

A PRELIMINARY LIST OF THE *Phyllophaga* OF FLORIDA
(Scarabaeidae: Melolonthinae)¹

By FRANK N. YOUNG and WALTER H. THAMES

The following list of the species of *Phyllophaga* Harris, commonly called May Beetles, which have been recorded from Florida is presented to facilitate further work on the genus. An attempt has been made to include every valid species recorded from the state, but distributional and bibliographical data, other than those necessary to substantiate the records, are omitted since a more complete treatment is in preparation. W. S. Blatchley's summary of the species of *Phyllophaga* in his "Scarabaeidae of Florida" (1929) is the most recent published state list. Blatchley reviewed most of the previous Florida records and his work has been used as a starting point for the present list, which includes new species, new records, and recent changes in names and synonymy. The authors will appreciate corrections or additions to this list.

At present, 66 species of *Phyllophaga* are recorded from Alabama (Löding, 1945) and 70 species from Georgia (Fattig, 1944). A comparison of these lists with the following, which includes only 42 species, indicates that further collecting and study may materially increase the number of species.

Fortunately, Florida is not one of the states in which damage by May Beetles is extensive. Only a few species have been reported as sporadically damaging crops or groves. The principal reason for this lack of damage to agriculture is the apparent lack of swarms of the adults. This is probably owing partly to the scarcity of grasslands for breeding and partly to numerous parasites and other enemies.

The groupings of species used below are those of Horn (1887). The Böving groupings (1942) have not been used because it has not been possible to determine them for all species. Keys to the Horn groups, useful diagnoses, descriptions, and figures for many of the Florida species may be found in Langston (1927), Blatchley (1929), Sim (1928), Travis (1934), and in various other papers cited. The most important name changes are indicated in parentheses below each species name, but complete synonymy has not been attempted. The reference immediately following the species name is to the original de-

¹ Contribution from the Department of Biology, University of Florida.

scription. The species preceded by an asterisk (*) are additions to the state list based on the work of the present authors.

Phyllophaga youngi, Cartwright (1935) described from Brickell Hammock, Miami, Florida, is not included in the following list because it is believed that it is not a true member of *Phyllophaga*, but should probably be transferred to *Cnemerachis* Saylor, on the basis of structural characters.

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Phyllophaga Harris

Horn Group II

**cribrosa* LeC. (1853: 231)—?Orange County, H. T. Townsend. The occurrence of this typically western species in Florida is very doubtful. The specimen was probably mislabeled by Mr. Townsend. It may, however, occur in the xeric sand areas of the Central Highlands of Florida.

Horn Group IV

latifrons (LeC.) (1856: 241)—Locally abundant throughout the state. In South Florida it often appears at lights in enormous numbers.

prununculina (Burm.) (1855: 360)—Locally abundant throughout the state. Around Gainesville it sometimes occurs in damaging numbers on Oldfield Pine (*Pinus taeda*).

**cerasina* LeC. (1856: 241)—Dade County, Miami, F. N. Young. Probably a variety or subspecies of *prununculina*.

elongata Linnell (1896: 725)—The types were from "Florida," collected by Chas. Palm. Blatchley (1929) also records it from Enterprise (Dietz).

pagilis Saylor (1937: 321) (*parva*//Linnell)—The types were from "Florida," collected by Chas. Palm. Blatchley (1929) also records it from Enterprise (Dietz). Marion County, in Big Scrub, T. H. Hubbell and J. J. Friauf, in UMMZ. This seems to be a species of the xeric scrub areas of the Central Highlands of Florida.

**schaefferi* Saylor (1937: 321) (*georgiana*//Schffr.)—Madison County, along Aucilla River opposite Lamont, F. N. Young and Lewis Berner. Apparently abundant in southern Georgia, but not previously reported from Florida.

glaberrima (Blanch.) (1850: 133)—Locally abundant throughout the state.

epilida (Say) (1825: 196)—Recorded from Florida only by Horn (1887).

**uniformis* (Blanch.) (1850: 133) (*carolina* Fall)—Holmes County, near Bonifay, F. N. Young and Lewis Berner. Common in Georgia and northward, but not previously reported from Florida.

Horn Group V

clemens (Horn) (1887: 227) (*howei* Sanderson)—Apparently rare in the state. Sanderson's *howei* (1937) was described in part from Leon County.

**lota* Luginbill (1928: 87)—Wakulla County, near Sopchoppy, F. N. Young, *et al.* Two males of this species found trapped in pitcher plants in flatwoods near Sopchoppy seem to be the only Florida records.

Horn Group VI

dispar (Burm.) (1855: 361) (*boops* Horn)—Abundant in northern part of state, emerging later in summer than most species.

