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GENUS *PARTHENICUS* IN THE EASTERN UNITED STATES, WITH DESCRIPTIONS OF NEW SPECIES (HEMIPTERA: MIRIDAE)

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ABSTRACT

The eastern United States species of the orthotyline plant bug genus *Parthenicus* Reuter (Hemiptera: Miridae) are reviewed. *Parthenicus juniperi* (Heidemann), *P. psalliodes* Reuter (type of genus), *P. taxodii* Knight, and *P. vaccini* (Van Duzee) are redescribed. The new species *P. knighti*, *P. rufus*, and *P. weemsi* are described from specimens collected in Florida. Known distributions and host plants, illustrations of male parameres, photographs of adults, and a key to the 7 eastern U.S. species are provided.

RESUMEN

Se revisan las especies del género Parthenicus Reuter (Hemiptera: Miridae) del este de los Estados Unidos. Se describen de nuevo P. juniperi, P. psalliodes, P. taxodii y P. vaccini, y se describen nuevas especies, P. knighti, P. rufus, y P. weemsi de especimenes de Florida. Se presentan las distribuciones conocidas y las plantas hospederas, ilustraciones de los parameros del macho, fotografías de los adultos y una clave para las 7 especies del este de los EUA. The orthotyline plant bug genus *Parthenicus* Reuter, 1876, is found primarily in western North America. Only 5 of 72 species have been reported east of the Mississippi River (Carvalho 1958, Knight 1968, Kelton 1980). Recently one of the 5 species, *Parthenicus nigrellus* Knight, was transferred to the genus *Texocoris* Schaffner (Henry 1982).

In this paper, I present for the first time hosts for the type of *Parthenicus*, *P. psalliodes* Reuter, describe 3 new species from Florida, review distributions and host plant information, provide photographs of adults and illustrations of all male parameres, and give a key to the 7 eastern species.

The following abbreviations are for institutions cited in this paper: FSCA—Florida State Collection of Arthropods, Florida Department of Agriculture, Gainesville; PDA—Pennsylvania Department of Agriculture, Harrisburg; and USNM—United States National Museum of Natural History, Washington, D.C.

Parthenicus Reuter

TYPE-SPECIES: Parthenicus psalliodes Reuter, 1876: 85 (Mon.)

DIAGNOSIS: Small, length usually less than 4.5 mm (less than 3.0 mm for eastern U.S. species), elongate; hemelytra subparallel on outer margins; head without a distinct basal carina, eyes large, strongly granulate in males; rostrum reaching metacoxae or beyond; pubescence silvery to golden, simple and sericeous, often intermixed with black scalelike setae, especially on apical area of corium and on cuneus; hemelytra and membrane well developed in macropterous males and females, membrane strongly abbreviated in brachypterous females; legs saltatorial; parempodia convergent.

REMARKS: The genus *Parthenicus* is easily recognized using Knight's (1941, 1968) keys to the Orthotylinae. The small size, dull dorsum, and absence of a basal carina on the head will distinguish this genus from all other North American Orthotylinae. All species have saltatorial hindlegs and are capable of jumping; this trait is especially noticeable in brachypterous females and nymphs.

Male genitalia are small and need to be dissected and viewed under a compound microscope. The aedeagus is simple and bears 2 simplified spiculi. The left paramere in the eastern species is C-shaped with the base thickened and the arch of the C gradually tapered. The right paramere is typically straight, thickened, and spined apically; some right parameres have a medial process that often forms an elongate comb or acute spine. For comparison, Knight (1968) figures parameres of many western species.

