

5. Weaver Ants, *Oecophylla smaragdina*, Systematically Predating Worker Sweat Bees, *Trigona* sp., by Snatching them from flight.

On the 8 November 1977 at 10:00 hours in clear sunny weather a nest of a small Old World sweat bee, probably of the genus *Trigona* (Family Apidae; Subfamily Apinae) was located due to the presence of a small swarm of the bees hovering directly above it. The nest entrance was a small aperture of less than 15 mm in diameter in the trunk of a *Rhizophora apiculata* mangrove tree one and a half metres above the exposed tidal mud substrate of the forest floor. The nest tree was located in the centre of an extensive mangrove forest, at the edge of a two metre wide channel; at Ao Nam Bor, Phuket Island, western peninsular Thailand. For much detail of the ecology of this particular mangrove shore see FRITH, D.W.; TANTANASIRIWONG, R. & BHATIA, O., 1976. Phuket Mar. Biol. Center Res. Bull. 10: 1-37.

In addition to the discrete swarm of bees hovering above the nest site, bees were going back and forth to and from the nest. About the nest aperture, and on the tree trunk directly above it, was a mass of weaver ants *Oecophylla smaragdina* (Family Formicidae; Subfamily Formicinae). Close observation of the bees nest over a period of approximately an hour, during which some of the insect activity was filmed, enabled me to observe the weaver ants systematically predated the flying bees. The ants immediately about the bees nest entrance would stand on their rear legs and stretch upward, downward, or forward in an attempt to snatch a flying bee from its flight path to and from the nest. I watched at least eight ants successfully grasp a bee, bring it down between its forelegs and bite into it with its mandibles, and subsequently carry the bee off up the tree trunk. Another ant would fill the place left by the departing captor. On several occasions an ant was seen to grasp a bee in its mandibles and attempt to bring it down, but suddenly release it. This suggests that possibly the bees had bitten the ants. Bees of the genus *Trigona* cannot sting as their stinging apparatus is vestigial (Dr Paul Freeman pers. comm., CSIRO 1970. *Insects of Australia*. Canberra). The same activity as above was again observed at 11:15 hours on the 9 November 1977, during overcast and showery weather.

The 16 mm colour cine film taken of this remarkable behaviour was exposed with the intention of including some of the footage in the B.B.C. Natural History Unit production "Wildlife Safari to Thailand" produced by Mr. Jeffery Boswall. This is a six-part television series and the particular film including the insect sequence will describe the wildlife in a mangrove forest on Phuket Island. It is expected to be transmitted in Great Britain shortly before Christmas 1978.

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