

***Leptopholcus hispaniola* Huber, 2000**

**Huber, B. A. 2000.** New World pholcid spiders (Araneae: Pholcidae): a revision at generic level. Bull. Amer. Mus. Nat. Hist. 254: 1-348.

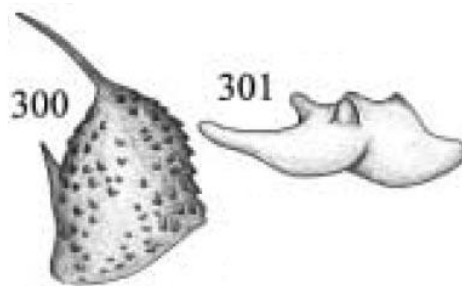
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***Leptopholcus hispaniola*, new species**

Figures 300–301, 308

TYPE: Male holotype from Parque Nacional Bermudez Cienaga, La Vega Prov., Dominican Republic; 1100 m elev., tropical ev-

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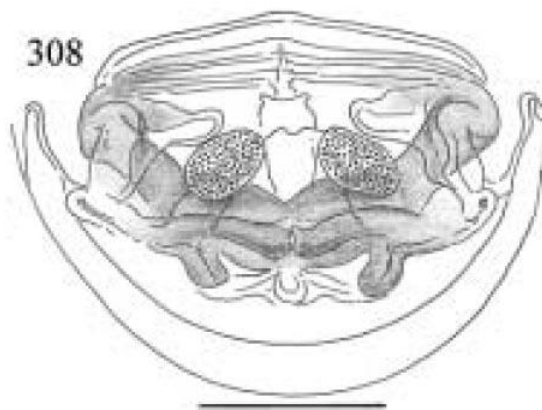


Figs. 291–305. *Leptopholcus* spp. from the Antilles, male diagnostic characters.

300–301. *L. hispaniola*, n. sp. 300. Bulbal “appendix.”

301. Palpal trochanter.

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Figs. 306–309. *Leptopholcus* spp. from the Antilles, female internal genitalia, dorsal views.

308. *L. hispaniola*, n. sp.

Scale lines: 0.2 mm.

ergreen forest, malaise, July 19–Aug. 2, 1995 (S. & J. Peck), in AMNH.

ETYMOLOGY: Named for the Island of Hispaniola. The specific name is a noun in apposition.

DIAGNOSIS: Close relative of *L. delicatulus*, distinguished by the shorter palpal trochanter apophysis (compare figs. 294, 301), the thicker palpal tibia (0.37 mm diameter in two *L. hispaniola* males versus 0.28–0.33 mm in five *L. delicatulus* males), and the broader bulbal appendix (compare figs. 293, 300).

MALE (holotype): Total length 3.8, carapace width 0.74; leg 1: 30.4 (6.9+0.3+7.5+14.0+1.7), tibia 2: 5.0, tibia 3: 3.1, tibia 4: 4.5; tibia 1 l/d: 102. Habitus exactly as in other Caribbean *Leptopholcus* (cf. figs. 22a–b in Huber, 1997a). Carapace ochre-yellow, ocular area with brown band between eye triads; AME represented by black spots, but apparently without lenses; distance PME–ALE about 15% of PME diameter. Clypeus brown, sternum whitish; chelicerae ochre-yellow, with apophyses as in *L. dalei* and *L. delicatulus* (cf. fig. 24 in Huber, 1997a; fig. 11 in Huber and Pérez González, 1998). Palps ochre-yellow, trochanter apophysis very short: 0.12–0.13 mm in two males; procurus brown ventrally and distally, apparently identical to that of *L. delicatulus* (cf. fig. 291); bulb whitish with black apophyses, with distinctive appendix. Legs light ochre-yellow, with dark patellae and tibia-metatarsus joints; apparently without spines, without curved and vertical hairs (many hairs missing); retrolateral trichobothrium of tibia 1 at 4%; tarsus 1 with ~ 35 pseudosegments. Opisthosoma grayish, without spots (bleached?).

VARIATION: Tibia 1 in other male studied: 6.9; in this male there is absolutely no trace left of the AME, but the genitalia are indistinguishable from those of the type specimen.

