

## TWO NEW SPECIES OF THE GENUS *LYSSOMANES* (HENTZ) FROM THE CAPE REGION, B.C.S., MEXICO

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**ABSTRACT.** Two new species of the genus *Lyssomanes* Hentz from the Cape Region, Baja California Sur, are described and illustrated. *Lyssomanes burrera* n. sp. is similar to *Lyssomanes jemineus* Peckham, Peckham & Wheeler, and *Lyssomanes pescadero* n. sp. is similar to *Lyssomanes mandibulatus* F. O. P. Cambridge.

Sixty-one species of spiders from the Americas are included in the genus *Lyssomanes* Hentz (Galiano 1980, 1984) and ten of these species are present in Mexico: *L. jemineus* Peckham, Peckham & Wheeler 1889, *L. temperatus* Galiano 1980, *L. diversus* Galiano 1980, *L. malinche* Galiano 1980, *L. placidus* Peckham, Peckham & Wheeler 1889, *L. unicolor* (Taczanowski 1872), *L. deinognathus* Cambridge 1900, *L. mandibulatus* F. O. P.-Cambridge 1900, *L. elegans* F. O. Pickard-Cambridge 1901 and *L. spiralis* F. O. Pickard-Cambridge 1901 (Richman & Cutler 1988).

The genus *Lyssomanes* is primarily tropical with a high concentration of species in Brazil, but it has not been well studied in Mexico; and the possibility exists that there are many new species there (Galiano 1980). Mexico, from a biogeographical point of view, is considered to be as a transitional zone occupied by elements of a hybrid fauna of both Neotropical and Nearctic origin. There are strong endemic characteristics, but there are also affinities with the faunas of both South America and temperate North America (Halffter 1976).

This is the first record of the genus *Lyssomanes* from the peninsula of Baja California. We describe two new species: *Lyssomanes burrera* n. sp. is included in the *jemineus* group because of fringes of black setae on the tibia and tarsus and the long and divergent chelicerae of the males. The bulb of the palp has a cylindrical embolus ending in a sharp tip and its base has an apophysis. *Lyssomanes pescadero* n. sp. is included in the *viridis* group because it has very long and divergent chelicerae. The bulb of the palp is relatively simple, with its basal part of the embolus

covered partial or wholly by a membranous sheath.

