. During the one hour stay at this place about 2,000 migrants could be observed. The migration was also noticed further north while driving along the Captain Cook Highway towards Port Douglas, with many individuals killed by the traffic, but the phenomenon seemed to be confined to the narrow coastline, because no migrants could be seen only a few 100 metres away from the coast (like at Cairns airport) and no butterfly was seen flying across the sea. Assuming the migration lasted the whole day with a rate of 100 individuals migrating per minute along a 100 metre coastline, a calculated estimate of at least 50,000 butterflies was involved in the migration event. Finally near Port Douglas around noon, stationary *T. hamata* butterflies were also seen in Eucalyptus groves and remnants of rainforest, partly feeding on flowers of different bushes (including *Lantana*).

*Tirumala hamata* is an element of the wet tropics with an extensive distribution from the Moluccas, Timor and New Guinea to the Solomon and Fiji islands in the east, and to North Australia and Queensland in the south, only rarely found in New South Wales and far eastern Victoria (Common & Waterhouse, 1981), but usually common in the tropical part of its range.
References

ACKERY, P. R. & R. I. VANE-WRIGHT (1984): Milkweed butterflies, their cladistics and biology. – British Museum (Natural History), London.

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