FEMALE (Haiti): Total length 3.6, carapace width 0.65; leg 1 missing. Opisthosoma even more elongated above spinnerets than in male, with dark spots dorsally; AME more clearly present, apparently with lenses; internal genitalia as in fig. 308. An egg sac accompanies the female, and is remarkable for being relatively tightly woven, in contrast to the few threads of *Metagonia* egg sacs.

DISTRIBUTION: Known from one locality in

Haiti, and two localities in the Dominican Republic.

MATERIAL EXAMINED: DOMINICAN REPUBLIC: *La Vega*: type above; forest between Hato Mayor and Sabana de la Mar, July 20, 1935 (W. G. Hassler), 1 ♂ in AMNH. HAITI: *Port-au-Prince*: Damiens, Nov. 10, 1959 (A. M. Nadler), 1 ♀ in AMNH.

**Huber, B. A., Wunderlich, J. 2006.** Fossil and extant species of the genus *Leptopholcus* in the Dominican Republic, with the first case of egg-parasitism in pholcid spiders (Araneae: Pholcidae). *Journal of Natural History* 40: 2341-2360.

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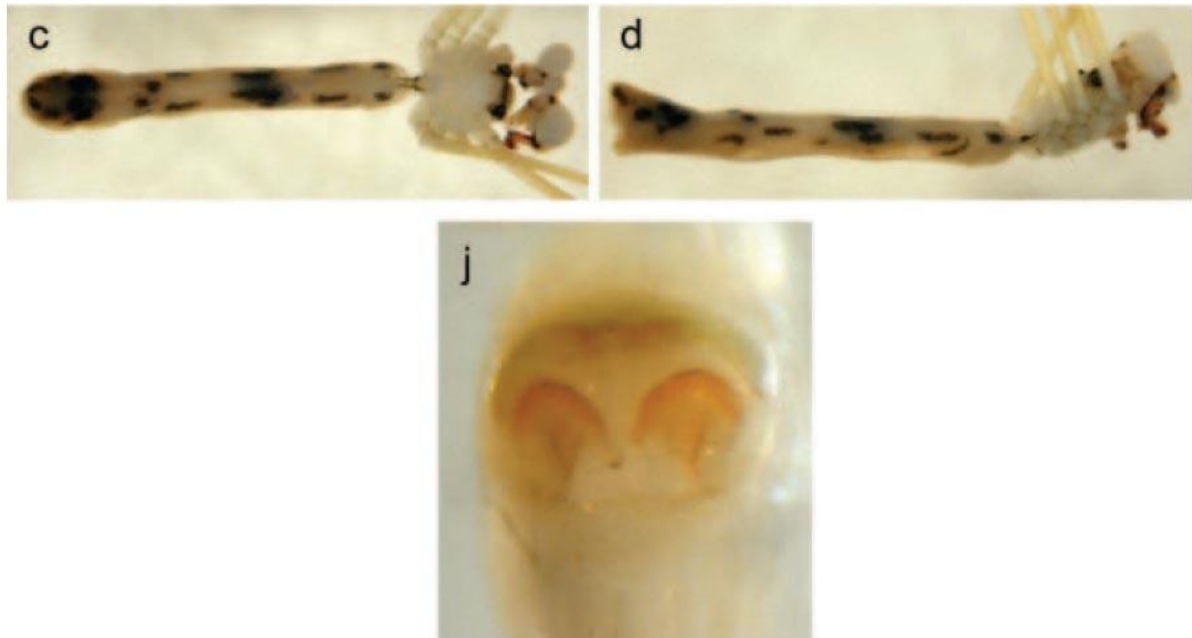


Figure 2. (a–f) Males in dorsal and lateral views: *Leptopholcus baoruco* (a, b); *L. hispaniola* (c, d); *L. toma* (e, f); (g, h) *L. baoruco* females, lateral views; (i–k) untreated female genitalia in ventral views: *L. baoruco* (i); *L. hispaniola* (j); *L. toma* (k).

***Leptopholcus hispaniola* Huber, 2000**

(Figures 2c, d, j, 5, 6, 9b)

*L. hispaniola* Huber 2000, p 77–79, Figures 300, 301 (female not conspecific, see below).