### *Lyssomanes burrera*, new species (Figs. 1–8)

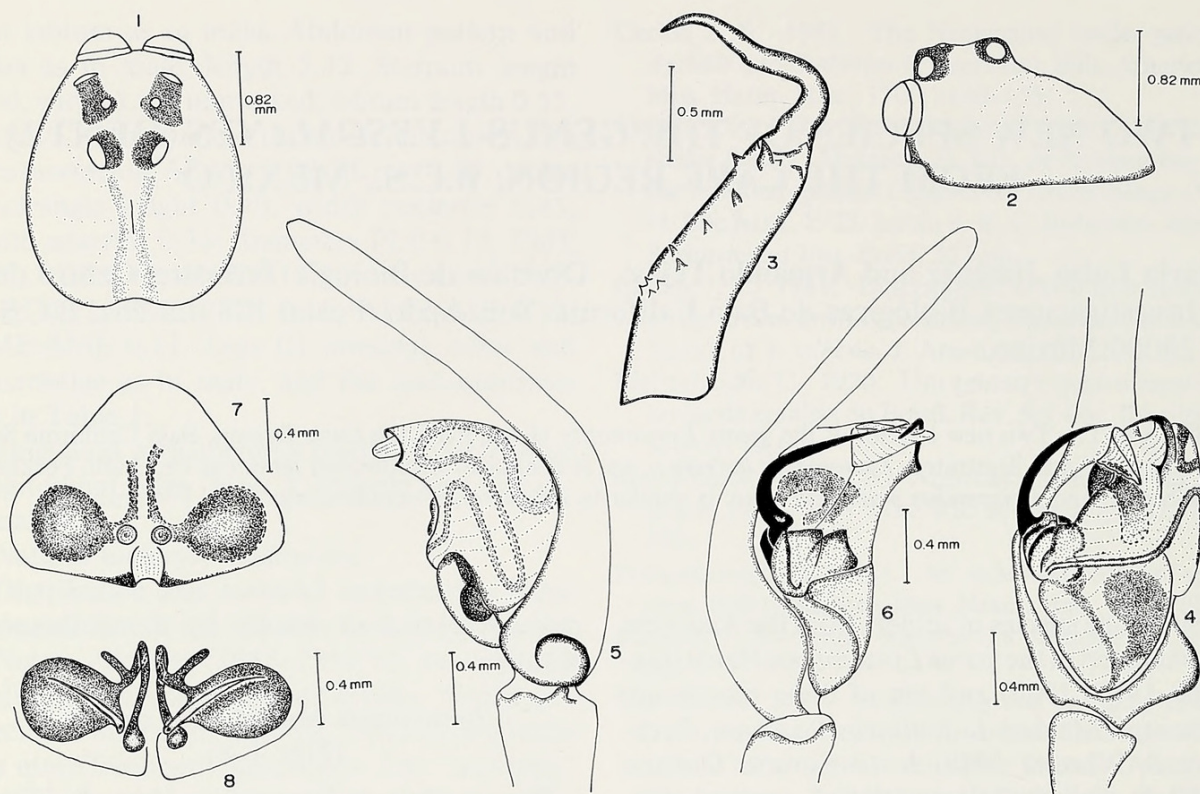
**Type.**—Male holotype from low deciduous forest, 600 m elev., Cañon de la Burrera, Sierra de la Laguna, Baja California Sur (25 June 1992), A. Tejas and G. Navarrete. Two male and one female paratypes are from the type locality (25 June 1992, A. Tejas and M. Jiménez). One female paratype is from low deciduous forest, 753 m elev., Cañon de la Zorra, Sierra de La Laguna, (29 October 1987, M. Jiménez). The holotype and a female paratype will be deposited in the collection of the Instituto de Biología, Universidad Autónoma de México, and three paratypes will be deposited in the arachnological collection of the Centro de Investigaciones Biológicas de Baja California Sur, A.C.

**Etymology.**—The specific name is derived from the type locality.

**Diagnosis.**—Members of *Lyssomanes burrera* n. sp. resemble *L. jemineus* Peckham, Peckham, & Wheeler in coloration and body shape, but can be separated from the other known similar species by the shape of the embolus, the number of teeth of the female chelicerae, leg spination, and the shape of the epigynum.

**Males.**—( $n = 2$ ). Total length 5.58–8.33 mm; prosoma 2.55–2.70 mm long, 1.95–2.15 mm wide and 1.25–1.75 mm high (Fig. 1, 2). Clypeus 0.20 high. Eye sizes and interdistances: AME 0.55, ALE 0.26–0.29, PLE 0.23–0.26, ALE-PME 0.18–0.20, PME-PL 0.34–0.36, ALE-PL 0.52–0.58. Eye row widths: first 1.08–1.14, second 1.00–1.06, third 0.60–0.64, fourth 0.82–0.84. Chelic-





Figures 1-8.—*Lyssomanes burrera* n. sp. holotype male from Cape Region of Mexico: 1. dorsal view of the carapace; 2. lateral view of the carapace; 3. right chelicera; 4. ventral view of palp; 5. retrolateral view of palp; 6. prolateral view of palp; 7. ventral view of epigynum; 8. female dorsal view of epigynum.