Key to the species of Parthenicus of eastern United States

1.	Tibial spines without distinct spots at bases	2
1′.	Tibial spines with distinct red or brown spots at bases	4
2(1).	Metafemora strongly infuscated on dorsal 2/3; scutellum and apical 1/3 of corium with numerous black scalelike setae	`
2′.	Metafemora not infuscated, instead uniformly pale yellow or testaceous; scutellum and apical 1/3 of corium without black scalelike setae	, 3

3(2').	Dorsum uniformly yellow; rostrum short, just reaching middle
	of metacoxa taxodii Knight
3′.	Dorsum not uniformly yellow, basal angles of scutellum in-
	fuscated, spots at base and along outside margin of clavus and
	at base of cuneus red; rostrum long, reaching beyond meta-
	coxae knighti Henry, n. sp.
4(1').	Dorsum and venter predominately red to reddish orange,
	sometimes with a few pale areas showing through red
	rufus Henry, n. sp.
4'.	Dorsum and venter not red or reddish orange, with or without
	brown or red spots
5(4').	Dorsum whitish or pale-testaceous with numerous red spots
	throughout psalliodes Reuter
5′.	Dorsum testaceous or grayish without red spots over entire
	surface
6(5').	Dorsum, 1st and 2nd antennal segments, and legs pale grayish
	or grayish green, with numerous brown to fuscous spots; wing
	membrane white with fuscous clouds apically; females usually
	brachypterous
6′.	Dorsum testaceous, often with a light reddish-orange tinge and
	a few brown or red spots at base and apex of corium. spots on
	legs red; antennae uniformly pale testaceous, without spots:
	wing membrane smoky brown: brachypterous female un-
	known ane Henry n sn
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Parthenicus juniperi (Heidemann) (Fig. 1, 8)

Psallus juniperi Heidemann, 1892: 225.

Parthenicus juniperi: Knight, 1919: 114.

DESCRIPTION: MALE—Length 2.76-3.20 mm (n=5), width 1.00-1.08 mm. Head: Width 0.62-0.66 mm, vertex 0.16-0.18 mm. Rostrum: Length 1.00 mm, reaching just past base of metacoxa. Antenna: Segment I, length 0.20 mm; II, 1.04-1.08 mm; III, 0.60 mm; IV, 0.32 mm. Pronotum: Length 0.40-0.44 mm, basal width 0.82-0.84 mm.

General coloration pale testaceous, hemelytra often tinged with salmon pink, anterior 1/2 of pronotum tinged with greenish yellow, scutellum usually black or strongly infuscated, membrane fumate; venter testaceous, abdomen often strongly infuscated; legs testaceous, dorsal 2/3 of metafemora fuscous to fuscorufous; tibiae testaceous without spots at bases of pallid spines; dorsum clothed with erect and semierect, simple, golden setae, intermixed with silvery sericeous setae on head and middle of hemelytra, golden sericeous setae on pronotum and throughout hemelytra, and black scalelike setae on scutellum, apical 1/3 of corium, and scattered on clavus and cuneus.

Parameres: Left (Fig. 8a); right (Fig. 8b) stout with a subapical process and a short acute spine at middle of back side.

FEMALE—Length 2.68-3.08 mm (n=10), width 1.04 mm. *Head*: Width 0.52-0.58 mm, vertex 0.26-0.28 mm. *Rostrum*: Length 1.08-1.12 mm, reaching just past metacoxae. *Antenna*: Segment I, length 0.18-0.22 mm; II, 0.82-0.98 mm; III, 0.44-0.54 mm; IV, 0.34-0.36 mm. *Pronotum*: Length 0.38-0.44 mm, basal width 0.84-0.98 mm.



Fig. 1-4. Photographs of Parthenicus spp. 1) juniperi; 2) knighti; 3) psalliodes; 4) rufus.



Fig. 5-7. Photographs of *Parthenicus* spp. 5) taxodii; 6 a-b) vaccini, macropterous male (a) and brachypterous female (b); 7) weemsi.

Henry: Parthenicus

Very similar to male in color and pubescence.

REMARKS: Parthenicus juniperi, described from Washington, D.C. and Berkeley Springs [Morgan Co.], West Virginia (Heidemann 1892), is common on red cedar, Juniperus virginiana L., and cultivated Juniperus spp. everywhere east of the 100th meridian (Knight 1941). Wheeler and Henry (1977) reviewed the distribution and host plants, redescribed the adult, described the 5th-instar nymph, and provided a brief account of the seasonal history. Parthenicus juniperi also feeds on cultivated species of Chamaecyparis and Thuja (Wheeler and Henry 1977).

