

Although not known from the United States, this cricket is endemic to the Bahama Islands, which are less than 80 km away from the closest US location along the Florida coast. Since our earlier publication (Weissman *et al.* 2019), we have documented this cricket on a third island in the Bahamas: San Salvador, 24.122279° -74.45678°, 23-i-2019, 1♂, N. Lee, deposited CAS.

Recognition characters and song. Known only from 3 islands in the Bahamas. Body color as in Fig. 22. *Song* (Fig. 22) at 25°C typically with widely spaced single pulses delivered at 7–15/10 seconds at a pulse rate of 0.8–2.1.

DNA. GBM05, from Andros Island, multilocus appears (Fig. 6, p. 28) to be one of several *Gryllus* near the base of a continental North American species group, distinct from the Afro-Eurasian *G. bimaculatus* and *G. campestris* Linnaeus. We interpret this result cautiously, however, as we lack DNA samples for other geographically nearby species *G. jamaicensis* Walker, *G. mandevillus* Otte & Perez-Gelabert, and *G. bermudensis* Caudell (probably most closely related to *G. firmus* [Kevan 1980]).

The Ovisopis Group

Gryllus ovisopis Walker and *Gryllus thinos* Weissman and Gray, n. sp.

These two species are distributed in far allopatry on opposite sides of the Gulf of Mexico: *G. ovisopis* in Florida, Georgia, and South Carolina, and *G. thinos* in coastal Texas. They differ in several major ways: *G. ovisopis* is a wood cricket, with an obligate egg diapause, and lacks a functional calling song. In contrast, *G. thinos* is a beach cricket without an obligate egg diapause and has a 4–7 pulse chirp calling song. Nonetheless, multilocus DNA places them as sister species.

Gryllus ovisopis Walker, 1974

Taciturn Wood Cricket

Fig. 23

Gryllus ovisopis Walker, 1974 Florida Entomologist 57:13. Holotype male, Florida, Alachua County, deposited in USNM, type #72970. Holotype male and allotype female both listed on USNM type webpage and specimens located and photographed by Floyd Shockley and Kayla Kramer (Fig. 23).

Recognition characters and song. This species is an egg overwintering, obligate egg diapausing, fall maturing species where adults first appear in September, and whose documented US distribution includes 3 states (Florida, Georgia, and South Carolina) but may include as many as 6 southeastern states: Florida, Georgia, South Carolina, Alabama, Mississippi, and Louisiana (Capinera *et al.* 2004, Walker 2019). Head is narrower than pronotum. Males produce no calling song, but do naturally produce both aggressive and courtship songs, and can be chemically induced to produce a feeble 3–5 pulse chirp structurally similar to *G. pennsylvanicus* and *G. firmus* songs (Gray *et al.* 2018).

DNA. Multilocus 2018-001 and 2016-035, courtesy of Kevin Judge's cultures, from samples originally from the type locality of Gainesville, FL., show (Gray *et al.* 2019) that nearest multilocus relative is non-taciturn, non-egg diapausing *G. thinos*, the latter known only from coastal Texas. In the absence of genetic sequencing data, Walker (1974) believed *G. fultoni*, and perhaps *G. firmus*, to be the nearest relatives. Harrison & Bogdanowicz (1995) showed a single clade of *G. ovisopis*, *G. pennsylvanicus*, and *G. firmus* with 1.3% separation for the whole group; Huang *et al.* (2000) found similar results.

Discussion. With the exception of a single male nymph caught 22-vii-2002 (DAG FLA02-311) in Yulee, Nassua Co., FL, we have no field experience with this species. Therefore, the interested reader is referred to Walker (1974, 2019) and Capinera *et al.* (2004).