erae moderately long and divergent from the base. Anterior surface with 2-3 median spines and 4-7 dorsal spines. Promargin with four teeth, retromargin with six teeth and a small apophysis near the the fang (Fig. 3). Leg spination: Femora I-III d 1-1-1, p 0-1-1, r 0-1-1; IV d 1-1-1, p 0-0-1, r 0-1-1; Patella I-IV d 0-0-1; Tibia I p 0-1-1, r 0-1-1, v 2-2-2; II d 0-1-1, p 0-1-1, r 0-1-1, v 2-2-2; III d 1-0-1, p 0-1-1, r 0-1-1, v 0-2-2; IV d 1-0-1, p 0-1-1, r 0-1-1, v 0-1-0; Metatarsi I-II p 0-0-1, r 0-0-1, v 2-2-2; III p 0-0-1, r 0-0-1, v 2-2-1; Palpi: Femur 1.14-1.85, d 0-1-1, p 0-0-1, r 0-0-1; Patella 0.40-0.66, d 0-0-1, r 0-0-1; Tibia 0.56-0.64, d 0-0-8, p 0-1-1; Cymbium 1.50-1.76 (Figs. 4, 6).

*Color in alcohol:* Carapace light yellow with a longitudinal dark band. Ocular quadrangle light with the ALE, PME and PLE in black tubercles and rounded with white setae, clypeus yellow with lower edge orange red, setae on each side; anterior surface of the chelicerae dark yellow, inner side darker, sternum light yellow. Opisthosoma dorsally yellow with two green, longitudinal dark brown bands; venter yellow, spinnerets darker. Legs yellow without marks and stripes. First metatarsus curved and flattened on the sides and a little dilated dorsoventrally,

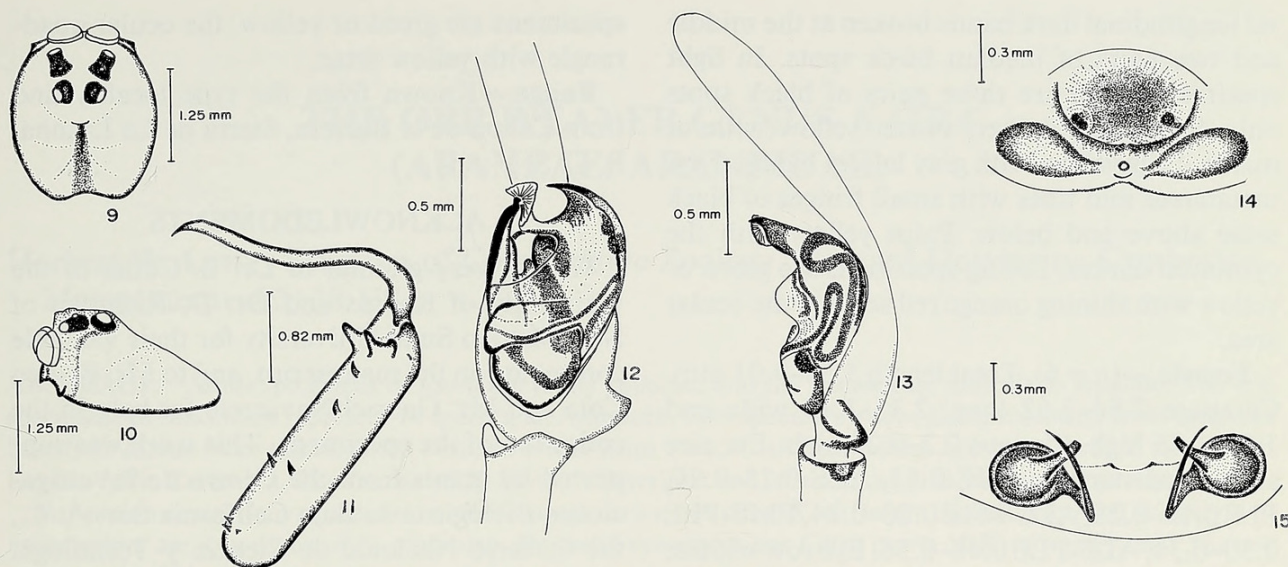
blackish with iridescent shine and fringes of black setae above and below. Tibia I with fringe of black setae distally above and below. Palps yellow with distal part of the tibia orange yellow.