Parthenicus juniperi is distinguished from other eastern species of the genus by the testaceous dorsum, often with a salmon-pink tinge, by the infuscated scutellum, the black scalelike setae on the scutellum and apex of the corium, and by the pale testaceous tibiae without spots at the bases of the spines.

Parthenicus knighti Henry, NEW SPECIES (Fig. 2, 9)

DESCRIPTION: HOLOTYPE MALE—Length 2.76 mm (range of 4 paratypes and holotype, 2.76-3.12 mm), width 1.08 mm (1.00-1.08 mm). *Head*: Width 0.64 mm (0.64-0.66 mm), vertex 0.24 mm (0.24 mm). *Rostrum*: Length 1.22 mm (1.22-1.34 mm), reaching base of 5th abdominal segment. *Antenna*: Segment I, length 0.20 mm (0.20-0.28 mm); II, 0.86 mm (0.86-0.92 mm); III, broken (0.66 mm); IV, broken (0.32 mm). *Pronotum*: Length 0.48 (0.44-0.48 mm), basal width 0.92 mm (0.88-0.96 mm).

General coloration yellow to testaceous, area around calli tinged with orange yellow, basal angles of scutellum infuscated, base and outside margin of clavus, inside margin of corium, and base of cuneus blotched or spotted with red; membrane fumate, veins of small areole red; venter, legs and antennae uniformly pallid to testaceous, tibial spines pallid without spots at bases. Dorsum with erect and semierect, golden, simple setae, intermixed with silvery, sericeous setae on head, pronotum, scutellum and base of clavus, and golden sericeous setae generally over hemelytra, especially on apical 1/3 of corium.

Parameres: Left (Fig. 9a); right (Fig. 9b) with a stout, pointed apical process and a large middle process with the acute apex pointed basally.

Allotype (brachypterous) female: Length to apex of abdomen 2.32 mm, length to apex of hemelytra (membrane greatly reduced) 2.06 mm, width 1.04 mm. Head: Width 0.58 mm, vertex 0.30 mm. Rostrum: Length 1.40 mm, reaching base of ovipositor. Antenna: Segment I, length 0.20 mm; II, 0.94 mm; III and IV broken. Pronotum: Length 0.38 mm, basal width 0.84 mm.

Similar to male in color and pubescence.

TYPE-DATA: Holotype—Male, Fort Meyers [Lee Co.], Florida, 12 May 1928, E. D. Ball coll. (USNM type no. 100237). Allotype: Female, same data as for holotype. Paratypes: 1 3, Tampa [Hillsborough Co.], Florida, 10 September 1927, E. D. Ball coll. (USNM); 5 3, same data as for holotype (USNM).

REMARKS: Parthenicus knighti is described from material found in the H. H. Knight collection (USNM). I have the honor of naming this species after Dr. Knight, who described most of the 72 known species of *Parthenicus*.

This species can be separated from other species of eastern Parthenicus

by the uniformly testaceous dorsum, accented with red at the base and outside margin of the clavus, the inside margin of the corium, and basal area of the cuneus; and by the long rostrum that reaches the 5th abdominal segment in males and to the base of the ovipositor in the only known female.

Parthenicus psalliodes Reuter (Fig. 3, 10)

Parthenicus psalliodes Reuter, 1876: 85

DESCRIPTION: MALE—Length 2.56-3.16 mm (n=5), width 1.00-1.16 mm. Head: Width 0.54-0.64 mm, vertex 0.20-0.24 mm. Rostrum: Length 0.94-1.02 mm, reaching 3rd abdominal segment. Antenna: Segment I, length 0.20-0.22 mm; II, 0.84-1.00 mm; III, 0.60-0.68 mm; IV, 0.32-0.38 mm. Pronotum: Length 0.38-0.44 mm, basal width 0.76-0.90 mm.

General coloration whitish or pale testaceous, thickly spotted with orange red; scutellum lightly infuscated; membrane smoky gray; venter pallid to testaceous, sides of abdomen often tinged with green and spotted with orange; legs pallid to testaceous, femora red to brown spotted and usually infuscated, especially on metafemora; tibiae pale with red to brown spots at bases of pallid spines; antenna pale with one or a few orange spots



Fig. 8-11. Parameres of Parthenicus spp. (a= left paramere; b= right paramere). 8) juniperi; 9) knighti; 10) psalliodes; 11) rufus.

on 1st segment. Dorsum covered with numerous, golden, simple setae, intermixed with silvery sericeous setae on head, pronotum and hemelytra and fuscous scalelike setae on scutellum, hemelytra, especially apical 1/3, and along inside margin of cuneus.

