

FIRST REPORT OF *AMBLYOMMA COELEBS*
FROM HONDURAS, WITH NOTES ON OTHER
ARTHROPODS.

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ABSTRACT

This note presents the first report of the tick *Amblyomma coelebs* (Acarida: Ixodidae), along with comments on other arthropods from Honduras.

RESUMEN

Esta nota presenta el primer reporte de la garrapata *Amblyomma coelebs* (Acarida: Ixodidae) y comentarios sobre otros artrópodos de Honduras.

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In June of 1991, I served as the medical entomologist for an infantry battalion of the Maryland Army National Guard deployed to Honduras for a training exercise. The focus of my collecting efforts was on arthropods of potential medical importance.

The base of operations and principal collecting site (base camp) was located about 16 km inland from the Caribbean coastal city of Trujillo in the state of Colón. Physiogeographically, the site is in the Aguán-Negro Plain. Ecologically, the area is a part of the Moist Tropical Forest Zone, otherwise known as the Lowland Wet Climatic Zone, as described by Wilson and Meyer (1985). Collecting trips were made into the lower levels of the Northern Cordillera, along the course of the Río Claro. The Río Claro Valley penetrates the Wet Subtropical Forest (Intermediate Wet Climatic Zone) (Wilson and Meyer 1985). This coastal region and the lower levels of the hills that border it are intensively cultivated or grazed. Minuscule subsistence farms and large plantations are common in the region. The occasional solitary tall tree is the only reminder of the climax tropical forest that has long since disappeared.

The rains often arrive in this region in May, but in 1991 no significant rain fell on our campsite until 20 June (there was, however, a brief but heavy downpour on 15 June). Threatening clouds would form each afternoon, but little, if any, rain would fall. The humidity was very high and the temperature rose to about 32°C soon after sunrise. The generally low level of arthropod activity was consistent with the dry conditions. A nearby streambed held only scattered pockets of shallow water. These pools contained no mosquito larvae or pupae, but they were attended by swarms of female sarcophagid flies, apparently attracted to decaying animal matter in and around the pools.

A few biting mosquitoes were on the during the day in a woodlot adjacent to the campsite. After dark, mosquitoes would visit the campsite, but only in very small numbers. The insects most obvious during the daylight were ants, wasps, and flies. Fire ant nests were present, but not in the high numbers that one might expect. The annual inundation of the campsite during the rainy season perhaps acts as a deterrent to more intensive utilization by the ants.

Trails of leafcutting ants were readily observable both near the campsite and in the Río Claro Valley. At one time early in the day, leafcutters were seen carrying leaf fragments along a trail in a shady woods. Later, during the heat of the day, I saw small numbers of ants lying immobile on the trail, apparently, I conjecture, the victims of sort of heat stupor. One wonders what opportunities this behavior gives predators and parasitoids. Orr (1992) observed that workers of this leafcutting species, *Atta cephalotes*, in Costa Rica tended to forage less diurnally than at night, apparently exhibiting an avoidance reaction to attacks by the diurnal parasitoid *Neodohrniphora curvinervis* (Phoridae).

Wasp were commonly seen in the Río Claro Valley. House flies (*Musca domestica*) were abundant everywhere. The flies appear to be exhibiting intense moisture-seeking behavior, persistently landing on one's person and food. Only darkness put an end to their unceasing attentiveness.

Nightfall in the extremity of the dry season brought relief from house flies and from heat in the form of cooler air borne by brisk breezes. One can only imagine how this pleasant situation would contrast with nightfall in the wet season. Populations of biting mosquitoes and midges must prodigious then. Our nightfall brought out populations of spiders and scorpions, but these were not obvious to the casual observer. There were a few bites and stings as both human and arachnid tried to occupy the same place at the same time.

One arthropod group appeared to be represented in large numbers in spite of the drought. Nymphal ticks of the genus *Amblyomma* were often seen crawling on people. Only one adult tick was collected, a female *Amblyomma coelebs*, the first specimen of this species from Honduras (it has been collected elsewhere in Central America and Mexico).

Another group of arthropods was abundant but only in a very restricted locality. A morning visit to Puerto Castilla, a busy shipping point located at the end of the long, narrow peninsula that forms Trujillo Bay, proved that biting midges (Ceratopogonidae) were quite ready to take blood. Puerto Castilla is the type locality for one of the two species collected there (*Leptoconops bequaerti*).

A list of arthropods collected in Honduras concludes this note (the taxonomic specialists, to whom I am most grateful for expert assistance, are also named). All of the known plants and animals of medical significance in Honduras are listed in a Department of Defense publication (Defense Pest Management Information Analysis Center 1992).

LIST OF ARTHROPODS COLLECTED

Scorpions (SCORPIONES)

(Identified by Scott A. Stockwell, Walter Reed Biosystematics Unit, Walter Reed Army Institute of Research, Washington DC).