Living specimens are green in color, with white and orange-red ocular setae.

**Female.**—( $n = 3$ ). Total length 6.50-8.00 mm. Carapace 2.50-2.60 long, 1.80-2.15 mm wide, 1.50-1.75 high. Clypeus 0.25. Eye sizes and interdistances: AME 0.50-0.55, ALE 0.26-0.28, PLE 0.14-0.23, ALE-PME 0.16-0.29, PME-PLP 0.34-0.59, ALE-PLP 0.42-0.95. Eye row widths: first 1.08-1.10, second 1.00, third 0.60-0.64, fourth 0.82. Leg spination: Femora I-III d 1-1-1, p 0-1-1, r 0-1-1; IV d 1-1-1, r 0-0-1; Patella II-IV d 0-0-1; Tibia I p 0-1-1, r 0-1-1, v 2-2-2; II d 0-1-1, p 0-1-1, r 0-1-1, v 2-2-2; III d 0-1-1, p 0-1-1, r 0-1-1, v 0-2-2; IV d 1-0-1, p 1-0-1, r 0-1-1, v 0-0-1; Metatarsi I-II p 0-0-1, r 0-0-1, v 2-2-2; III p 1-1-1, r 0-0-1, v 1-1-1; IV p 0-1-1, r 0-1-1, v 0-1-1. Epigynum (Fig. 7, 8).

*Color in alcohol:* Light yellow, ocular quadrangle with lateral white and dorsal red setae, and long whitish setae around AME and ALE. Clypeus with iridescent setae and red orange setae on the sides. Chelicerae with three promarginal and five retrolateral teeth. Opisthosoma long





Figures 9–15.—*Lyssomanes pescadero* n. sp. holotype male from Cape Region of Mexico: 9. dorsal view of the carapace; 10. lateral view of the carapace; 11. right chelicera; 12. ventral view of palp; 13. retrolateral view of palp; 14. dorsal view of female epigynum; 15. ventral view of epigynum.

and slender, with two longitudinal marks as in the males.

**Habitat.**—Specimens were collected under leaves of mango and underside of wide leaves of riparian shrubs.

**Range.**—Known only from the type locality.

*Lyssomanes pescadero*, new species  
(Figs. 9–15)

**Types.**—Male holotype from Rancho San Simón, Pescadero, Baja California Sur. (9 June 1992; A. Tejas, M. Jiménez and F. Cota). Eleven paratypes are from the same type locality. The holotype and a female paratype will be deposited in the collection of Instituto de Biología, Universidad Autónoma de México, and ten paratypes which will be deposited in the arachnological collection of the Centro de Investigaciones Biológicas de Baja California Sur.

**Etymology.**—The specific name is derived from the type locality.

**Diagnosis.**—Male specimens of *Lyssomanes pescadero* n. sp. resemble *L. mandibulatus* F. O. Pickard-Cambridge in shape and coloration, but can be separated from the other known similar species by the shapes of the bulb in lateral view, the median apophysis, and the embolus and by the number of cheliceral teeth and leg spination.

**Males.**—( $n = 6$ ). Total length 6.07–8.52 mm prosoma 2.94–3.62 mm long, 2.35–3.13 mm wide and 1.50–2.00 high (Figs. 9, 10). Clypeus 0.20–0.25 high. Eye size and interdistances: AME 0.50–0.60, ALE 0.23–0.26, PLE 0.19–0.23, ALE–PME

