

The holotype and allotype will be deposited in the Museum of Zoology, University of Michigan, Ann Arbor, Michigan.

I wish to thank Dr. R. E. Blackwelder and Dr. E. A. Chapin of the United States National Museum, and Dr. P. J. Darlington, Jr., of the Museum of Comparative Zoology, for the loan of material from their respective museums.

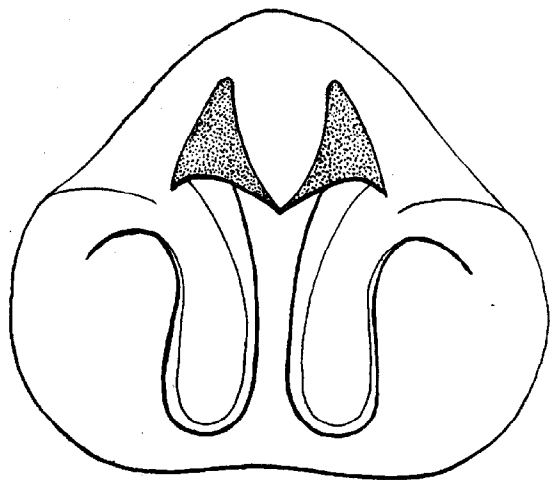
---

**A NEW WOLF SPIDER FROM FLORIDA, WITH NOTES  
ON OTHER SPECIES<sup>1</sup>**

H. K. WALLACE

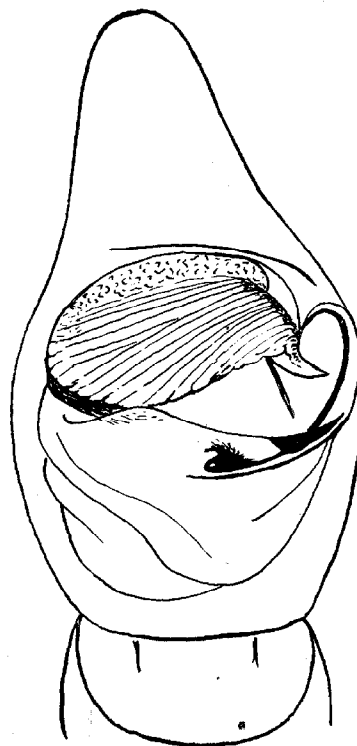
The following three species of spiders from north-central Florida are quite similar in appearance and size and may be easily confused. One of these is new; all three have distinctive genitalia and different habitat preferences. For the two described species references to papers containing figures of the genitalia are given.

*Lycosa apothetica* n. sp.



1

Fig. 1.—*Lycosa apothetica*, n. sp.,  
epigynum.



2

Fig. 2.—*Lycosa apothetica*, n. sp.,  
palpus.

**HOLOTYPE:** Female, from pond margin in slash-pine flatwoods<sup>2</sup> 6.5 miles from the Alachua County, Florida, courthouse on the west side of the road to the Devil's Mill Hopper (via Fla. 26), October 26, 1937, **ALLOTYPE**, a male with the same data: both in author's collection.

**DESCRIPTION OF HOLOTYPE:** In alcohol—Overall color effect a dusky reddish or yellowish brown; femora annulate. Median stripe of the carapace widest behind the posterior lateral eyes, here equalling the width of the posterior median eye row; median stripe incloses a median dark streak between the eyes and two dark spots behind the eyes. Sides of carapace dusky with a wide, irregular submarginal light area. Dorsum of abdomen dusky brown with an indistinct hastate mark and other dark maculation; venter almost immaculate, sides of abdomen with black spots. Sternum, endites, labium and coxae immaculate, light reddish brown in color. Femora beneath with large, faint dusky areas. Palpal joints light, immaculate.