BUTHIDAE

Centruroides gracilis (Latreille). One of the several specimens collected was recovered from a pineapple purchased from a street vendor in Trujillo.

Spiders (ARANEAE)

(Identified by Peter Mundel, Walter Reed Biosystematics Unit).

GNAPHOSIDAE (hunting spiders)

Herpylus sp. From base camp near Trujillo.

THERAPHOSIDAE (tarantulas)

Brachypelma sp. From the Río Claro.

Ticks (ACARI).

IXODIDAE (hard ticks)

Amblyomma sp. (nymphs) (identified by Richard G. Robbins, Defense Pest Management Information Analysis Center, Walter Reed Army Medical Center, Washington DC, and James E. Keirans, Georgia Southern University, Statesboro, Georgia). Collected from the base camp and from Río Claro Valley. At present, nymphs of Neotropical *Amblyomma* cannot be identified to species. *Amblyomma imitator* Kohls is known to occur in Honduras.

Amblyomma coelebs Neumann (adult female) (identified by James E. Keirans). Taken from the skin (whether attached (mouthparts embedded) or not is uncertain) of a soldier in the Río Claro Valley. Tapirs (*Tapirus* spp.) commonly host this species (Wenzel and Tipton 1966). *Amblyomma coelebs* has not previously been collected in Honduras. This species is very similar to *Amblyomma imitator*. The voucher specimen is in the tick collection of Georgia Southern University.

Insects (INSECTA)

COLEOPTERA (beetles)

(Identified by Richard E. White, Systematic Entomology Laboratory, U.S. Department of Agriculture, Washington DC).

Nitidulidae (sap beetles). These beetles were attracted to a bottle of ethyl acetate.

DIPTERA (flies)

CERATOPOGONIDAE (biting midges)

(Identified by Jayson I. Glick, Walter Reed Biosystematics Unit)

Culicoides furens (Poey). Actively biting around 07 30 hours on beach at Puerto Castilla, near the tip of the peninsula, on the side facing Bahía de Trujillo.

Leptoconops bequaerti (Kieffer). Actively biting at 07 30 hours on beach at Puerto Castilla.

CULICIDAE (mosquitoes)

(Identified by James Pecor, Walter Reed Biosystematics Unit)

Aedes taeniorhynchus (Wiedemann). Actively biting at base camp.

Mansonia titillans (Walker). Actively biting at base camp.

MUSCIDAE (house flies)

Musca domestica L. (house fly). Abundant at all localities visited.

SARCOPHAGIDAE (flesh flies)

(Identified by Raymond J. Gagné, Systematic Entomology Laboratory).

Sarcophaga sp., females. Collected from a swarm hovering over a puddle in the streambed adjacent to base camp.

TABANIDAE (deer flies and horse flies)

(Identified by Richard Wilkerson, Walter Reed Biosystematics Unit)

Tabanus pungens Wiedemann. Collected at base camp.

HYMENOPTERA (ants, bees, wasps)

FORMICIDAE (ants)

(Identified by David R. Smith, Systematic Entomology Laboratory)

Atta cephalotes (L.). A male was taken during a nuptial flight on 18 June. Workers were collected from a typical leafcutter ant trail in the woodlot adjacent to base camp.

Camponotus planatus Roger. This species of carpenter ant nests in tillandsias (*Tillandsia* spp.), epiphytic bromeliads (Wheeler 1910). Collected from the palm-hardwood forest adjacent to base camp.

Ectatomma tuberculatum (Olivier). Collected from the woodlot next the base camp. The kelep, a predaceous ponerine ant, was brought into Texas in the late 1800s as a part of an unsuccessful campaign to control the boll weevil, *Anthonomus grandis grandis* Boheman (Wheeler 1910). The common name of this ant is derived from *kelép*, a Kekchi word for this kind of ant. Apparently the sting of the kelep was sufficiently noteworthy to prompt this Mayan tribe of north central Guatemala give the ant a specific name in their language.

Solenopsis geminata (Fabricius). This is one of several kind of fire ants, so named because of the potency of their stings. This species is common in pastures, meadows, airfields, croplands, and rangelands from the southern United States south through Central America. Any place that is suitable for a campsite has probably already been claimed by fire ants. Unless they are eradicated from the site, they will make life miserable for anyone who tries to coexist in their territory.

Pseudomyrmex sp. Collected at La Ceiba, a Caribbean coastal town, capital of the state of Atlántida. Several species of *Pseudomyrmex* are closely associated with acacia trees (*Acacia spp.*) (Hölldobler & Wilson 1990).

POMPIDAE (spider wasps)

(Identified by A.S. Menke, Systematic Entomology Laboratory)

Anoplius sp. (male). Collected from the Río Claro Valley.

VESPIDAE (hornets, yellow jackets, paper wasps, potter wasps)

(Identified by A.S. Menke, Systematic Entomology Laboratory)

Synoecca septentrionalis Richards (female). Collected at base camp.

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