AN UNUSUAL METHOD FOR CATCHING ADULT DRAGONFLIES FOR FOOD IN GUATEMALA (ANISOPTERA) $\,$

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Abstract – The traditional method of collecting adult Anisoptera for food in Guatemala by knocking them down with twigs is brought on record and it is documented photographically.

Introduction

Dragonflies are known to be used as human food in several countries of the World, mostly in tropical areas (TAYLOR, 1975; MENZEL & D' ALUISIO, 1998; CORBET, 1999), both as larval (RAMOS-ELORDUY et al., 1998; RA-MOS-ELORDUY & PINO, 2001) and adult stages (TAYLOR, 1975; BELLE, 1994; MEN-ZEL & DÀLUISIO, 1998; RAMOS-ELOR-DUY et al., 1998; RAMOS-ELORDUY & PINO, 2001). In Latin America, dragonflies are known to be eaten in México, in the states of Hidalgo and Estado de México (RAMOS--ELORDUY et al., 1998; RAMOS-ELOR-DUY & PINO, 2001), where they are consumed mostly as larvae. However, RAMOS-ELOR-DUY & PINO (2001) reported that adults of Enallagma praevarum (Hag.) are also consumed in Hidalgo.

Methods for collecting adult dragonflies for food are not well documented, although BELLE (1994) commented that in the Lesser Sunda Islands of Bali and Lombok, Indonesia, dragonflies were hunted with the aid of a "fishing rod" made from 3 m long stalk rubbed at the end with the sticky milk from a nangkatree (Artocarpus integra Merr.). The dragonflies, which occur in the vegetation along the road, were flushed with the tip of the stalk. The insects often alighted on the sticky tip of the stalk and became firmly attached. Most specimens included Orthetrum sabina (Dru.), a few

Crocothemis servilia (Dru.) and Pantala flavescens (Fabr.). A similar observation was reported by TAYLOR (1975) for the Island of Lombok.

Observation and discussion

During a botanical expedition on 13 August 2002, one of us (CGH) observed local people using dead twigs to knock down flying adult anisopterans to the ground (Figs 1-2) at Aldea Yolcultac, 30 km NW of San Mateo Ixtatán in the highlands of Guatemala (15°29'36"N and 91°29'42"W, 3365 m asl). The local name for these insects is "Tzolin" ("Tzolines" plural). The local people said that they toasted the adults and served them on a tortilla.

The dragonflies were apparently migrating; they were observed practically all day by the thousands crossing the Cordillera de los Cuchumatanes at several points in a south--north direction. The species was the libellulid Pantala hymenaea (Say) a fairly common and widespread species in the American tropics. It ranges from the USA, Bermuda, the Bahamas, West Indies and the Galapagos Islands south to Argentina and Chile. According to DUNKLE (2000) this species migrates in swarms along the Atlantic Coast, and has been seen in the desert 50 miles away from any water. In México this species was seen on 18 September 1977 crossing the mountains in large numbers during an apparently migratory flight ca 1800 m asl at Los Tuxtlas, Veracruz state (E. González, unpublished).

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Figs 1-2. In the highlands of Guatemala: local people knocking down the anisopterans with twigs; 13 Aug. 2002 (Photo C. Gómez-Hinostrosa).

References – BELLE, J., 1994, Notul odonatol. 4(4): 60-62; – CORBET, P.S., 1999, Dragonflies: behavior and ecology of Odonata. Cornell Univ. Press; – DUNKLE, S.W., 2000, Dragonflies through binoculars. Oxford Univ. Press; – MENZEL, P. & F. D'ALUISIO, 1998, Man eating bugs: the art and science of eating insects. Material World Books, Speed Press; – RAM-OS-ELORDUY, J., J.M. PINO M. & S. CUE-

VAS CORREA, 1998, An. Inst. Biol. Univ. Méx. (Zool.) 69(1): 65-104; — RAMOS-ELORDUY, J. & J.M. PINO MORENO, 2001, ibidem 72(1): 43-84; — TAYLOR, R.L., 1975, Butterflies in my stomach or insects in human nutrition. Woodbridge Press, Santa Barbara/CA.

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