

October 1998

Psilotreta Indecisa and *Agarodes Distinctus* (Trichoptera: Odontoceridae, Sericostomatidae): New State Records and Notes on the Habitat of These Species in Michigan

Ethan Bright
University of Michigan

Doug Bidlack
Rutgers University

Follow this and additional works at: <https://scholar.valpo.edu/tgle>

 Part of the [Entomology Commons](#)

Recommended Citation

Bright, Ethan and Bidlack, Doug (1998) "*Psilotreta Indecisa* and *Agarodes Distinctus* (Trichoptera: Odontoceridae, Sericostomatidae): New State Records and Notes on the Habitat of These Species in Michigan," *The Great Lakes Entomologist*: Vol. 31 : No. 3 , Article 9. Available at: <https://scholar.valpo.edu/tgle/vol31/iss3/9>

This Peer-Review Article is brought to you for free and open access by the Department of Biology at ValpoScholar. It has been accepted for inclusion in The Great Lakes Entomologist by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.

PSILOTRETA INDECISA AND *AGARODES DISTINCTUS*
(TRICHOPTERA: ODONTOCERIDAE, SERICOSTOMATIDAE):
NEW STATE RECORDS AND NOTES ON THE HABITAT
OF THESE SPECIES IN MICHIGAN

Ethan Bright¹ and Doug Bidlack²

ABSTRACT

The caddisfly species *Psilotreta indecisa* and *Agarodes distinctus* are reported for the first time in the State of Michigan. These species appear to be widely distributed in the state based upon their collection localities. Habitat information from collection localities is given.

Psilotreta is an infrequently collected odontocerid caddisfly in which the larvae are known for constructing an incredibly strong case and often aggregating in large numbers when attaching their cases to rocks for pupation (Parker and Wiggins 1987). The genus ranges from Wisconsin and southern Hudson Bay in Ontario east to Quebec and Nova Scotia, and south along the Appalachian Mountains to Tennessee, Georgia and South Carolina. Several records also are from the Coastal Plain in North Carolina, South Carolina, and northern Florida. However, no records have been published from Michigan, where one would expect to find it based on the known range of this genus.

Larval and adult odontocerid caddisflies were collected in 1997 from the Huron River at Indian Springs Metropark (T3N, R8E, Sec. 3), Oakland County, Michigan, and identified as *Psilotreta indecisa* (Walker). We then rechecked the UMMZ-Insect Division Trichoptera collection for additional odontocerid specimens. Two larval specimens collected by S. Lievens on 18 April 1949 from the Escanaba River (T41N, R23W, Sec. 7), Delta County were found in the collection. J. W. and F. A. Leonard, who curated the specimens, were not able to identify these larvae to species because larvae had not been associated with adults at that time. The Leonards probably did not include the genus in their annotated list of the Trichoptera of Michigan (1949) for this reason. The genus *Psilotreta* has since been revised by Parker and Wiggins (1987), who published a detailed systematic account of the genus. The specimens from the Escanaba River are undoubtedly *P. indecisa* and should therefore be considered the first record for the state of Michigan. Four additional larvae were collected from the Little Siskiwit River, Isle Royale (T64N, R37W, Sec. 24) on 23 May 1997. The collection localities of these specimens and the overall geographic range given in Parker and Wiggins (1987) indicate that this species is widely distributed in Michigan. *Psilotreta inde-*

¹Insect Division, Museum of Zoology, University of Michigan, Ann Arbor, MI 48109-1079.

²Headlee Labs, Dept. of Entomology, Rutgers University, New Brunswick, NJ 08901-8536.

cisa is found principally in riffle areas of cool, gravel-bottom streams and rivers, a habitat that is characteristic of the northern part of the state. This species is probably more restricted to groundwater-fed sections of streams and rivers in southern Michigan.

The sericostomatid genus *Agarodes* is known from Minnesota, Ontario and Maine to Louisiana and Florida (Wiggins 1996). Wiggins (1996) has collected *Agarodes* larvae from sand and gravel of Ontario lakes and rivers as well as from cool, sandy springs in the southeastern United States. This genus was also expected from Michigan because it was collected from all other states and provinces bordering the Great Lakes.

Several sericostomatid larvae from Gull Lake, Kalamazoo Co., Kellogg Biological Station were kindly sent to the senior author by Dr. Richard Merritt. These were collected on 11 and 16 October 1974, by D. Hayes and W. T. Kendall, respectively, and identified as *Agarodes distinctus* Ulmer by the senior author. According to Merritt, the larvae were collected from sand and gravel in a wave-swept section of Gull Lake ca. 15-20 meters from shore. These specimens should be considered the first record for the state of Michigan. Subsequently, the senior author collected larvae of *A. distinctus* from a wave-swept portion of Ives Lake (T51N, R28W, Sec. 4), Marquette County in the Upper Peninsula of Michigan. The substrate there is predominately large rocks interspersed with sand and gravel, similar to that described by Wiggins. Based on collection localities of these specimens, this species is also probably widely distributed in Michigan.

ACKNOWLEDGMENTS

Thanks to Dr. Richard Merritt (Michigan State University) and Joan Martin (Huron Watershed Council) for providing specimens and information. Mark O'Brien (UMMZ) made editorial suggestions. Thanks to Dr. David Gosling of the Huron Mountain Wildlife Foundation for collection access to Ives Lake and use of research facilities of the Huron Mountain Wildlife Foundation.

Specimens of *P. indecisa* from the Huron River are in the possession of the Huron Watershed Council, Ann Arbor, Michigan; from the Escanaba River are in the collection of the University of Michigan of Zoology, Insect Division (UMMZ); and those from Isle Royale are in the private collection of the junior author. Specimens of *A. distinctus* from Gull and Ives Lakes are also deposited in UMMZ-Insect Division.

LITERATURE CITED

- Leonard, J. W. and F. A. Leonard. 1949. An annotated list of Michigan Trichoptera. Occasional Papers of the Museum of Zoology, University of Michigan 522:1-35, 1 chart.
- Parker, C. R. and G. B. Wiggins. 1987. Revision of the caddisfly genus *Psilotreta* (Trichoptera: Odontoceridae). Royal Ontario Museum, Life Sciences Contributions 144, vi + 55 pp.
- Ulmer, G. 1905. Neue und wenig bekannte aussereuropaische Trichopteren, hauptsächlich aus dem Wiener Museum. Naturhistorisches Hofmuseums Wien Annalen 20: 59-98.
- Walker, F. 1852. Catalogue of the specimens of neuropterous insects in the collection of the British Museum. Part 1. London. 192 pp.
- Wiggins, G. B. 1996. Larvae of the North American Caddisfly Genera (Trichoptera). 2nd edition. University of Toronto Press, Toronto. 457 pp.