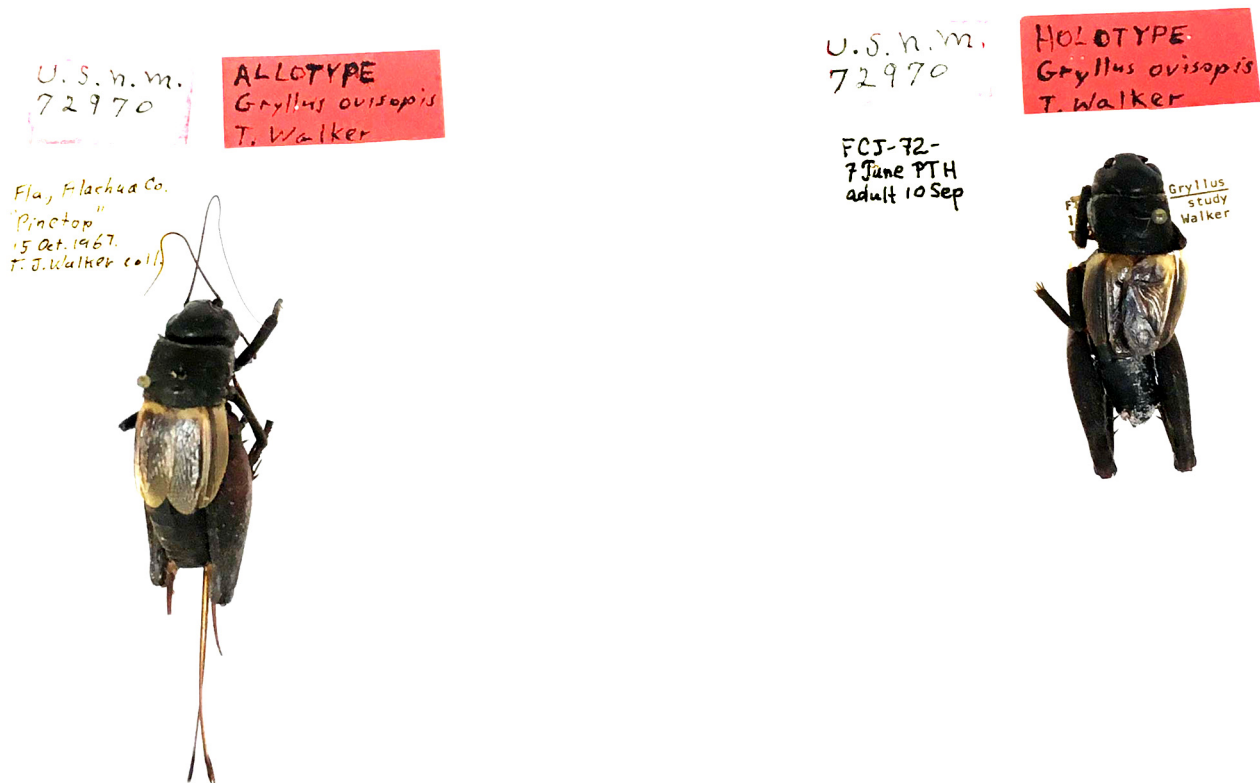


FIGURE 23. Male holotype (right) and female allotype (left) *G. ovisopis*.

***Gryllus thinos* Weissman & Gray, n. sp.**

Texas Beach Field Cricket

Figs 24–27, Table 1

‘Gryllus #21’ and ‘near #21’ of DBW notebooks.

Distribution. Texas—restricted to Texas Gulf coast and up to 8 km inland.

Recognition characters and song. Small to medium sized (Fig. 24), always short hind wings, medium length cerci, almost always in sandy habitats, males frequently sing from up in vegetation. *Song* (Fig. 25; R07-125) a slow chirp, CR usually < 90, 4–7 p/c, PR 20–35. Can be distinguished from only other Texas Gulf coast, sandy-environment field cricket, *G. firmus* (Texas), by DNA, non-overlapping file teeth, teeth/mm and a generally lower PR (Table 1, p. 18). Singing males of *G. thinos* also easier to approach than singing, microsympatric *G. firmus*. Females of the two taxa can be difficult to separate although *G. firmus* ovipositor length is generally longer in that larger species (see Table 1).

Holotype. Male (Fig. 24). USA, Texas, Kleberg Co., Padre Island National Seashore around Malaquite Visitor Center, 11-vi-2011, 15° 27' 25" 23.2" -97° 18' 07.7". D.B. Weissman. S11-35, R11-8, DNA sample G2018. 16S GenBank accession #MK446632. BL 17.28, HF11.53, LC 10.76. Right tegmen removed: 119 teeth, file length 3.1, TL 10.0, TW 4.6. Type deposited in CAS, Entomology Type #19274.

Paratypes. (Total: 67♂ 14♀) **Texas.** *Aransas Co.*, Business 35 near Rockport, 10', 12-vii-2013, 27° 57' 32.7" -97° 06' 14.4" (S13-55) 1♂. Texas 188 0.2 m SE Hwy 35, 19', 12-vii-2013, 27° 57' 56.1" -97° 07' 13.7" (S13-54) 2♂. *Cameron Co.*, Boca Chica State Park, 10', 25° 59.827" -97° 09.146" 3-vi-1991 (S91-36) 5♂ 1♀; 10-vi-2007 (S07-25) 6♂ 4♀. South Padre Island, Isla Blanca Park, 5', 10-vii-2013, 26° 04' 09.3" -97° 09' 41.7" (S13-41) 3♂. *Kleberg Co.*, Padre Island National Seashore, near Park entrance, 11-vi-2011, 27° 28' 39.9" -97° 16' 28.7" (S11-34) 1♂. Malaquite Visitor Center, 11-vi-2011 (S11-35) 2♂ 3♀; 3 m N Malaquite Visitor Center, 2-vi-1991 (S91-33) 11♂ 5♀; South Beach, 2-vi-1991 (S91-34) 2♂. *Matagorda Co.*, Hog Island, 21', 13-vii-2013, 28° 36' 17.4" -95°