Carapace longer than wide (4.0 mm./2.9 mm.), 1.3 mm. high; width of head 1.9 mm. Posterior eye quadrangle wider than long (1.4 mm./1.0 mm.), eyes of the median row slightly larger than those of the posterior (0.4 mm./0.3 mm.); median row slightly wider than the anterior (1.0 mm./0.8 mm.). Anterior row of eyes slightly procurved, median eyes larger than laterals; clypeus equals diameter anterior median eye. Lower margin of furrow of chelicera with three equal, almost contiguous, teeth. Distance from top of posterior median eyes to clypeus 0.6 mm. Palpal segments: femur 1.4 mm., patella 0.7 mm., tibia 0.8 mm., tarsus and claw 1.2 mm. Legs 4123.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	3.9	1.5	2.2	2.0	1.5	11.1
II	2.7	1.5	2.0	2.0	1.5	9.7
III	2.6	1.3	1.8	2.2	1.5	9.4
IV	3.3	1.6	2.8	3.7	1.9	13.3

**DESCRIPTION OF ALLOTYPE:** In alcohol—General body color a dusky yellowish or reddish brown; legs annulate. Median stripe of carapace incloses a median dark line which extends posteriorly to the posterior margin of the posterior lateral eyes; median stripe widens behind the posterior lateral eyes to equal the width of the posterior median row; here incloses two dark spots. Sides of carapace dusky with radially disposed darker bands; a sparse covering of white hairs gives the appearance of an indistinct submarginal stripe. Dorsum of abdomen with distinct hastate mark, with black maculation behind; venter yellow with a few black spots. Sternum yellow, immaculate; coxae and femora somewhat darker in color. Palpal joints about as light in color as sternum; endites light, labium darkens proximally.

<sup>1</sup> Contribution from the Department of Biology and Geology, University of Florida, Gainesville.

<sup>2</sup> For descriptions of terrestrial habitats in a region in northern Florida see Laessle, A. M., 1942. *The Plant Communities of the Welaka Area*. University of Florida Publications. Biological Science Series, Vol. 4, No. 1.

Carapace longer than wide (3.5 mm./2.5 mm.), 0.8 mm. high; width of head 1.4 mm. Posterior eye quadrangle wider than long (1.0 mm./0.8 mm.), eyes of the median row slightly larger than those of the posterior (0.4 mm./0.3 mm.); median row slightly wider than anterior row (0.9 mm./0.7 mm.). Anterior row of eyes slightly procurved, median eyes larger than laterals; clypeus equals diameter anterior median eye. Lower margin of furrow of chelicera with three teeth, equally spaced, lateral tooth largest, middle tooth larger than the median. Distance from top of posterior median eyes to clypeus 0.6 mm. Palpal segments: femur 1.3 mm., patella 0.6 mm., tibia 0.6 mm., cymbium 1.0 mm. Legs 4123.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	2.7	1.4	2.3	2.3	1.5	10.2
II	2.4	1.3	2.0	2.1	1.5	9.3
III	2.4	1.2	1.7	2.3	1.3	8.9
IV	3.1	1.2	2.5	3.3	1.8	11.9

SPECIMENS RECORDED: 57 — 8 ♂♂, 49 ♀♀.

GEOGRAPHIC DISTRIBUTION: Southeastern states; known at present from Florida, Georgia, and Mississippi.

RECORDS: **Florida:** *Alachua Co.:* 1774 Leon Street, Gainesville, Apr. 11, 1933, Cat. 140 — 1 ♀; pine flatwoods 2.0 miles east of Alachua County courthouse on Fla. 26: Jan. 19, 1937 — 2 ♀♀; Jan. 20, 1937 — 4 ♀♀; Jan. 22, 1937 — 1 ♀; Jan. 30, 1937 — 9 ♀♀; Apr. 19, 1937 — 2 ♀♀; pond margin in slash-pine flatwoods 6.5 miles from the Alachua County courthouse on the west side of the road to the Devil's Mill Hopper (via Fla. 26): Feb. 7, 1937 — 5 ♀♀; Oct. 26, 1937 — 2 ♂♂, 3 ♀♀ (including holotype and allotype); pine flatwoods on east side of San Felasco Hammock: Feb. 7, 1938, Cat. 1007 — 6 ♀♀; Feb. 7, 1938, Cat. 1008 — 1 ♂, 3 ♀♀; slash-pine flatwoods about 4.3 miles northwest of University of Florida campus on U. S. 441, Feb. 15, 1938, Cat. 1023 — 1 ♀; slash-pine flatwoods about 5.5 miles northwest of University campus on U. S. 441, Feb. 15, 1938, Cat. 1024 — 3 ♀♀; 5.0 miles west of Gainesville, Mar. 18, 1938, W. J. Gertsch — 1 ♀; Nov. 2, 1938, C. Benton — 1 ♂; *Leon Co.:* north shore of "Seven Mile" Pond, Apr. 16, 1936, H. K. Wallace and R. E. Bellamy, Cat. 541A — 3 ♀♀.