Parameres: Left (Fig. 10a); right (Fig. 10b) with a stout apical process and an elongate, but broad, comblike middle process.

FEMALE:—Length 2.52-2.88 mm (n=5), width 1.00-1.12 mm. Head: Width 0.52-0.56 mm, vertex 0.26 mm. Rostrum: Length 1.00-1.12 mm. Antenna: Segment I, length 0.18-0.20 mm; II, 0.78-0.86 mm; III, 0.54-0.60 mm; IV, 0.32 mm. Pronotum: Length 0.44 mm, basal width 0.90 mm.

Similar to male in color and pubescence.

REMARKS:—*Parthenicus psalliodes* was described from Texas (Reuter 1876). It is also recorded from California and Florida (Blatchley 1926), but the California record is doubtful. Knight (1968) did not record *psalliodes* from California and I have not seen specimens east of Texas.

I found this species common at light in Highlands Co., Florida, Archbold Biological Station during April 1981-82 and Alachua Co., Florida, Gainesville, in late April 1981. Other records include: 5 adults (3 nymphs) Alachua Co., Florida, Austin Cary Memorial Forest, Rt. 24, 4 May 1982, T. J. Henry coll., taken on Eupatorium compositifolium Walt. and Eupatorium pinnatifidum Ell. (Asteraceae) (USNM); 3δ , 5φ , (and 5th instar nymphs) Bay Co., Florida, 11 miles west of Jct. 230 along Rt. 20, T. J. Henry coll., taken of Chrysoma pauciflosculosa (Michx.) Greene (Asteraceae) (USNM); 1 & (and nymphs) Gulf Co., Florida, 5 mi. S of Port St. Joe, Rt. 30, 8 May 1982, T. J. Henry coll. taken on Chrysoma pauciflosculosa (USNM); 10 3rd instar nymphs, Henry Co., Alabama, 10 mi. W of Abbeville, Rt. 10, 11 May 1982, T. J. Henry coll., taken on Eupatorium compositifolium (USNM); 1 3, Harnett Co., North Carolina, Fort Bragg, 15 September 1968, D. B. Palmer coll. (USNM); 9 males and 10 females, Brazos Co., Texas, College Station, 10 Sept.-20 Oct. 1928, S. E. Jones coll., taken on broomweed, Gutierrezia texana Torreya and Gray (Asteraceae) (USNM).

Parthenicus psalliodes can be separated from other eastern species of *Parthenicus* by the whitish or pale-testaceous, red-spotted dorsum and legs and by the male parametes as described above.

Parthenicus rufus Henry, NEW SPECIES (Fig. 4, 11)

DESCRIPTION: HOLOTYPE MALE—Length 2.78 mm (range of 4 paratypes 2.76-2.96 mm), width 1.04 mm (1.00-1.04 mm). *Head*: Width 0.58 mm (0.58-0.60 mm), vertex 0.24 mm (0.24 mm). *Rostrum*: Length 0.96 mm (0.94-0.98 mm), reaching 4th abdominal segment. *Antenna*: Segment I, length 0.22 mm (0.20-0.22 mm); II, 0.90 mm (0.88-0.90 mm); III, 0.66 mm (0.64-0.70 mm); IV, 0.28 mm (0.28-0.34 mm). *Pronotum*: Length 0.42 mm (0.42 mm), basal width 0.82 mm (0.80-0.84 mm).

