

SCIENTIFIC NAME: *Cryptochia denningi*
COMMON NAME: Denning's cryptic caddisfly
CLASS, FAMILY: Insecta, Limnephilidae

ORIGINAL DESCRIPTION: Wiggins, G.B. 1975. Contributions to the systematics of the caddisfly family Limnephilidae (Trichoptera). II. Canadian Entomologist 107(3):331, fig. 7A-D (various aspects of male genitalia).

TYPE MATERIAL: *Holotype:* Adult male - California: Tulare Co.; Sequoia National Park, Dorst Creek Campground, 21 Jun 1961, G. B. Wiggins. Depository unknown, but probably at the Royal Ontario Museum, Toronto

RANKING/STATUS: G1G2S1S2 (NatureServe-CNDDDB).

GENERAL DESCRIPTION: Males are brown with yellowish areas on the front of the head and on the prothorax and front legs. The wings are uniformly medium brown without any color pattern except for a lightened, rough area at the stigma.

Larvae and females are unknown.

DIAGNOSTIC CHARACTERS: Males can be separated from other species in the genus by the short tenth abdominal segment, which does not extend beyond the base of the clasper. Females and larvae of this genus cannot yet be separated to species. However, the larvae of *Cryptochia* are unusual in possessing a dense fringe of long setae behind the head, on the anterior edge of the thorax. The top of the head is flattened, with a circular, peripheral ridge bearing two thick, curved rows of setae.

OTHER ILLUSTRATIONS: The larva of a related species, *C. pilosa*, is illustrated in Wiggins (1996), Fig. 20.10A-F (lateral view of larva, anterolateral view of head and thorax, case, lateral view of middle leg, ventral view of head, ventral view of mouthparts); the illustrations show the generic characters of the larvae. Merritt and Cummins (1996) illustrate the head (p. 369, fig. 18.144) and case (p. 370, fig. 18.159) of an unidentified species of *Cryptochia*.

DISTRIBUTION: Known only from the type locality.

HABITAT: Unknown, but other species in the genus are found in small, cold first- and second-order streams.

LIFE HISTORY/BEHAVIOR: There is no information on life history or behavior of this species. Larvae of other *Cryptochia* construct a flattened, tapered case from woody debris. The larvae are suspected of using their mandibles to smooth the rough edges of the posterior portion of their cases. *Cryptochia pilosa* cases are buoyant and float in the water; when lodged along the edge of the stream, the semi-aquatic larvae then crawl onto shore where they probably feed on fungi in the damp, decaying

leaves and decaying wood on which they are frequently found (Wissemann and Anderson, 1987). Pupae of other *Cryptochia* have been found in wet logs above the water surface. In Oregon, *Cryptochia pilosa* appears to complete its life cycle in two years.

SELECTED REFERENCES:

- Denning, D.G. 1975. New species of Trichoptera from Western North America. Pan-Pacific Entomologist 51:318-326. (key to species)
- Erman, N.A. and C.D. Nagano. 1992. A review of the California caddisflies (Trichoptera) listed as candidate species on the 1989 federal "Endangered and threatened wildlife and plants; Animal notice of review." California Fish and Game 78(2):45-56.
- Merritt, R.W. and K.W. Cummins. 1996. An Introduction to the Aquatic Insects of North America. Kendall/Hunt Publishing Co., Dubuque. 862 pp.
- Wiggins, G.B. 1996. Larvae of the North American caddisfly genera. 2nd Edition. University of Toronto Press, Toronto. 457 pp.
- Wiggins, G.B., Weaver, J.S. III, and J.D. Unzicker. 1985. Revision of the caddisfly family Uenoidae (Trichoptera). Canadian Entomologist 117(6):763-800.
- Wissemann, R.W. and N.H. Anderson. 1987. The life history of *Cryptochia pilosa* (Trichoptera: limnephilidae) in an Oregon coast range watershed. In Bournaud, M., and H. Tachet (eds.), Proceedings of the 5th International Symposium on Trichoptera, Dr. W. Junk Publishers, Dordrecht, The Netherlands.

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