THE GENUS EUTHORE SELYS IN VENEZUELA, WITH SPECIAL NOTES ON EUTHORE FASCIATA FASCIATA (HAGEN, 1853) (ZYGOPTERA: POLYTHORIDAE)

J. DE MARMELS

Departamento e Instituto de Zoología Agrícola,
Facultad de Agronomía, Universidad Central de Venezuela,
Apartado 4579, Maracay-2101-A, Aragua, Venezuela

In Venezuela the genus Euthore is represented by three species, all of them described from this country. The three species are montane and occur at altitudes between 1000 and 2000 meters above sea level. E. f. fasciata and E. meridana Sel. are found in the Venezuelan Andes. The first one inhabits the Sierra de Perijá, Zulia State, and the Cordillera de la Costa Central (Aragua and Miranda States and Federal District). E. meridana has been caught in the Andes of Mérida and in the Sierra de Terepaima, Mérida and Lara State, respectively. E. montgomeryi Rácenis is restricted to the Guayanan Highlands, Bolivar State. According to MONTGOMERY (1967) E. plagiata Sel. should be considered a synonym of fasciata. E. plagiata was described from Rio Negro, Brazil. However, taking into account the Andean distribution of fasciata, and the fact that only one female and no male of plagiata is known, plagiata may indeed be a valid species.

Little is known of the ecology and behaviour of the Polythoridae in general. During the past three years, however, many excursions into "El Avila" National Park due North of Caracas in the Coastal Cordillera, have been carried out. Populations of *E. fasciata* live in several canyons on the southern slope (the northern slope has so far not been checked). Only during the rainy season, from May to November, did I find the species in any abundance. In the dry season one may see only single specimens, if any. The canyons where *E. fasciata* lives, are covered with gallery forest, which at higher elevations becomes transitional to cloud forest. The species has a particular micro-habitat which is normally confined to patches of a few square meters each.

J. de Marmels

This habitat is found mostly on steep slopes, parallel to the main stream, where minuscule rivulets and seeping water are constantly dripping and keeping rocks, earth, roots and small plants wet. The males settle here near the ground in the sun, awaiting females. Sometimes they fly up, chasing away other males, but often two or three of them are found together, at least as long as the sun is shining on the spot. In cloudy weather the males settle higher onto bushes. - Territoriality is not well developed and the males often change from one patch to another. A possible explanation for this behaviour can be seen in the fact that the micro-habitat is not continuous in space, and the few sunny spots on the bottom of the forest are constantly wandering with the moving sun, coinciding only for a short time with patches of suitable habitat.

When a male detects a female he flutters above her and tries to perch upon her wing tips. When the female is unwilling she flutters, without leaving her perching site. The male then gives up quickly and settles at some distance. — One copula has been observed. During the copula the male clapped his wings every few seconds. After one minute the female detached herself from the male's second abdominal segment and began to flutter. The male tried several times to bring the female into position again, but finally released her neck. — During oviposition, which the female carries out alone, she claps her wings every few seconds, while depositing her eggs into wet roots or bare earth. Oviposition may take place here, where the males are waiting for the females but often in the shadow when the males are gone. No larvae or exuviae have been found.

The typical colour form of *E. fasciata* males is characterized by its mother-of-pearl white wing bars. However, in two canyons of the Coastal Cordillera populations have been found with a predominant part of the males showing butter-yellow wing bars. I call this form *sulphurata*. The females of all populations show invariably a fluorescent white stripe on their hind wing.

There seems to be a Batesian-Mimicry relation between the males, especially the yellow form, and some sympatric butterflies of the distasteful Ithomiidae family, namely *Hyalyris oulita cana* (Hsch.) and *H. coeno* (Hew.). The female of *E. fasciata* resembles other ithomiids, such as *Greta andromica* (Hew.) and similar forms. Although resemblance in colour pattern between pinned specimens of the dragonfly and these ithomiids is not striking, flying specimens in their semi-shadowed habitat are often difficult to distinguish at a glance. The butterfly-like flight of the dragonfly, together with the flashing wing marks, evoke exactly the same effect as the model ithomiids themselves do when flying.

REFERENCE

MONTGOMERY, B.E., 1967. Studies in the Polythoridae. -Acta biol. venez. 5: 123-158.