# DESCRIPTION OF THE MALE *LACHESILLA FUSCIPALPIS* BADONNEL, AND NEW RECORDS FROM MEXICO AND PERU

ALFONSO NERI GARCÍA ALDRETE \*

# ABSTRACT

The male of *Lachesilla fuscipalpis* is described in this paper. New records, from Mexico and Peru are included for this species, described originally from Chile. Habitat and morphological variation are included. Measurements, ratios and ctenidial counts, as well as illustrations of genitalia and fore and hindwings are presented for the male of *L. fuscipalpis*.

## RESUMEN

Se describe en este trabajo el macho de Lachesilla fuscipalpis Badonnel. Se incluyen nuevos registros de México y de Perú para esta especie, descrita originalmente de Chile. Se indica el habitat y la variación morfológica observada en L. fuscipalpis. Se presentan medidas, proporciones y cuentas de ctenidia, así como ilustraciones de caracteres de genitalia y de alas anterior y posterior del macho de L. fuscipalpis.

Lachesilla fuscipalpis was described by Badonnel (1971) from three brachypterous female specimens, one of which he designated holotype. The material studied by Badonnel is from Chile. The male described in this paper has been found associated with females of L. fuscipalpis in two localities in Mexico; lone males have also been collected within the range now known for this species. These new records for L. fuscipalpis are herewith included. This species, and an undescribed, closely related one, are included in species group "fuscipalpis" of the genus Lachesilla (García Aldrete, 1974).

Lachesilla fuscipalpis Badonnel

Male. Measurements (Table I).

Color (in alcohol). Body pale brown. Compound eyes black, ocelli clear; epicranial and epistomal sutures distinct; first three segments of each maxillary palp slightly darker than rest of the body; fourth segment of each maxillary palp much darker than rest of the body. Wings (Figs. 4-5) hyaline, veins pale brown. Tergal lobes of meso- and metathorax slightly darker than rest of thorax, with pale bands along the sutures; pleural sutures distinct. Abdomen with dark brown subcuticular rings, with four transverse plates, well sclerotized, anterior to the hypandrium.

Morphology. Hypandrium (Fig. 2) convex anteriorly, posterior margin concave, with a pigmented band along the border; surface pilose, with two macrosetae toward posterior border, one to each side of midline. Claspers (Fig. 2) lateral to hypandrium, each clasper slender, distally curved, tips acuminated, directed inward; each clasper with a

<sup>\*</sup> Instituto de Biología, Departamento de Zoología, Apartado Postal 70-153, México 20, D. F.

TABLE I

MEASUREMENTS (IN MM) RATIOS, AND CTENIDIAL COUNTS IN MALES LACHESILLA FUSCIPALPIS

RANGE	MEAN	N
1.505 — 1.881	1.745	8
0.599 - 0.744	0.677	8
0.193 - 0.251	0.230	8
0.087 - 0.096	0.089	8
14 - 17	16.5	8
2.13 - 2.33	2.22	8
0.533 - 0.692	0.601	8
	1.505 - 1.881 $0.599 - 0.744$ $0.193 - 0.251$ $0.087 - 0.096$ $14 - 17$ $2.13 - 2.33$	1.505 - 1.881 $1.745$ $0.599 - 0.744$ $0.677$ $0.193 - 0.251$ $0.230$ $0.087 - 0.096$ $0.089$ $14 - 17$ $16.5$ $2.13 - 2.33$ $2.22$

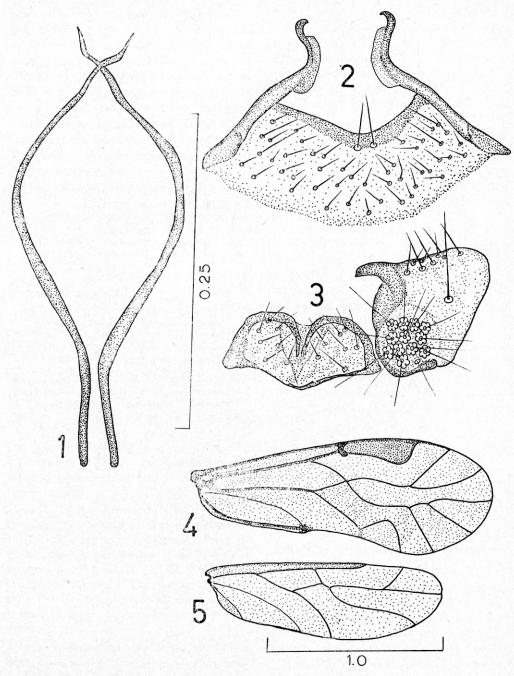
distinct, elongate thickening on inner edge of distal half. Parameres (Fig. 1) independent, long, slender, bow-shaped, arms basally parallel to each other, distally acuminate. Paraprocts (Fig. 3) approximately semicircular; each paraproct with a strong mesal prong; sensory fields with 13 trichobothria, surfaces of paraprocts setose. Epiproct (Fig. 3) obtusely convex anteriorly, distinctly bilobed posteriorly, with a pigmented band along the border of each lobe; surface setose.