*Type*

Male holotype from Parque Nacional Bermudez Cienaga, La Vega Prov., Dominican Republic; tropical evergreen forest at 1100 m a.s.l., 19 July to 2 August 1995 (S. and J. Peck), in AMNH.

*Diagnosis*

Distinguished from known Caribbean congeners by the shapes of the apophyses on the male genital bulb (Figures 5a, 6a–c, 9b), by the shape of the procursus (Figure 5b), by the short male palpal trochanter apophysis (Figure 5b), and by the internal sclerotized structures in the female genitalia (Figures 2j, 5c, d). From *L. toma* and *L. baoruco* also distinguished by the shorter abdomen tip (Figure 2d).

*Male (type locality)*

For a detailed description of the male holotype see Huber (2000). All males from the type locality have distinct black spots in the area of the AME, lenses are either absent or not visible in the dissecting microscope; other eyes as usual: distance PME–PME 300 µm;

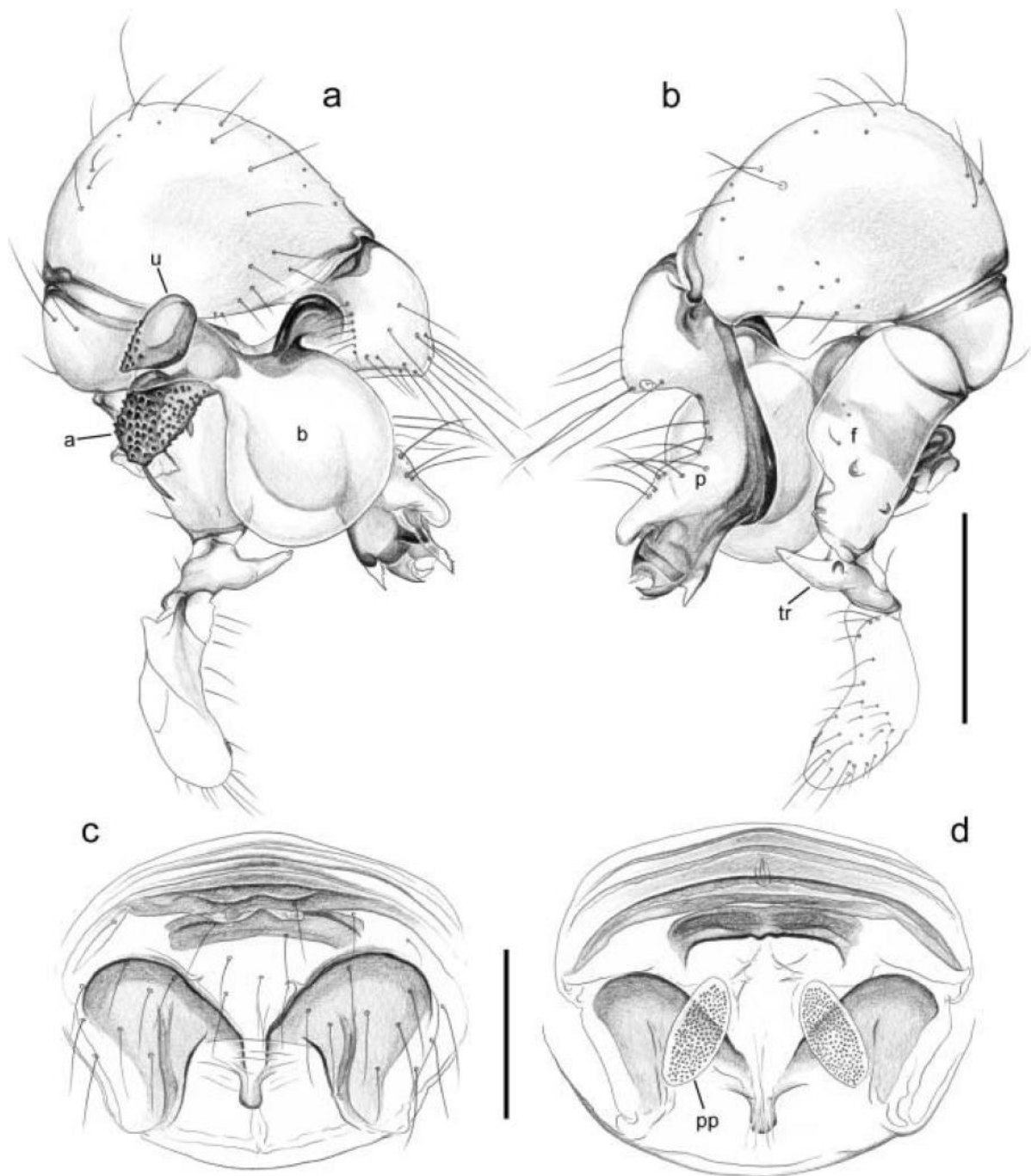


Figure 5. *Leptopholcus hispaniola*. (a, b) Male palp in prolateral and retrolateral views; (c, d) cleared epigynum in ventral and dorsal views. a, appendix; b, bulb; f, femur; p, procursus; pp, pore plate; tr, trochanter; u, uncus. Scale bars: 0.3 mm (a, b), 0.2 mm (c, d).

diameter PME 80  $\mu$ m; distance PME–ALE 20  $\mu$ m. Habitus as in Figure 2c, d; prosoma very pale ochre-grey, with darker band between eye triads extending over dorsal half of clypeus; sternum whitish, legs pale ochre, patellae and tibia–metatarsus joints dark (almost black), abdomen ochre-grey with black spots dorsally (Figure 2c). Chelicerae not visibly different from those of *L. baoruco* (cf. Figure 3c), with indistinguishable distal apophyses

