



## IFAS EXTENSION

# Click Beetles, *Alaus* spp. (Insecta: Coleoptera: Elateridae)<sup>1</sup>

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### Introduction

Because of their striking appearance and their large size, beetles of the genus *Alaus* are commonly brought to the attention of nursery inspectors and Cooperative Extension Service agents. Two species in this genus, *A. myops* (Fabr.) and *A. oculatus* (Linn.), are found in Florida.

### Distribution

*A. oculatus* is widespread in the eastern United States, being recorded by Leng (1920: 167) from "Indiana, Atlanta States -- Texas, Florida." Blatchley (1910: 717) listed it from throughout Indiana; Fattig (1951: 5) listed 19 localities scattered over Georgia; and Dietrich (1945: 9) listed it as being found throughout the state of New York. The Florida State Collection of Arthropods (FSCA) contains records from the following Florida counties: Alachua, Columbia, Dade, Duval, Gulf, Hardee, Hillsborough, Orange, Palm Beach, Seminole, and St. Lucie. *A. myops* is more common in the southeastern United States although it is occasionally found in the northern states; recorded by Leng (1920: 167)

reported from "Indiana, Middle and Southern States, Florida." Blatchley (1910: 719) listed one record for Indiana and stated "rare north of the Ohio River". Fattig (1951: 5) listed 20 localities scattered over Georgia. Dietrich (1945: 10) listed nine localities in New York. The FSCA contains records from the following Florida counties: Alachua, Baker, Brevard, Dade, Hardee, Highlands, Liberty, Monroe, Orange, Polk, and Seminole.

### Description

#### Adults

The adults reach a length of 24 to 45 mm. The photographs below illustrate why these beetles are so striking. The large "false eyes" on the pronotum of adults are characteristic of this genus. Presumably these spots have some selective value in frightening a would-be predator. The true eyes are much smaller and are located on the head anterior to the "false eyes." Both Florida species have a mottled pattern on the dorsal surface created by minute scales. These patterns are variable but similar to those shown in the photographs and are effective in concealment.

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**Figure 1.** Adults of the click beetles *Alaus myops* (Fabr.), left, and *Alaus oculatus* (Linn.), right. Credits: M.C. Thomas, Division of Plant Industry

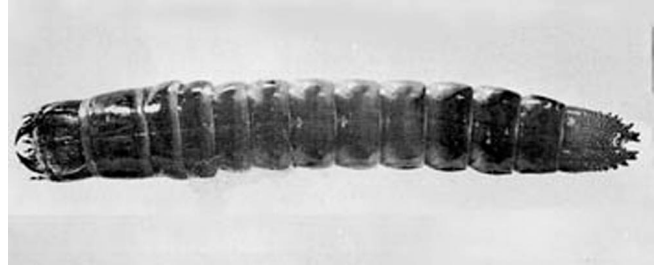


**Figure 2.** The adult click beetle *Alaus oculatus* (Linn.) on oak bark. Credits: E.M. Collins, Jr, Division of Plant Industry

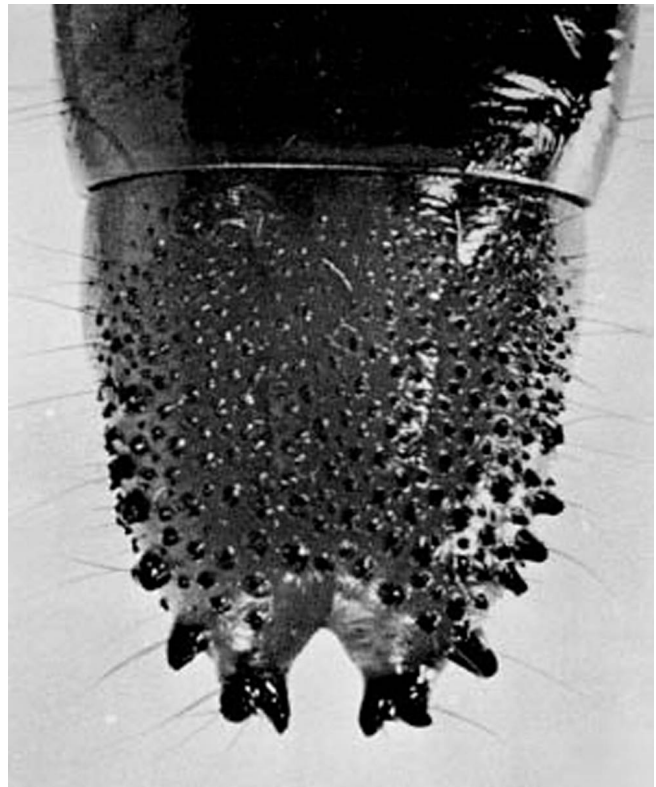
### Larvae

The larvae are large (up to 2 inches), heavily sclerotized, smooth, stout, and yellowish to dark brown. That of *A. oculatus* is described technically by Jewett (1946: 16, Fig. 53-55) and Peterson (1951: 176, Fig. C46, K, L, M). The head is nearly black and

the last four abdominal segments are dark brown. The last dorsal abdominal segment (9th) is armed with many conical tubercles and terminates in a pair of forked teeth (urogamphi). The 10th segment has two anal hooks and 10 to 12 spines and setae anterior to the anus. The spiracles are biforous, located on the ventral side of the mesothorax and on the dorso-lateral part of the first through eighth abdominal segments. I have not found a description or illustration of the larva of *A. myops*.



**Figure 3.** Mature larva of the click beetle *Alaus oculatus* (Linn.). Credits: E.M. Collins, Division of Plant Industry



**Figure 4.** Dorsal view of the last (9th) abdominal segment of the mature larva of the click beetle *Alaus oculatus* (Linn.). Credits: E.M. Collins, Division of Plant Industry

## Biology

The ferocious looking larva and the large beetle might be expected to be a serious pest. However, the adults probably feed little and the larvae are effective predators on many wood-boring beetle larvae. Craighead (1950: 185) stated that larvae of *oculatus* were voracious on wood borers, and that during their development caged specimens each devoured more than 200 cerambycid larvae. They are most often encountered in rotting stumps of oak, cherry, and apple, whereas *myops* is usually found in pine stumps and logs. Rohwer (1920: 443) listed *Xorides catomus* Davis (Ichneumonidae) as a parasite of the larvae.

### Key to Florida Species of *Alaus*

1. "Eye spots" less than one-fourth the length of pronotum; base color or dorsum brownish, the scales mostly grey and covering more than half the surface; associated with pines. . . . *myops* (Fabr.)

1'. "Eye spots" about one-third the length of the pronotum; base color or dorsum black, the scales mostly white and covering less than half the surface; associated with hardwoods. . . . *oculatus* (Linn.)

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