0.14–0.20, PME–PLE 0.28–0.36, ALE–PLE 0.44–0.60. Eye row widths: first 1.04–1.22, second 1.04–1.18, third 0.64–0.76, fourth 0.78–0.96. Chelicerae strong, very long and divergent from the base. Anterior surface with three basal spines and 19 distal spines. Promargin with one distal apical tooth and three small teeth and retromargin with five teeth, the apical tooth bifurcated and a small apophysis near the base of the fang (Fig. 11). Leg spination: Femora I–III d 1-1-1, p 0-1-1, r 0-1-1; IV d 1-1-1, p 0-1-1, r 0-0-1; Patella II–IV d 0-1-1; Tibia I p 0-1-1, r 0-0-1, v 2-2-2; II d 0-1-1, p 0-1-1, r 0-1-1, v 2-2-2; III d 0-1-1, p 0-1-1, r 0-1-1, v 0-2-0; IV d 0-1-1, p 0-1-1, r 0-1-1; Metatarsi I p 0-0-1, r 0-0-1, v 2-2-2; II p 0-0-1, r 0-0-1, v 2-2-2; III p 0-0-1, r 0-0-1, v 2-2-1; IV p 1-1-1, r 0-1-1, v 0-0-1; Palps: Femur 1.62–2.08, d 0-1-1, p 0-0-1, r 0-0-1; Patella 0.56–0.76, d 0-0-1; Tibia 0.69–0.89, d 0-0-1, p 0-1-1. Cymbium 1.32–1.55 (Figs. 12, 13).

**Color in alcohol:** Carapace robust and sides prominent at the ocular area, dark yellow, with a longitudinal dark band. The carapace is bordered with a black line in darker specimens and with white setae around the eyes; ALE, PME and PLE on black tubercles, ocular quadrangle with white dorsal and lateral setae and an inner curved band of orange-red hairs; clypeus yellow with orange-red hairs on each side and a dark line under the median anterior eyes, border darker; anterior surface of the chelicerae darker yellow, fangs dark yellow, sternum and mouthparts shiny yellow. Opisthosoma light yellow with two dor-



sal longitudinal dark bands broken at the middle and two pairs of median black spots. In light specimens there are three pairs of black spots only. Spinnerets darker, venter yellow without marks. Legs yellow with gray lateral bands. First metatarsus and tibia with small fringes of black setae above and below. Palps yellow with the cymbium darker. Living specimens are green or yellow with shining orange red setae in the ocular area.

**Female.**—( $n = 6$ ). Total length 5.58–9.01 mm. Carapace 2.94–3.62 long, 2.35–3.13 wide and 1.30–1.75 high. Clypeus 0.2–0.25 high. Eye size and interdistances: AME 0.55, ALE 0.23–0.26, PLE 0.19–0.23; ALE-PME 0.20–0.14, PME-PL 0.30–0.34, ALE-PL 0.48–0.56. Eye row widths: first 0.96–1.18, second 0.98–1.12, third 0.68–0.74 and fourth 0.76–0.90. Leg spination: Femora I-III d 1-1-1, p 0-1-1, r 0-1-1; IV d 1-1-1, r 0-0-1; Patella II-IV d 0-0-1; Tibia I p 0-1-1, r 0-1-1, v 2-2-2; II d 0-1-1, p 0-1-1, r 0-1-1, v 2-2-2; III d 0-1-1, p 0-1-1, r 0-1-1, v 0-0-2; IV d 0-1-1, p 0-1-1, r 0-1-1; Metatarsus I-III p 0-0-1, r 0-0-1, v 2-2-2; IV p 1-1-1, r 0-1-1, v 0-0-1. Epigynum (Fig. 14, 15).

**Color in alcohol:** Light yellow with orange-red setae between the eyes, dorsal and lateral sides of the ocular area with white setae, eyes surrounded by white setae. Clypeus with a band of white setae and red setae on each side. Cheliceral promargin with three teeth and retromargin with five teeth and two dorsal inner spines. Opisthosoma white with three pairs of green spots. Legs yellow, the metatarsi and tarsi darker. Living

specimens are green or yellow, the ocular quadrangle with yellow setae.

**Range.**—Known from the type locality and from Cañon de la Burrera, Sierra de La Laguna, B. C. S.

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