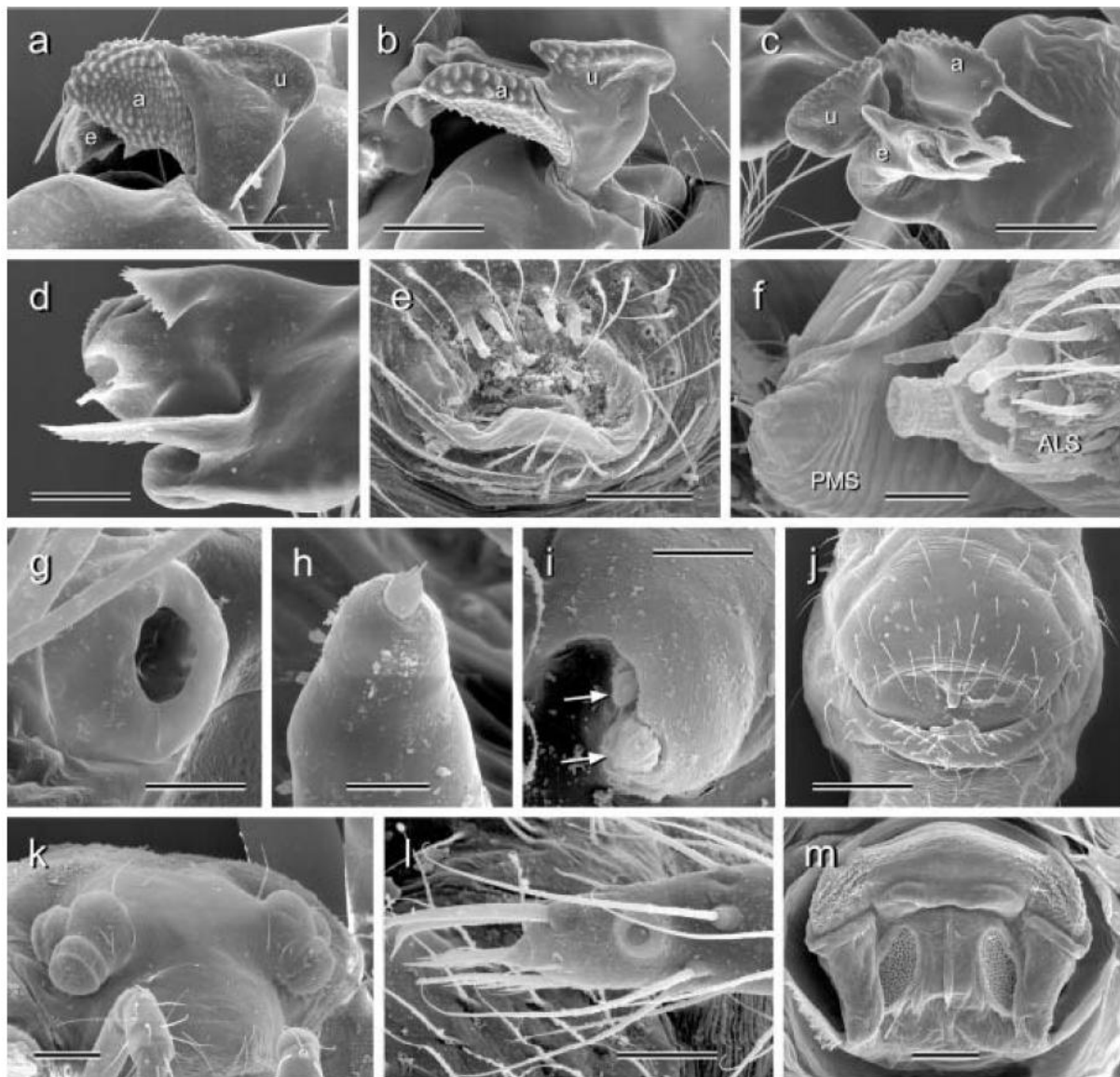


Figure 6. *Leptopholcus hispaniola*, SEM images. (a–c) Male bulbal projections; (d) tip of procursus, prolateral view; (e) male gonopore; (f) male ALS and PMS; (g) male palpal tarsal organ; (h) tip of male palpal trochanter apophysis with modified hair at tip; (i) male distal cheliceral apophysis (arrows point to modified hairs); (j) epigynum, ventral view; (k) ocular area of a female with distinct AME pigment but without AME lenses; (l) tip of female pedipalp; (m) female internal genitalia, dorsal view of cleared genitalia. a, appendix; e, embolus; u, uncus. Scale bars: 100  $\mu\text{m}$  (a–c, k, m); 60  $\mu\text{m}$  (d); 40  $\mu\text{m}$  (e); 10  $\mu\text{m}$  (f–i); 200  $\mu\text{m}$  (j); 30  $\mu\text{m}$  (l).

(Figure 6i). Palps as in Figure 5a, b; coxa unmodified, trochanter with small retrolateral and relatively short ventral apophyses, the latter with distal modified hair (Figure 6h); femur with three small apophyses retrolaterally; procursus strongly bent dorsally, with distinctive distal structures (Figure 6d); genital bulb with distinctive uncus and appendix and slightly sclerotized embolus (Figures 5a, 6a–c, 9b); palpal tarsal organ capsulate (Figure 6g). Prolateral trichobothrium absent on tibia 1, present on other tibiae. Gonopore with four epiandrous spigots (Figure 6e). Spinnerets as in *L. baoruco* (see above, and Figure 6f). Serrated hairs on tarsi 4 as in *L. toma* (cf. Figure 8g).

*Variation*

All males (and females) from the Cordillera Central (La Cienaga; near Jima) have distinct AME spots (sometimes apparently even lenses), while males (and females) from all other localities lack these spots as well as any trace of AME lenses. The genitalia (male and female) in all these specimens are indistinguishable. Tibia 1 in 36 males: 6.3–8.3 (mean: 7.2).

*Female*

The single female specimen available at the time of the original description was from Haiti, Damiens (Huber 2000). The newly collected material clearly shows that this female specimen is not conspecific with the type specimen of *L. hispaniola*, but probably represents an undescribed species. Females of *L. hispaniola* have relatively short abdominal tips (similar to males), and the distinctive internal sclerotized structures in the genitalia differ markedly from those of the Haitian specimen (compare Figure 5d with Figure 308 in Huber 2000). Tibia 1 in 56 females: 4.7–6.6 (mean: 5.4). Epigynum as in Figures 5c, 6j; internal genitalia with oval pore plates (Figures 5d, 6m). Palpal tarsus with short distal cone-shaped claw, pair of strong hairs, and capsulate tarsal organ (Figure 6l). Figure 6k shows a female from La Cienaga with distinct AME pigment but without any trace of AME lenses. Serrated hairs on tarsi 4 as in male.