General coloration orange red with a few irregular, paler blotches on pronotum, embolium, cuneus, and base of clavus and corium; hemelytral membrane fumate or black, veins orange red; venter orange red, flecked with red on abdomen; antennae testaceous (some paratypes tinged with orange), segment IV and apex of III infuscated; legs generally testaceous pro- and mesofemora lightly brown flecked, metafemora strongly brown flecked, flecks coalescing dorsally to form solid brown areas; tibial spines pale testaceous





Fig. 12-14. Parameres of *Parthenicus* spp. (a = left paramere; b = right paramere). 12) taxodii; 13) vaccini; 14) weemsi.

with orange spots at bases. Dorsum with semierect, simple, golden setae, strongly intermixed with golden sericeous setae on head, pronotum, and hemelytra; silvery sericeous setae on scutellum, apex of clavus, and sparsely scattered over head and pronotum; inner apical 1/3 of corium and a single tuft on inside margin of cuneus with black sericeous or scalelike setae.

Parameres: Left (Fig. 11a); right (Fig. 11b) with an upward-pointing apical process and a slender, but elongate middle process.

ALLOTYPE FEMALE: Length 2.60 mm (range of 10 paratypes 2.32-2.76 mm), width 1.04 mm (0.92-1.04 mm). Head: Width 0.56 mm (0.50-0.58 mm), vertex 0.28 mm (0.28-0.30 mm). Rostrum: Length 1.02 mm (0.94-1.02 mm). Antenna: Segment I, length 0.20 mm (0.16-0.22 mm); II, 0.80 mm (0.72-0.86 mm); III, 0.60 mm (0.48-0.58 mm); IV, 0.30 mm (0.32-0.34 mm). Pronotum: Length 0.40 mm (0.36-0.42 mm), basal width 0.86 mm (0.76-0.88 mm).

Similar to male in color and pubescence.

TYPE-DATA: Holotype-Male, Highlands Co., Florida, 2 mi. W of Sebring,

Rt. 634, 24 April 1982, T. J. Henry and A. G. Wheeler, Jr. colls., taken on *Hypericum fasciculatum* Lam. (USNM type no. 100238). *Allotype*: same data as for holotype (USNM). *Paratypes*: 2 δ , 4 \Im , same data as for holotype (USNM); 2 δ , 9 \Im , Highlands Co., Florida, Archbold Biological Station, 27 April 1981 and 20-25 April 1982, T. J. Henry, taken at blacklight (USNM); 8 \Im , Collier Co., Florida, 1.5 mi. E of Hendry Co. line, Rt. 82, 25 April 1982, T. J. Henry coll., taken on *Hypericum fasciculatum* (FSCA, USNM); 2 δ , 1 \Im , Seminole Co., Florida, Sanford, 5 May 1927, E. D. Ball coll. (USNM); 2 \Im , Polk Co., Florida, 6 May 1957, H. V. Weems, Jr. coll., taken on *Hypericum* sp. (FSCA); 1 δ (teneral), Co.?, South Carolina, N. Landing (no date), W. F. Fiske coll. (USNM).

REMARKS: Parthenicus rufus is distinguished from other eastern species of Parthenicus by the uniformly red body with small irregular pale areas, predominantly clothed with golden sericeous setae, and by the heavily red-spotted legs.

The general reddish coloration of this bug is similar to that of other Miridae, *Taedia heidemanni* (Reuter) and *Phytocoris rufus* Van Duzee, that were also collected on *Hypericum* spp. in Florida in 1981 and 1982.

> Parthenicus taxodii Knight (Fig. 5, 12)

Parthenicus taxodii Knight, 1941: 76

DESCRIPTION: MALE—Length 2.00-2.56 mm (n=2), width 0.90-0.96 mm. Head: Width 0.54-0.60 mm, vertex 0.17-0.18 mm. Rostrum: Length 0.73-0.90 mm, reaching metacoxae. Antenna: Segment I, length 0.13-0.16 mm; II, 0.73-0.82 mm; III, 0.43-0.50 mm; IV, 0.26-0.30 mm. Pronotum: Length 0.34-0.40 mm, basal width 0.73-0.80 mm.

Overall coloration yellow to greenish yellow, with some specimens exhibiting an orange tinge; venter, legs, and antennae uniformly yellowish, only metafemora sometimes with a few minute fuscous spots; dorsum with erect and semierect pale to golden, simple setae, thickly intermixed with silvery sericeous setae.

Parameres: Left (Fig. 12a); right (Fig. 12b) rather stout and having a small acute, downcurved, subapical spine.

