## First records of the subfamily Acaenitinae in Florida (Hymenoptera: Ichneumonidae)

Acaenitines have five genera and 18 species in North American forests (Townes 1960). Several of these occur in the eastern United States, but none is recorded from Florida; however, recent fieldwork in Florida yielded four species: Arotes decorus (Say), Spilopteron formosum (Cresson), S. occiputale (Cresson) and S. vicinum (Cresson). These inhabit mature forests and attack wood-boring beetle larvae in dead trunks. There are no Florida host records, but Townes (1960) and Cushman and Rohwer (1920) report that in the northeastern states A. decorus was reared from Tomoxia (Mordellidae) in Carya (Juglandaceae), S. formosum from Bellamira (Cerambycidae) in Betula (Betulaceae), S. occiputale from Strangalina (Cerambycidae) in Quercus (Fagaceae) and S. vicinum from Leptura (Cerambycidae) in Pinus (Pinaceae)

Florida records are detailed in the list that follows. All material is in the Florida State Collection of Arthropods.

Arotes decorus (Say): Material examined. 21 females. Alachua Co., Beville Heights, Gainesville, La Crosse, Paynes Prairie; Lake Co., Tavares; Liberty Co., Torreya St. Pk.; Suwannee Co., Suwannee River St. Pk. Habitat. hardwoods, often riparian. Phaenology. 2 in IV, 6 in V, 3 in VI, 8 in VII, 1 in X, 1 in XI.

Spilopteron formosum australe (Townes): Material examined. 5 females, 1 male. Alachua Co., Gainesville, La Crosse; Liberty Co., Torreya St. Pk. Habitat. Moist hardwoods, often riparian. Phaenology. 4 in IV, 2 in V.

Spilopteron occiputale (Cresson): Material examined. 37 females, 56 males. Alachua Co., Devil's Millhopper St. Preserve, Gainesville, La Crosse, Paynes Prairie, San Felasco Hammock; Clay Co., Goldhead Branch St. Pk.; Gilchrist Co., Wilcox; Levy Co.; Liberty Co., Torreya St. Pk.; Marion Co., Ocala Natl. For.; Suwannee Co., Suwannee River St. Pk. Habitat. Mesic to moist hardwoods, sometimes riparian. Phaenology. 6 in IV, 82 in V, 5 in VI.

Spilopteron vicinum (Cresson): Material examined. 15 females and 4 males. Alachua Co., Gainesville, Micanopy, Paynes Prairie, San Felasco Hammock; Clay Co., Goldhead Branch St. Pk.; Levy Co., Manatee Springs St. Pk.; Liberty Co., Torreya St. Pk. Habitat. Mesic to moist pines and hardwoods. Phaenology. 3 in III, 8 in IV, 8 in V.

**Taxonomy.** An excellent, well-illustrated revision of the North American Acaenitinae is provided by Townes (1960).

Biogeography. Acaenitines have centers of diversity in the eastern Palaearctic, Oriental, and Ethiopian regions. Remarkably, none is known from South America, the Mesoamerican Neotropics have only two species of *Arotes*, and the genera found in North America are more speciose in the Palaearctic and/or the Oriental regions. For example, *Arotes* has seven Palaearctic species (Europe, China, Japan), while *Spilopteron* in the Old World is limited to the eastern Palaearctic, with 16 species in China and Japan.

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## Literature cited

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— Charles C. Porter, Florida State Collection of Arthropods, P. 0. Box 147100, Gainesville, Florida 32614-7100