*Distribution*

Known from several localities in central, northern, and eastern Dominican Republic (Figure 10)

*Material examined (all collected by the first author)*

Dominican Republic: La Vega Prov.: near La Cienaga, path to Los Tablones (19°03.5'N, 70°53.0'W), ~1200 m a.s.l., 3♂, 3♀ (8 November 2005); near La Cienaga, path along river (~19°03'N, 70°53'W), ~1100 m a.s.l., underside of leaves, 2♂, 5♀ (9 November 2005). Monseñor Nouel Prov.: forest at brook through plantation near Jima (19°01.4'N, 70°28.8'W), ~700 m a.s.l., underside of leaves, 4♂, 8♀ (8 November 2005). Samaná Prov.: forests near Saltos de Limón (~19°16.6'N, 69°26.5'W), ~120 m a.s.l., underside of leaves, 4♂, 13♀ (11 November 2005). Puerto Plata Prov.: N of La Cumbre (19°34.3'N, 70°38.0'W), forest near plantations, 600 m a.s.l., underside of leaves, 2♂, 10♀ (13 November 2005). Espaillat Prov.: near Jamao al Norte (19°38.6'N, 70°26.9'W), forest along river, 40 m a.s.l., underside of leaves, 5♂, 2♀ (13 November 2005). Monte Plata Prov.: near Monte Plata (18°48.7'N, 69°47.1'W), forest along river, 60 m a.s.l., underside of leaves, 2♂, 2♀ (21 November 2005); near Yamasá (18°45.9'N, 70°01.2'W), forest along river, 70 m a.s.l., underside of leaves, 10♂, 6♀ (20 November 2005). Hato Mayor Prov.: N of Manchado (18°50.2'N, 69°18.5'W), forest near river, 150 m a.s.l., underside of leaves, 2♂, 10♀ (21 November 2005). El Seibo Prov.: near Miches (18°56.8'N, 69°05.2'W), forest with plantations, ~300 m a.s.l., underside of leaves, 2♂, 3♀ (22 November 2005). La Romana Prov.: near Batey El Gato (18°27.7'N, 69°04.7'W), near entrance to cave, 80 m a.s.l., underside of leaves, 1♂, 1♀ (24 November 2005). Distrito Nacional: Santo Domingo, Jardín Botánico (18°29.7'N, 69°57.2'W), forest along brook, 50 m a.s.l., underside of leaves, 3♂, 1♀ (27 November 2005).

Assigned tentatively: Puerto Plata Prov.: S of Puerto Plata, forest along path towards Isabel Torres National Park (19°46.4'N, 70°42.3'W), ~400 m a.s.l., underside of leaves,

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1♀ (14 November 2005). Duarte Prov.: Reserva Científica Loma Quita Espuela, ~300 m a.s.l. (19°41'N, 70°08'W), one juvenile (10 November 2005).

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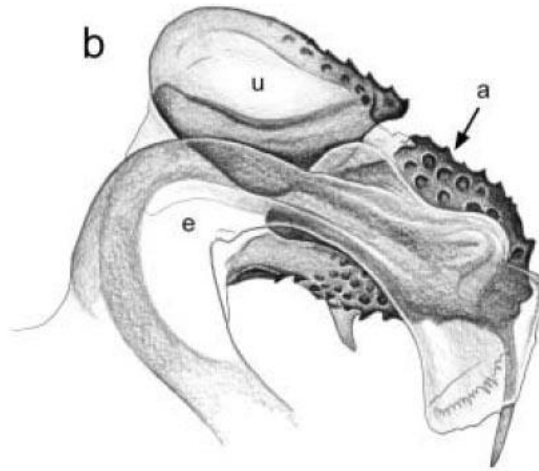


Figure 9. Distinctive bulbal projections (left bulbs in retrolateral views). (b) *L. hispaniola*; a, appendix; e, embolus; u, uncus. Scale bar: 0.2 mm.