**Georgia:** *Turner Co.:* 9.0 miles southeast of Sycamore, seepage area, May 6, 1937, Cat. 606 — 1 ♀.

**Mississippi:** 42 miles east of New Orleans on U. S. 90, F. Norman and party, Dec. 15, 1939, HKW Cat. 652A & B — 4 ♂♂, 4 ♀♀.

REMARKS: Males have been collected only in October, November, December and February while females have not been taken after May until October. *Lycosa apothetica* is a very secretive animal and usually stays close by, or in, the mouth of its retreat; this probably accounts for the small number of county records. I have not found this species on bare, open stretches of soil devoid of leaf mould or vegetational matting. In north-central Florida it is usually found in moist situations in pine flatwoods (pond margins, cypress bay margins, etc.), but may be found occasionally in other situation.

This species resembles *L. parthenus* and *L. acoma* somewhat in appearance and size but the genitalia are distinct in both sexes. In *L. acoma* the lateral processes of the guide of the epigynum are not recurved; in *L. parthenus* they are recurved, extending cephalad to a point in front of the cephalic end of the median process of the guide; in *L. apothetica* the lateral processes are also recurved, but they extend cephalad only about three-fourths of the length of the median process of the guide. Differences in the male palpi can be determined by a study of published figures.

The differences in habitat preferences are indicated in the discussions under each species.

*Lycosa acoma* Chamberlin

1924. *Lycosa acoma* Chamberlin. Proc. U. S. Nat. Mus., 63(13): 29; pl. 6, fig. 45. [♀ — type locality, New Orleans, La.; epigynum figured].

1934. *Lycosa abdita* Gertsch. Amer. Mus. Nov., No. 726: 3; fig. 6. [figure of epigynum].

1935. *Lycosa acoma*, Gertsch and Wallace. Amer. Mus. Nov., No. 794: 11-12; fig. 31. [figure of male palpus].

GEOGRAPHIC DISTRIBUTION: Known from Texas, Louisiana, Georgia, and Florida.

RECORDS: Florida: Edgewater, Mar. 12, 1939, C. A. Frost, M. C. Z. collection — 1 ♂; Alachua Co.: near Alachua: May 10, 1941, Cat. 1139 — 5 ♂♂, 2 ♀♀; May 3, 1941, Cat. 1137 — 1 ♂; Gainesville vicinity: Apr. 29, 1933, Cat. 207 — 1 ♂; Apr. 16, 1934, Cat. 285 — 1 ♂; May 1, 1936, Cat. 549 — 2 ♂♂; Jan. 19, 1937 — 2 ♂♂, 1 ♀; Feb. 9, 1938, Cat. 1012 — juv. ♂; Apr. 22, 1937 — 4 ♂♂, 2 ♀♀ (one pair observed copulating); May 14, 1937, Cat. 611A — 2 ♀♀; near Hawthorne, Mar. 24, 1935 — 2 ♂♂; Mesophytic Hammock of Biology Station on Newnan's Lake: Jan. 23, 1937 — 1 ♂, 6 immatures; Apr. 16, 1934, Cat. 284 — 2 ♀♀; Apr. 24, 1937 — 3 ♀♀; San Felasco Hammock: May 5, 1937 — 1 ♂; May 21, 1937 — 1 ♀; June 5, 1937 — 2 immatures; June 19, 1937 — 2 ♀♀; Sugarfoot Hammock, Mar. 19, 1938, Cat. 1031 — ♂♂, ♀♀; Prairie Creek Magnolia-Cypress Hammock, Apr. 18, 1935, Cat. 394 — 1 ♀; Wauberg Lake Hammock, Mar. 14, 1933, Cat. 121 — 1 ♀. Brevard Co.: Cocoa, Feb. 23, 1925, M. C. Z. collection — 1 ♀. Collier Co.: Everglades, Feb. 1935, W. M. Barrows — 1 ♀. Escambia Co.: Riverview, Apr. 6, 1934, Cat. 282 — 1 ♂, 44 ♀♀. Flagler Co.: 3.6 miles east of county line on Florida 28, Apr. 1, 1939, Cat. 1072 — 1 ♂. Lake Co.: Lake Eustis, Jan. 4, 1935, Cat. 366 — 1 ♀. Lee Co.: Ft. Myers, Jan. 20, 1937, W. M. Barrows — 1 ♂. Levy Co.: in the Gulf Hammock, Apr. 20, 1935, Cat. 397, G. Van Hyning — 1 ♂. Liberty Co.: Torrey Ravine, Apr. 10, 1935, Cat. 382 — 9 ♂♂, 3 ♀♀, 1 immature; Sweetwater Branch, Apr. 11, 1935, Cat. 383C — 1 ♂, 2 ♀♀. Polk Co.: 3 miles east of Lakeland, June 26, 1935, Cat. 420 — 1 ♀. Putnam Co.: Welaka, U. of F. Conservation Reserve: June 2, 1947, Cat. 1267 — 1 ♀; June 3, 1947, Cat. 1267 — 1 ♀ with egg sac; June 6, 1947, Cat. 1273 — 5 ♀♀; June 6, 1947, Cat. 1273A — 3 ♀♀; June 7, 1947, Cat. 1275 — 1 ♀. Taylor Co.: Stephenville, Mar. 26, 1933, Cat. 131 — 1 ♂, 1 ♀. Volusia Co.: Benson Springs, Nov. 11, 1933, Cat. 252 — immatures; 1.8 miles southeast of county line on U. S. 1, Apr. 1, 1939, Cat. 1074 — 1 ♂.

