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Michael C. Thomas

Florida State Collection of Arthropods, Michael.Thomas@freshfromflorida.com

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(Coleoptera: Laemophloeidae)

Michael C. Thomas
Florida State Collection of Arthropods
Florida Department of Agriculture and Consumer Services
P.O. Box 147100
Gainesville, FL 32614-7100

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A new Nearctic species of *Placonotus* MacLeay
(Coleoptera: Laemophloeidae)

Michael C. Thomas

Florida State Collection of Arthropods
Florida Department of Agriculture and Consumer Services
P.O. Box 147100
Gainesville, FL 32614-7100
michael.thomas@freshfromflorida.com

Abstract. *Placonotus falinorum* Thomas, **new species** (Coleoptera: Laemophloeidae), is described from Kansas. Habitus and genitalic details are illustrated and the species is distinguished from other New World members of the genus. *Placonotus maya* Thomas is newly recorded from Honduras.

Introduction

In a relatively poorly studied, predominantly tropical family like the Laemophloeidae undescribed species are commonly encountered in many collections but the American Midwest is rarely the source of them. Nevertheless, examination of specimens from the Snow Entomological Collection (SEMC) at the University of Kansas revealed a series of an anomalous *Placonotus* MacLeay collected in Kansas that is described below as a new species. The new species brings to seven the number of known Nearctic species of *Placonotus*.

***Placonotus falinorum* Thomas, new species**

Figures 1-3

Diagnosis. The combination of the following character states for this species will distinguish it from the other species in the Nearctic fauna: elytra entire, elytral cells not impressed, abdominal sternite III without femoral lines, genital claspers without peg setae, ventral processes of basal piece of tegmen slender, each process with a single seta, flagellum loosely coiled.

Description. Holotype, male, in SEMC, with label data: "USA: Kansas: Jefferson Co. The Falin Property, 1.5 km N jct. 94th St. & Kingman Rd. 39°13.38'N 95°24.24'W 10-14-IV-2005 Z.H. Falin ex. FIT, near lower meadow KAN1F05 025"/"[barcode] SM0751851 KUNHM-ENT". [The holotype is dissected and the genitalia are imbedded in a drop of dimethyl hydantoin formaldehyde (DMHF) on the point with the specimen.]

Body elongate; orange testaceous, elytra paler (Fig. 1). Length, 1.9 mm.

Head 1.8× wider than long; surface shiny, glabrous, with punctures larger than an eye facet separated by about two diameters, interspersed with minute punctures (Fig. 1); clypeus shallowly emarginate; antennal scape elongate, about 0.66 length of head; antenna filiform, very elongate, 0.95 length of body; eye slightly convex, about 0.33 length of head.

Pronotum 1.3× wider than long; surface sculpture as on head, punctures a little larger; broadest just behind anterior margin, gradually narrowing posteriorly, lateral margins almost straight; anterior angles deflected, with a small tooth; posterior angles obtuse, not produced.

Elytra 1.7× longer than combined width; broadest just before middle; striae punctate, not impressed; margins narrowly explanate; conjointly rounded to apex, not truncate.

Male genitalia as in Fig. 2, claspers simple, without peg setae; ventral processes of basal piece of tegmen slender, each with one apical seta; internal sac (Fig. 3) with three spinose structures, a field of microspinules, and greatly elongate, flagellum loosely coiled.

Variation. The paratype series ranges in length from 1.6mm to 2.1mm. The female antennae are proportionately shorter than in males, length attaining about the midpoint of the elytra.



Figure 1. *Placonotus falinorum* Thomas, n. sp., dorsal habitus of holotype less antennae. **Inset,** dorsal habitus of entire specimen.



Figure 2-3. *Placonotus falinorum* Thomas, n. sp. **2)** Male genitalia and claspers. **3)** Detail of armature of internal sac.

Distribution. The species is known only from three localities in Jefferson County in northeastern Kansas.

Type material. Paratypes, 20, as follows: 2, “USA: Kansas: Jefferson Co./The Falin Property, 1.5 km/N jct. 94th St. & Kingman/Rd. 39°13.38’N 95°24.24’W/4-10-IV-2005 Z.H. Falin/ ex. FIT, near lower meadow/ KAN1F05 016”; 3, same except: near upper meadow KAN1F05 019; 1, same except: 15-23-VIII-2004 near upper meadow [no number]; 1, same except: 25-VIII-7-IX-2005 near upper meadow KAN1F05 198; 1, same except: 8-15-VIII-2004 near lower meadow [no number]; 2, same except: 19-24-V-2005 near lower meadow KAN1F05 079; 4, same except: 14-21-IV-2005 near lower meadow KAN1F05 036; 1, same except: 10-14-IV-2005 near upper meadow KAN1F05 028; 1, same except: 12-19-V-2005 near lower meadow KAN1F05 070; 1, same except: 5-12-V-2005 near lower meadow KAN1F05 061; 1, “USA: Kansas: Jefferson Co./Perry State Park, 1km SW; off/ Douglas Rd. 39°06.791’N/95°30.155’W 23-31-V-2006/A. Cruz ex. canopy trap/ KAN1S06 039”; 2, “USA: Kansas: Jefferson Co./University of Kansas Field Station/Unit 4018, Nelson Ravine Forest/39.05181°N 95.19542°W/4-XI-2010 Z.H. Falin ex. sifting/leaf litter KAN1F10 104”. In addition, all paratypes have SEMC bar-code labels. Deposited in SEMC and the Florida State Collection of Arthropods.

Etymology. This species is named for the Zack Falin family, on whose property most of the type series was collected.

Discussion. In the key to New World *Placonotus* (Thomas 1984), *P. falinorum* will key to *P. maya* Thomas, known from Mexico and Guatemala, but also represented in the FSCA by two specimens from Honduras (**new country record**) with the label data: "HONDURAS: Olancho Dept., P.N. La Murella 29-XI-1995", one each collected by F. W. Skillman, Jr., and R. H. Turnbow. The two species are very similar externally. They differ primarily in details of the male genitalia. In *P. maya*, the ventral processes of the basal piece are relatively broad, each with two apical setae (Thomas 1984: 25, fig. 47), while those of *P. falinorum* are slender and each has only one apical seta (Fig. 2). In *P. maya*, the coiled part of the flagellum is quite long and has about five loose coils (Thomas 1984: 21, fig. 19); in *P. falinorum*, the coiled part of the flagellum is shorter, consisting of only two loose coils (Fig. 3). The shape of the ventral claspers (Fig. 2 and Thomas 1984: 23, fig. 33) in the two species is similar.

Most of the type series was collected in a mixed forest in northeastern Kansas described by the collector (Z. Falin, pers. comm.) as: "The tree composition was quite varied for such a small area, though the forest could be separated into three vague zones. There were cottonwood, sycamore and silver maple trees along the seasonal stream, though I wouldn't call it a full-blown gallery-type forest. The bulk of the forest was dominated by red and white oaks with hickory, several species of ash, hackberry, black walnut, and various elms mixed in (in about that order of prevalence). There were a few redbud, basswood and ironwood trees sprinkled around as well. Towards the tops of the limestone bluffs where the soil was thinnest and exposure the most, honey locust, hickory and osage orange predominated."

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Thomas, M.C. 1984. A revision of the New World species of *Placonotus* Macleay (Coleoptera: Cucujidae). Occasional Papers of the Florida State Collection of Arthropods 3: i-vii, 1-28.

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