



New *Amphibolips* gallwasp species from Mexico (Hymenoptera: Cynipidae)

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Abstract

Two new species of oak gallwasp, *Amphibolips zacatecaensis* Melika & Pujade-Villar and *A. hidalgoensis* Pujade-Villar & Melika, are described from Mexico, known to induce galls on *Quercus eduardi*, *Q. crassipes*, *Q. candicans* and *Q. crassifolia* (section Lobatae, red oaks). Only females are known. Data on the diagnosis, distribution and biology of the new species are given.

Key words: new species, *Quercus*, oak gallwasp, taxonomy, morphology, distribution, biology

Introduction

Within the oak gallwasps (Hymenoptera: Cynipidae: Cynipini), some of the largest galls are induced by Nearctic and Neotropical species in the genus *Amphibolips* Reinhard. Forty three species are known in the Nearctic region: 30 species from regions north of Mexico (United States and Canada) (Burks 1979; Melika & Abrahamson 2002), 9 species known exclusively from Mexico (Bassett 1890; Kinsey 1937); three species, *A. castroviejoi* Medianero & Nieves-Aldrey, *A. aliciae* Medianero & Nieves-Aldrey, *A. salicifoliae* Medianero & Nieves-Aldrey, were recently described from Panama (Medianero & Nieves-Aldrey 2010). One species, *A. niger* Beutenmüller (originally named as *A. nigra* (Beutenmüller 1909)) is known from Mexico and southern Arizona (Burks 1979). Before 1937, only two species were recorded from Mexico (*A. palmeri* Bassett and *A. niger*). Kinsey (1937) described nine additional species from Mexico; six species, represented by asexual forms only, were included in the 'niger' complex: *A. gumia* Kinsey, *A. jubatus* Kinsey, *A. elatus* Kinsey, *A. maturus* Kinsey, *A. nebris* Kinsey, and *A. pistrinx* Kinsey, a Mexican group with a unique representative (*A. niger*) in southern Arizona (Kinsey 1937). Additionally, members of 'niger' complex had an unusual gall structure (Fig. 46). Three other species in Mexico, outside the 'niger' complex, are *A. dampfi* Kinsey, *A. nassa* Kinsey and *A. fusus* Kinsey, which we put here in the 'nassa' complex.

Morphological characters of adults and their galls are very uniform in *Amphibolips* species: antennae with 10–12 flagellomeres in females and 13–14 flagellomeres in males; the body is very robust, the head and mesosoma are dull-rugose, notauli usually inconspicuous, hidden by coarse sculpture; the mesoscutellum without or with a deep posterior median depression, scutellar foveae large, shiny, with strong irregular rugae; tarsal claws with strong acute basal lobes; metasomal tergites usually micropunctate; forewings are usually clouded, with dark stripes or spots, the radial cell is narrow, opened on the wing margin; the projecting part of the ventral spine of the hypopygium is long, needle-like, usually more robust and broader than in the closely allied genus *Andricus* Hartig (Melika & Abrahamson 2002). Both sexual and asexual generations of *Amphibolips* species induce stem, bud and leaf galls exclusively on red oaks, which usually are of a spongy oak-apple type, globose or spindle-shaped, monolocular, with a single, centrally located larval chamber in a spongy parenchyma or the central larval chamber supported by radiating filaments (Beutenmüller 1909, Kinsey 1937, Melika & Abrahamson 2002). Kinsey (1923) suggested a