FEMALE—Length 2.20-2.44 mm (n=2), width 0.91-1.00 mm. Head: Width 0.47-0.54 mm, vertex 0.26-0.28 mm. Rostrum: Length 0.84 mm. Antenna: Segment I, length 0.13-0.18 mm; II, 0.70-0.74 mm; III, 0.40-0.44 mm; IV, 0.26-0.29 mm. Pronotum: Length 0.32-0.38 mm, basal width 0.75-0.84 mm.

Color and pubescence similar to that of male.

REMARKS: Parthenicus taxodii was described from specimens collected on bald cypress, Taxodium distichum (L.) in Illinois (Knight 1941), and later recorded from Missouri (Froeschner 1949). I collected nymphs and 4 adults of this species in Florida from Liberty Co., 3 miles south of Bristol, County Road 379, 7 and 11 May 1981, on bald cypress (USNM). A single $\[mathcar{Q}$ was taken on bald cypress in Martin Co., Florida, 7 mi. So. of the Okeechobee Co. Line, 29 Apr. 1982 (USNM).

Parthenicus taxodii is recognized by the small size, uniformly yellowish coloration, often with an orange tinge, silvery sericeous pubescence on the dorsum, and by the pallid tibial spines without spots at bases.

Parthenicus vaccini (Van Duzee) (Fig. 6, 13)

Psallus vaccini Van Duzee, 1915: 117

Parthenicus vaccini Van Duzee, 1916: 45

DESCRIPTION: MALE—Length 2.68-2.96 mm (n=10), width 1.00-1.04 mm. Head: Width 0.54-0.56 mm, vertex 0.24-0.26 mm. Rostrum: Length 1.20-1.28 mm, reaching base of genital segment. Antenna: Segment I, 0.24-0.26 mm; II, 0.94-1.00 mm; III, 0.72-0.74 mm; IV, 0.42 mm. Pronotum: Length 0.32-0.36 mm, basal width 0.78-0.80 mm.

General coloration gray to grayish green, mesosternum fuscous, abdomen green, 1st and 2nd antennal segments, pronotum, scutellum, and hemelytra with numerous fuscous spots; legs grayish, femora thickly dark spotted, some spots coalescing to form blotches on metafemora; pale tibial spines with large fuscous spots at bases. Dorsum with erect and semierect, pale, simple setae, intermixed with silvery sericeous setae on head, pronotum and hemelytra, and black scalelike setae on scutellum, apical 1/3 of corium and on cuneus.

Parameres: Left (Fig. 13a); right (Fig. 13b) slender and nearly C-shaped with the apex gradually tapering.

MACROPTEROUS FEMALES—Similar to males in color, form, and pubescence.
BRACHYPTEROUS FEMALE (Fig. 6b)—Length to apex of abdomen 2.08-2.30 mm (n=10), length to apex of hemelytra 1.76-1.92 mm, width 0.96 mm.
Head: Width 0.52-0.54 mm, vertex 0.26-0.28 mm. Rostrum: Length 1.26-1.30 mm, reaching base of ovipositor. Antenna: Segment I, length 0.24 mm; II, 0.86-0.92 mm; III, 0.62-0.66 mm; IV, 0.36-0.38 mm. Pronotum: Length 0.30 mm, basal width 0.70 mm.

Similar to macropterous forms in color and pubescence, differing only in the broader form and the abbreviated membrane of the hemelytra.

REMARKS: Parthenicus vaccini (Van Duzee), described from Ipswich [Essex Co.], Massachusetts (Van Duzee 1915), was later recorded from Long Island, New York (Knight 1923), Florida (Blatchley 1926, Frost 1964), and New Jersey (Henry 1978).

Parthenicus vaccini is known to occur on mats of Hudsonia ericoides L. (Cistaceae) (Henry 1978). A. G. Wheeler, Jr. and I collected adults and nymphs of vaccini in abundance near Yaphank and Quoque, Suffolk Co., 29 August 1981 on Hudsonia tomentosa Nutt. (PDA, USNM). At the Quogue locality, a few adults were swept from the low growing Lechea maritima Leggett, a plant also belonging to the Cistaceae. The first record for Maryland is Assateaque Island, Worcester Co., 6 September 1981, T. J. Henry coll., on H. tomentosa.

