

TANYMECUS LACAENA (HERBST), AN OCCASIONAL WEEVIL
PEST OF CITRUS IN FLORIDA (COLEOPTERA: CURCULIONIDAE)¹

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INTRODUCTION: A key was provided to the Florida citrus weevils in Entomology Circular 202, in which Tanymecus lacaena was distinguished (Woodruff, 1979). This publication is intended to provide additional detail that was not possible because of previous space limitations.

DESCRIPTION: (Fig. 1-2) Beak as long as head, flattened above, feebly emarginate at tip, not carinate above. Antennal funicle with segments 1 and 2 nearly equal and longer than remainder; 3 to 7 obconical, and gradually shorter. Eyes oval. Scutellum small, triangular. Body surface densely scaly; scales whitish to grey, pattern irregular, but alternate elytra intervals whiter, the 2 lateral ones forming a white line extending entire length of the elytra, the pronotum, and the head. Length 8-9 mm. Males are more elongate, subcylindrical; females more oblong-oval, with elytra noticeably broader.

TAXONOMY: The genus Tanymecus contains 3 U.S. species (Blatchley and Leng, 1916 and Van Dyke, 1935): lacaena Herbst, confertus Gyllenhal, and texanus Van Dyke. Kissinger (1964:29-30) listed Tanymecus in the subfamily Tanymecinae along with the following U.S. genera: Isodrusus, Trigonoscutea, Isodacrys, Minyomerus, Piscatopus, Miloderoides, Pachnaeus, Amotus, Hadromeropsis, Polydacrys, Pandeleiteinus, and Pandeleiteius. Other authors (e.g., van Emden, 1944) place Tanymecus in the tribe Tanymecini of the subfamily Brachyderinae.

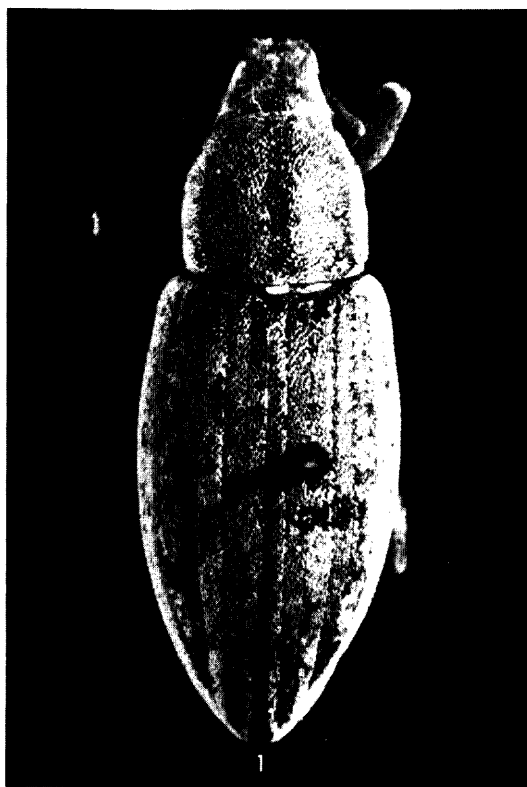


Fig. 1-2. Tanymecus lacaena (Hbst.), adult male: 1) dorsal view; 2) lateral view.

BIOLOGY: Little data are available on the habits or life history of this weevil. Adults are flightless, feed on a variety of plants (see hosts below), and are active both during the day and at night. Their feeding damage is similar to the leaf notching caused by many other species of weevils. They do not appear to be attracted to lights, but several specimens have been collected in Steiner fruit fly traps. Specimens have been taken in Florida every month of the year with most records being in August - October.

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Blatchley and Leng (1916) considered it "scarce", although I have examined over 100 records and over 200 specimens. Blatchley and Leng (1916) noted that it was "hibernating beneath boards in damp localities". The immature stages are unknown.