**Georgia:** *Turner Co.:* 9.0 miles southeast of Sycamore, May 6, 1937, Cat. 606 — 3 ♂♂, 5 ♀♀.

**Texas:** Edinburg, Feb. 14, 1935, Rutherford — 1 ♂, 1 ♀.

**REMARKS:** This is a spring form, the earliest date for the collection of a male being January 19 and the latest May 10. Copulation has been observed in April, a female with egg sac in June. By the middle of the summer this species is much reduced in numbers.

*Lycosa acompa* is one of the characteristic species of the leaf mould of mesophytic hammocks in north-central Florida; it seems to favor moist situations in these hammocks. It also occurs in low or wet hammocks, swamps, and around wet areas in pine flatwoods. Its main requirements appear to be shade, leaf mould, and moist soil. It is usually found close to its retreat which is most often a shallow burrow in the ground beneath the leaf mould; sometimes it is found under or in rotten logs. Like *Lycosa apothetica* it is a very furtive species, hiding in the leaf mould and not venturing far from its retreat. Sometimes these two species are found in the same habitat.

*Lycosa parthenus* Chamberlin

1925. *Lycosa parthenus* Chamberlin. Bull. Mus. Comp. Zool., Harvard, 67(4): 228. [♀ — type locality, Bartow, Florida].

1935. *Lycosa parthenus*, Gertsch and Wallace. Amer. Mus. Nov. No. 794: 12-13; figs. 28 and 29. [figures of male palpus and epigynum].

