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SCIENTIFIC NOTE

New Records and Antennal Variation of the Elusive *Ctenobium antennatum* LeConte (Coleoptera: Ptinidae) from Massachusetts and Wisconsin, USA

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Ctenobium LeConte, 1865 (Coleoptera: Ptinidae) was described for a single species, *Ctenobium antennatum* LeConte, 1865 (Fig. 1). *Ctenobium* most closely resembles *Oligomerus* Redtenbacher, from which it can be readily separated—the procoxae in *Ctenobium* are distinctly separated by a parallel-sided prosternal process, and the antennae are clubbed with antennal segments 3–8 serrate to pectinate (Figs. 1–2) (Philips 2002; White 1971). The conical shape and granulate surface of the last visible abdominal segment are also characteristic for *Ctenobium* (Fall 1905; LeConte 1865).

Although specimens of *C. antennatum* are rare in collections, this species appears to be broadly distributed across eastern North America, with specimens reported from Virginia (Fall 1905; LeConte 1865; Philips 2002), Ontario, and Quebec (Bousquet *et al.* 2013). The Massachusetts and Wisconsin specimens annotated here are **new state records**, and the Wisconsin male represents a considerable western range expansion for the known distribution of this species.

Eight specimens (6♂, 2♀) were collected by Tom Murray in Groton, Middlesex Co., Massachusetts (N42.6014°, W71.6175°). All specimens were collected at light during 1 April through 4 May 2015–2019. The single Wisconsin specimen (♂), identified from material obtained during a statewide survey of Cleridae, has the following collection data: "USA: WI: Wood Co. Sandhill State Wildlife Area (SWA); Hwy X; 1.33km W Babcock; N44.3050° x W90.12694°; 4–14 May 2008; 295m; Coll. John J. Dorshorst; Lindgren funnel trap baited with cantharidin". The cantharidin bait associated

Fig. 1. *Ctenobium antennatum*, male (photo credit: Tom Murray).

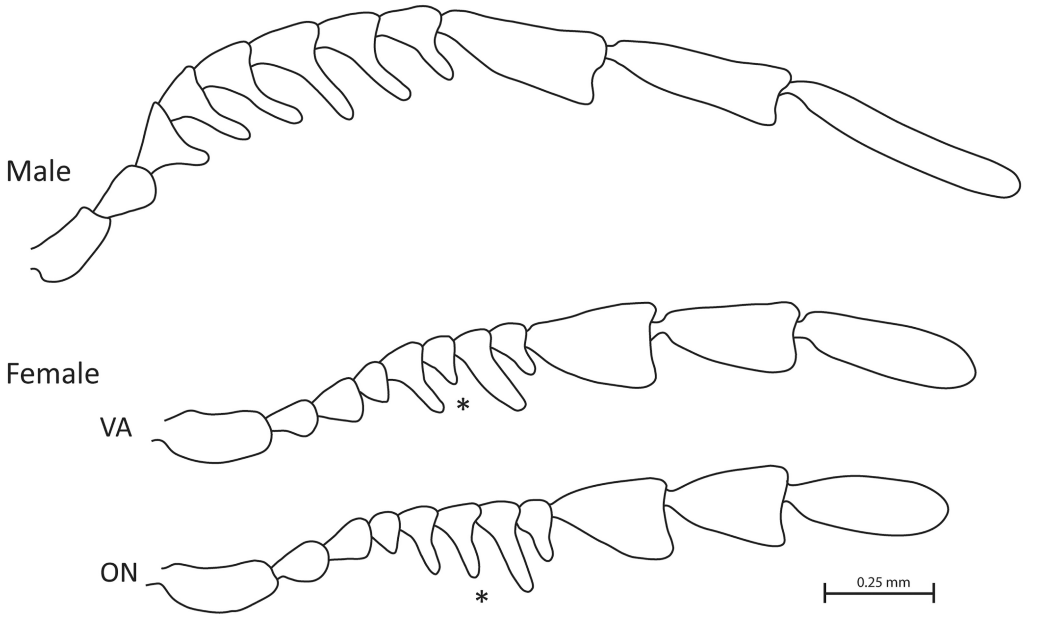

Fig. 2. *Ctenobium antennatum*, structure of the male and female antennae. Antennal structural variation in females from Ontario (ON) compared to Virginia (VA) specimens is indicated by an asterisk (*).

with the collection event is considered to be incidental and not of biological significance. The collection location, Sandhill State Wildlife Area, is dominated by oak (*Quercus* spp.), bigtooth aspen (*Populus grandidentata* Michaux), and jack pine (*Pinus banksiana* Lamb.). Collection dates from both Massachusetts and Wisconsin suggest adult emergence occurs in early spring. Specimens from Massachusetts and Wisconsin are housed at the University of New Hampshire Collection (UNHC) and University of Wisconsin-Madison Insect Research Collection (WIRC), respectively.

During this study, we also attempted to examine the specimens that were included in the checklist of the beetles of Canada and Alaska (Bousquet *et al.* 2013) in order to obtain any pertinent natural history data and confirm species identifications. The specimens from Quebec reported in Bousquet *et al.* (2013) could not be located, but two female specimens from Ontario were located in the Canadian National Collection (CNC). Both specimens were collected from "dying oak" in Hastings Co., Ontario, Canada (N44.75°, W77.58°, county centroid), 12 May 1957, by J. F. Brimley.

Examination of the Ontario specimens supported their identification as *C. antennatum*. However, the structure of the antennae, specifically antennomeres 5 and 6, were aberrant not only when compared to the Virginia specimens, but also when compared with LeConte's (1865) original species description. LeConte described the female antennae as having the "fourth to eighth [antennomeres] transverse, with the outer angle acutely prolonged, with the fifth and seventh more prolonged than the others". In both Ontario specimens antennomere 7 is clearly expanded, which agrees with LeConte's description; however, antennomeres 5 and 6 are subequal (Fig. 2).

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