Parthenicus vaccini can be separated from other eastern species of Parthenicus by the overall grayish coloration, with the dorsum, legs and antennae having fuscous spots, by the long rostrum that reaches near the base of the genital segment, and by the form of the male parameres as described above.

Parthenicus weemsi Henry, NEW SPECIES (Fig. 7, 14)

DESCRIPTION: HOLOTYPE MALE—Length 2.48 mm (range of 10 paratypes 2.28-2.76 mm), width 1.00 mm (0.88-1.04 mm). Head: Width 0.62 mm (0.54-

0.62 mm), vertex 0.26 mm (0.26 mm). *Rostrum*: Length 0.98 mm (0.92-1.00 mm), reaching just beyond metacoxae to 3rd abdominal segment. *Antenna*: Segment I, length 0.18 mm (0.18-0.20 mm); II, 0.90 mm (0.82-0.92 mm); III, 0.60 mm (0.58-0.64 mm); IV, 0.34 mm (0.32-0.34 mm). *Pronotum*: Length 0.38 mm (0.34-0.38 mm); basal width 0.82 mm (0.72-0.84 mm).

Coloration yellow or testaceous, with pronotum, base and apical area of corium and inner angle of cuneus tinged with red or reddish orange or flecked with red and/or brown spots; membrane smoky brown, veins more testaceous. Venter testaceous; antennae testaceous with 1st segment red spotted and 3rd and 4th segments infuscated. Legs testaceous, pro- and mesofemora flecked with brown, metafemora strongly flecked and tinged with brown to reddish brown; tibiae with distinct reddish-brown spots at bases of spines; claws fuscous. Dorsum with erect and semierect, golden, simple setae, thickly intermixed with silvery sericeous setae; clavus, apical area of corium and inner margin of cuneus with black scalelike setae.

PARAMERES: Left (Fig. 14a); right (Fig. 14b) slender with a dorsally directed apical spine and comblike middle process.

Allotype female: Length 2.32 mm (range of 10 paratypes 2.24-2.64 mm), width 1.00 mm (0.88-1.04 mm). Head: Width 0.52 mm (0.52-0.54 mm), vertex 0.28 mm (0.28-0.30 mm). Rostrum: Length 1.00 mm (0.94-1.02 mm), nearly reaching base of ovipositor. Antenna: Segment I, length 0.18 mm (0.16-0.20 mm); II, 0.78 mm (0.76-0.78 mm); III, 0.52 mm (0.46-0.58 mm); IV, 0.34 mm (0.32-0.34 mm). Pronotum: Length 0.34 mm (0.34-0.42 mm), basal width 0.76 mm (0.74-0.88 mm).

Females very similar to males in color and pubescence and differ only in the broader form.

TYPE-DATA: HOLOTYPE—Male, Highlands Co., Florida, 2 mi. W of Rt. 27 along Rt. 70, 20 April 1982, T. J. Henry and A. G. Wheeler, Jr. colls., taken on *Ceratiola ericoides* Michx. [Empetraceae] (USNM type no. 100239). *Allotype*: Female, same data as for holotype (USNM). *Paratypes*: 7 3, 16 9, same data as for holotype (FSCA, USNM); 2 3, 3 9, same locality as for holotype, 30 April 1982 (USNM); 9 3, 14 9, Putnam Co., Florida, 6 July 1956, H. V. Weems, Jr. coll., taken on *Ceratiola ericoides* (FSCA, USNM).

REMARKS: Parthenicus weemsi is distinguished from other eastern species of Parthenicus by the testaceous coloring with brownish and/or red spots on the pronotum and at the base and apex of the corium, and by the numerous red spots on the legs. This species is most similar to taxodii in the small size, but taxodii is uniformly greenish yellow, both on the body and legs, and lacks the red spots on the legs.

I have named this new species after Dr. Howard V. Weems, Jr. of the Florida Department of Agriculture, who has been instrumental in building the Florida State Collection of Arthropods into one of the outstanding collections in this country and who collected the first know specimens of this species.

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