

**THE FIRST MEXICAN RECORD OF *PERISOLESTES MAGDALENAE* (WILLIAMSON & WILLIAMSON) (ZYGOPTERA: PERILESTIDAE)**

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**Abstract** – Collections of adult Odonata at La Sierra de Los Tuxtlas, Veracruz, México, during 1977 yielded 1 ♂ of *P. magdalenae*, which has been known previously only in the area from Guatemala to Colombia.

**Introduction**

The Perilestidae includes two genera of neotropical dragonflies, whose distribution center is probably the Brazilian highlands, in the Amazon River Basin (WILLIAMSON & WILLIAMSON, 1924).

The genus *Perilestes* comprises six species, viz. *attenuatus* Sel., *fragilis* Hag., *gracillimus* Kenn., *khali* Wllmsn & Wllmsn, *minor* Wllmsn & Wllmsn and *solutus* Wllmsn & Wllmsn.

*Perissolestes* includes ten known species, viz. *aculeatus* Kenn., *castor* (Kenn.), *cornutus* (Wllmsn & Wllmsn), *guyanensis* (Wllmsn & Wllmsn), *klugi* Kenn., *magdalenae* (Wllmsn & Wllmsn), *pollux* (Kenn.), *remotus* (Wllmsn & Wllmsn), *remus* Kenn. and *romulus* Kenn. *P. remotus* and *P. magdalenae* are the only two species known to occur in Central America. The former has been collected in Costa Rica (PAULSON, 1969) and Panama (Westfall, 1977, pers. comm.), while the latter is recorded from Guatemala (Flint, 1977, pers. comm.), Costa Rica and Panama (Westfall, 1977, pers. comm.).

KENNEDY (1937) indicates that the

Perilestidae in South America are associated with *Paraphlebia* and *Thaumatoneura*, whose fossil relatives are found in the Eocene (Green River Formations) and Miocene (Florissant) of North America. Since these two genera and their associated fossils are more closely related to living oriental genera than they are to the present South American fauna, the Perilestidae and the other primitive genera should be considered as authentic "living fossils".

The members of this family are forest dwellers, inhabiting the primary tropical rain forest. They are found in dark places, perching on branches of small trees near small streams.

**Habitat and measurements of the Mexican specimen**

The Sierra de los Tuxtlas is located in the SE of the state of Veracruz between 18°34'-18°36' Lat. N. and 95°04'-95°09' Long W.

*Perissolestes magdalenae* was collected in a small stream near the Estación de Biología Tropical "Los Tuxtlas" which is maintained by the Instituto de Biología, Universidad Nacional Autónoma de México. The climate of the zone is A-type (humid-warm) with an average annual rainfall of 4500 mm and an average annual temperature of 22°-25°C (GARCÍA, 1970).

The area of the Estación de Biología is

covered with tropical rain forest, and the dominant trees of the canopy are: *Poulsenia armata* (Moraceae), *Brosimum alicastrum* (Moraceae) and *Nectandra ambigens* (Lauraceae) (PIÑERO et al., 1978). The collecting site is a small creek inside the primary rain forest and this stream has a low water level during the dry season (March-June); the environment of the site coincides with the description of the Perilestidae habitat-type of WILLIAMSON & WILLIAMSON (1924).

*P. magdaleneae* was found in this place with other Zygoptera typical of this habitat such as: *Heteragrion alienum* Wllmsn, *Heteragrion albifrons* Ris, *Cora marina* Sel., *Argia* spp. and *Hetaerina* spp.

The only specimen collected is a male taken on Sept. 3, 1977 by the junior author. It is deposited at the Instituto de Biología, UNAM. The measurements (in mm) are as follows: total length: 56; – abdomen: 49; – hind wing: 23; – pterostigma of front wing: 1.2; – pterostigma of hind wing: 1.3; – abdominal appendages: 1.8.

The species is very rare in the zone and we have searched in vain for additional specimens.

#### Discussion

The Sierra de los Tuxtlas is considered the northern limit of the American tropical rain

forest. The latter extends from South America through Central America up to México (states of Veracruz, Oaxaca, Tabasco, Campeche and Chiapas). The Perilestidae are rain forest inhabitants, their distribution following the distributional patterns of the tropical rain forest. On the basis of our record, therefore, we suggest that the northernmost limit of *Perissolestes magdaleneae* and, consequently, of the family is La Sierra de los Tuxtlas, Veracruz, México.

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