One male specimen, bearing the following information: 8 kms NW of Tehuacan, Puebla, Mexico, on Hwy. 150, July 11, 1973, on dead leaves of *Yucca* sp. Coll. Alfonso N. García Aldrete, will be deposited at the Institut d'Entomologie du Museum National d'Histoire naturelle, Paris, France. Two female paratypes of the species are kept in the same place.

The collectors in the following section, may be identified as follows: Alfonso Neri García Aldrete (ANGA); Edward L. Mockford (ELM); Fred Hill (FH); Joe Lopez (JL). M or B at the end of

each record indicate macropterous or brachypterous specimens.

Specimens Examined (24). MEXICO. Distrito Federal: Bosque de Chapultepec, Mexico City, Aug. 15, 1970, ANGA, 1 & M; Pedregal de San Angel, University City, June 27, 1973, ANGA, 1 9. M. Guerrero: 8 kms. N of Chilpancingo, Aug. 25, 1958, ELM, 1 9, B. Hidalgo: 11 kms, NE of Zimapan, Aug. 15, 1958, ELM, 2 & & s, 4 ♀ ♀ s, M. Jalisco: 6.4 kms. NW of Plan de Barranca, Hwy. 15, July 20, 1963, ELM, FH, 1 &, M. Michoacán; 24 kms. E of Cd. Hidalgo, Hwy. 15, July 22, 1963, ELM, FH, 1 9 Nuevo León: Galeana, June 14, 1962, ELM, 1 &, M; Chipinque, near Monterrey, Nov. 23, 1963, JL, 1 ♀ M; 44 kms NE of Matehuala, San Luis Potosí, Jan. 1, 1970, ANGA, 2 ♀♀s, B. Puebla; 43 kms SE of Acatlán, Hwy. 190, near the Puebla-Oaxaca state line, Aug. 20, 1973, ANGA, 1 ♀, B; 32 and 53.6 kms. SW of Acultzingo, Veracruz, Hwy, 150, July 6, 1962, ELM, FH, 1 ♂, 1 ♀, M. San Luis Potosi: 28.8 kms. SE of San Luis Potosí, Sept. 1, 1958, ELM. 1 ♀, M; 73.6 kms NE of San Luis Potosí, Sept.



Figs. 1-5. Genitalia and wings of Lachesilla fuscipalpis Badonnel, & Fig. 1. Parameres. Fig. 2. Hypandrium and claspers. Fig. 3. Epiproct and left paraproct. Fig. 4. Forewing. Fig. 5. Hindwing. Scales in mm. Figures 1, 2, and 3 to same scale as Figure 1. Figure 4 to same scale as Figure 5.

2, 1958, ELM, 1 &, 2  $\circ$   $\circ$  s, M; El Refugio NE of San Luis Potosí, Sept. 2, 1958, ELM, 1  $\circ$ , M. PERU: Locality unknown, 1  $\circ$ , M, intercepted by the U.S.D.A. in San Juan, Puerto Rico, March 5, 1967 in a sample of garlic soil from Peru; this specimen bears the label U.S.D.A. 67-7125.

Habitat. L. fuscipalpis has been taken on foliage of Juniperus sp., Pinus sp., Prosopis sp., and Larrea sp., on dead leaves of Quercus sp., and Yucca sp., and on fronds of fan palms.

Variation. Differences of coloration are observed. These are probably due to the age of the specimens when collected, teneral individuals being paler than mature ones. A fading of the coloration also occurs after specimens have been preserved in alcohol for several years. Both brachypterous and macropterous forms occur in this species; a reduction in eye size is associated with brachyptery. In macropterous forms, specimens with short wings also tend to have short tibiae and small eyes.

### ACKNOWLEDGMENTS

I am grateful to Edward L. Mockford, Department of Biological Sciences, Illinois State University, for giving me free access to his psocid collection, and for allowing me to publish some of his records.

#### REFERENCES

BADONNEL, A., 1971. Psocoptères édaphiques du Chili (3e note) (Insecta). Bull. Mus. Hist. Nat., Paris, 3e. Ser., (No. 1). Zoologie 1: 1-38.

GARCÍA ALDRETE, A. N., 1974. A Classification above species level of the genus *Lachesilla* Westwood (Psocoptera: Lachesillidae). *Folia Entomol. Mex.* No. 27. 1-88 pp.