**austriicola* Fall (1929: 110)—This is probably the *debelis* (LeC.) of older lists. The species is abundant on River Cypress (*Taxodium distichum*) along the Aucilla River and the St. Johns River. It does not seem to occur on the Pond Cypress (*Taxodium ascendens*). Specimens from Enterprise on Lake Monroe are somewhat darker and differ slightly in other respects from those found along the Aucilla River.

**taxodii* Langston (1924: 449)—Madison County, along Aucilla River opposite Lamont, F. N. Young, *et al.* Found abundantly on River Cypress in June 1938 together with *austriicola*.

gracilis (Burm.) (1855: 361)—Reported from Tallahassee, R. N. Wilson, collector (J. J. D.) by Blatchley (1929). Fairly common in southern Georgia.

futilis LeC. (1850: 226)—Gainesville and Lake City (Ag. Coll.), Blatchley (1929).

postrema Horn (1887: 233) (*quadrata* Smith = ♀ of *postrema*?)—Not uncommon in northern and western Florida. Lake City, Blatchley (1929). Liberty and Holmes counties, F. N. Young.

Horn Group IX

subpruinosa Casey (1884: 38) (*deani* Luginbill)—Jacksonville (Edward Tatnall), Horn (1887); Enterprise (Dietz), Ft. Reed (J. J. D.), Blatchley (1929).

micans (Knoch) (1801: 77)—Common in northern parts of state. The variety *cupuliformis* Langston occurs with the typical form.

diffinis (Blanch.) (1850: 138)—Duval County (Horn), Tallahassee (J. J. D.), Blatchley (1929).

floridana Robinson (1938: 110)—The types were from St. Petersburg, and the species is not uncommon over the central part of the state.

duvalis Robinson (1938: 110)—The types were from Lake City, Monticello, and Duval County.

ulkei Smith (1889: 94)—Rare in northern parts of state. Monticello, G. B. Fairchild.

fraterna Harris (1842: 29)—Enterprise (Schwarz), Blatchley (1929).

forsteri (Burm.) (1855: 325)—Marianna and Liberty County, Torreya Ravines, F. N. Young. This species occurs in western Florida,

but has probably been confused with *tecta* Cart. in the central parts of the state.

tecta Cartwright (1944: 32)—The types were from Gainesville and Bradenton. The species is not uncommon about Gainesville.

infidelis Horn (1887: 253)—Horn (1887). This record probably represents *ovalis* Cart.

ovalis Cartwright (1939: 353)—The types were from turkey oak uplands near Niceville and DeFuniak Springs. The species may be confined to the peculiar dry sand areas in that section of the state.

luctuosa (Horn) (1887: 254)—Tallahassee and Monticello, F. N. Young. Rare in western Florida.

**knochii* (Gyll.) (1817: 75)—Liberty County, Torreya Ravines area, F. N. Young. Apparently a characteristic species of the Altamaha Grit country of Georgia and occasionally found in Florida where similar environment occurs.

Horn Group XI

hirticula (Knoch) (1801: 79)—Tallahassee (Plant Board Coll.) and (J. J. D.), Blatchley (1929). Tallahassee, F. N. Young. Apparently rare in the western part of the state.

Horn Group XII

aemula Horn (1887: 271)—Haulover (Schwarz mss.), Blatchley (1929). Locally common in northern part of state.

crenulata (Froel.) (1792: 94)—Fairly common around Gainesville and elsewhere in northern part of state.

parvidens (LeC.) (1856: 259)—Fairly common on pines in Central Highlands area.

hesteropyga Davis (1920: 336)—Described from Sanford. This may be another species or form characteristic of the dry sand areas.

elizoria Saylor (1937: 321) (*pygidialis*//Schffr.)—Schaeffer described *pygidialis* from Indian River, Florida. Apparently it has been taken since only near DeSoto City where it was found attacking young orange trees in a recently planted grove. Apparently a rare, although locally abundant, species of the dry sand areas.

mariana Fall (1929: 111)—Described from a single male taken at Lake Mary, Seminole County. The species is not uncommon in the central and northern parts of the state. Gainesville, W. H. Thames; Jackson and Liberty counties, F. N. Young.

Horn Group XV

quercus (Knoch) (1801: 72)—Centreville (Schwarz ms.), Blatchley (1929). Gainesville, W. H. Thames, and T. H. Hubbell.

clypeata (Horn) (1887: 145)—Georgia and Florida (Horn); Enterprise (Fall), Blatchley (1929).

tristis (Fabr.) (1781: 39)—Haulover (Schwarz) and Ft. Barrancas (Ag. Coll.), Blatchley (1929). Not uncommon around Gainesville and

in western parts of the state. In Walton County it sometimes occurs in large numbers on *Quercus cinerea* in ecotones along the edge of flatwoods.

Subgenus *Phytalus*

*?georgianus (Horn) (1885: 120) (not *georgianus* Schffr.)—Record based on one female from Leon County, F. N. Young.

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