**GEOGRAPHIC DISTRIBUTION:** Known only from Florida.

**RECORDS:** **Florida:** *Alachua Co.:* 2 miles north of Melrose on Fla. 80, May 31, 1936, Cat. 558A — 1 ♀; approximately 2.7 miles northeast of Alachua on Fla. 113, Feb. 4, 1938, Cat. 1002 — 3 ♂♂, 1 ♀; vicinity of Gainesville: Apr. 2, 1933, Cat. 136 — 1 ♀; Oct. 25, 1933, Cat. 246 — 1 ♂ 1 ♀; Oct. 25, 1933, Cat. 247 — 3 ♀♀; Oct. 31, 1933, Cat. 250 — 1 ♀; Apr. 17, 1934, Cat. 286 — 1 ♀; May 1, 1936, Cat. 549 — 1 ♀; Jan. 23, 1937 — 1 ♀; Jan. 30, 1937 — 1 ♂; Feb. 3, 1937 — 1 ♂, 9 ♀♀; Mar. 6, 1937 — 1 ♀; May 14, 1937 — 1 ♀; May 15, 1937 — 2 ♀♀; June 12, 1937 — 1 ♀; Oct. 26, 1937 — 2 ♀♀; Oct. 27, 1937 — 1 ♂, 2 ♀♀; Feb. 7, 1938, Cat. 1009 — 1 ♂; Feb. 8, 1938 — 1 ♂, 1 ♀; Feb. 9, 1938, Cat. 1010 — 6 ♂♂, 5 ♀♀; Feb. 9, 1938, Cat. 1011 — 1 ♂, 1 ♀; Feb. 13, 1938, Cat. 1018 — 1 ♀; Feb. 16, 1938, Cat. 1025 — 1 ♂; Feb. 16, 1938, Cat. 1027A — 1 ♂. *Clay Co.:* Keystone Heights, Feb. 5, 1938, Cat. 1006 — 1 ♀. *Citrus Co.:* 10 miles south of Inverness, May 1, 1936, Cat. 577 — 1 ♀; Sweetgum Cavern, near Floral City: Dec. 18, 1936 — 1 ♀; Jan. 29, 1937, Cat. 580 — ♂♂, ♀♀ with egg sacs; Feb. 26, 1937, Cat. 582 — 1 ♀ with egg sac. *Escambia Co.:* Pensacola, Jan. 31, 1925, W. M. Barrows — 1 ♂. *Lake Co.:* Eustis, Jan. 2, 1935, Cat. 361 — 1 ♂, 2 ♀♀. *Levy Co.:* Sea Horse Island, Apr. 28, 1934, Cat. 298 — 1 ♀. *Liberty Co.:* near Sweetwater Branch, Apr. 11, 1935, Cat. 383C — 1 ♀; near Torreya Ravine, Apr. 12, 1935, Cat. 385 — 1 ♀. *Putnam Co.:* Welaka, U. of F. Conservation Reserve, May 2, 1947, Cat. 1253 — 1 ♀.

**REMARKS:** *Lycosa parthenus* matures and mates during January and February in the Gainesville region; however, I have two records of males from October. Females with egg sacs have been taken only during Jan-

uary and February. During the spring adults gradually decrease in numbers until, by the middle of the summer, they are rare. By June the young have left the mother and are common in the leaf mould of appropriate situations.

This species is apparently confined to dry leaf mould. In such xeric situations as turkey oak or old fields it is found among the leaves under trees but is missing on open sandy stretches. Wherever dry leaf mould occurs, including all situations drier than mesophytic hammock, this species is likely to be present. In this respect it differs from the two preceding species.

*Trabea aurantiaca* (Emerton)

1885. *Aulonia aurantiaca* Emerton. Trans. Conn. Acad. Sci., 6: 499; pl. 49, figs. 6, 6a, 6b.

RECORDS: Florida: Putnam Co.: Welaka, U. of F. Conservation Reserve: June 2, 1947, Cat. 1267 — 1 ♀; June 3, 1947, Cat. 1267 — 8 ♀♀, one with an egg sac; June 3, 1947, Cat. 1269 — 1 ♀; June 6, 1947, Cat. 1272 — 2 ♀♀; June 6, 1947, Cat. 1272A — 3 ♀♀ with egg sacs; June 6, 1947, Cat. 1273 — 3 ♀♀, one with egg sac; June 6, 1947, Cat. 1273A — 1 ♀; June 7, 1947, Cat. 1275 — 6 ♀♀; June 6, 1947, Cat. 1275A — 1 ♀ with egg sac.

REMARKS: The above collections were made in three types of situations, (1) under dry sphagnum moss—this had been in a shallow pond in pine flatwoods bordering a bayhead, but the pond had dried up completely leaving a layer of sphagnum about an inch thick suspended several inches above the ground, the sphagnum being suspended by its attachment to reeds and other plants growing in the area. The soil beneath the sphagnum was moist. (2) in and under moist rotten logs. (3) in a very thick leaf mould of a *Pinus australis*-*Quercus cinerea* association on Blanton Fine Sand. This situation had the appearance of being almost xeric, but I believe the thickness of the ground cover produced a fairly humid environment. All three situations were collected at night by raking an area clean of cover, or tearing up rotten logs, and then shining the disturbed areas with a headlight.

---

### RESEARCH REQUEST

Dr. Herbert Osborn has written to the society requesting data on recent activities in entomology, especially the part played in the recent war by individual entomologists, either in actual army duties or in reasearch related to the war. He also wishes to add pictures of entomologists to the collection of photographs now being made at the Department of Entomology, Ohio State University. Any data or photographs from members of the Florida Entomological Society will be appreciated. They should be sent to Dr. Herbert Osborn, B and Z Building, Ohio State University, Columbus 10, Ohio.