ADULT HOSTS: Division of Plant Industry records include the following plants: Acanthospermum hispidum DC., Acoelorrhapha wrightii (Griseb. & H. Wendl.) H. Wendl. ex Becc., Arecastrum romanzoffianum (Cham.) Becc., Artemisia sp., Bidens pilosa L., Brassica sp., Cakile edentula (Bigel.) Hook., Carissa sp., Cassia beareana Holmes, Casuarina sp., Citrus aurantium L., Citrus paradisi Macf., Citrus sinensis (L.) Osbeck, Celosia sp., Cornus florida L., Eremochloa ophiuroides (Munro) Hack, Eupatorium capillifolium (Lam.) Small, Fatshedera lizei (Cochet) Guillaum, Fragaria sp., Gardenia sp., Glycine max (L.) Merrill, Ipomoea batatas (L.) Lam., I. stolonifera (Cyrill.) Poer., Litchi chinensis Sonn., Nicotiana tabacum L., Oryza sativa L., Phaseolus vulgaris L., Phoenix rupicola Anders., Pinus clausa (Chapm.) Vasey, Plumbago sp., Prunus persica (L.) Balsch., Senecio sp., Solanum tuberosum L., Stenotaphrum secundatum (Walt.) O. Kuntze, Tribulus terrestris L., Ulmus parvifolia Jacq., Viburnum odoratissimum Ker-Gawl., and Zea mays L.

ECONOMIC IMPORTANCE: Although it has been recorded from several commercial crops (e.g., corn, soybeans, sweet potatoes, tobacco, beans, and citrus), it has rarely been considered a serious pest. Occasionally, large numbers have been found on citrus, and presumably the larvae cause damage indistinguishable from the other citrus weevils. It has therefore not been possible to assess its economic potential, but factors that favor its reproduction could create economic populations.

DISTRIBUTION: Blatchley and Leng (1916) recorded it from Georgia, Texas, and Florida. Division of Plant Industry records provide the following (counties underlined): Alachua: Archer, Gainesville, Jonesville; Baker: Glen St. Mary, Macclenny; Bay: Panama City; Brevard: Cocoa Beach, Merritt Island, Mims, St. Petersburg; Broward: Davie, Miramar, Plantation, Sunrise; Citrus: Inglis, Inverness, Lecanto; DeSoto: Nocatee, North Nocatee; Hendry: LaBelle; Highlands: Sebring; Hillsborough: Plant City, Ruskin, Tampa; Indian River: Vero Beach, Winter Beach; Lake: Cassia, Cassia Station, Fruitland Park, Lake Jem, Mascotte; Lee: Alva, Fort Myers; Manatee: Bethany, Bradenton, Ona, Oneco, Palmetto; Nassau: Fernandina; Orange: Apopka, Plymouth, Taft, Windermere, Winter Garden; Osceola: Holopaw; Palm Beach: Delray Beach, West Palm Beach; Pasco: Dade City; Pinellas: Clearwater, Dunedin, Largo, Palm Harbor, Pinellas Park, Safety Harbor, St. Petersburg; Polk: Bereah, Lakeland, Nichols; Putnam: Crescent City, Pomona Park; Saint Lucie: North Beach; Sarasota: Crescent Beach, Nokomis; Seminole: Longwood, Sanford, Wagner; Volusia: Daytona Beach, Oak Hill, and Ponce Inlet.

SURVEY AND DETECTION: Visual inspection of citrus foliage, both in the day and at night should show leaf notching damage and/or weevils. It falls to the ground easily when disturbed, so beating or shaking of trees is effective. It is not attracted to light. Larvae should be searched for in soil at the base of plants infested with adults so this stage may be reared or associated.

CONTROL: No specific information is available on this species. Possibly sticky bands around trees would help. Dieldrin and Heptachlor have been used for related weevil control, but their use is now restricted. Clean cultivation and weed control should aid by providing fewer hosts for population build up.

ACKNOWLEDGMENTS: The subfamily Tanymericinae is currently under study by Anne T. Howden, whom I thank for advice.

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