

SCIENTIFIC NAME: *Cryptochia shasta*
COMMON NAME: Confusion caddisfly
CLASS, FAMILY: Insecta, Limnephilidae

ORIGINAL DESCRIPTION: Denning, D.G.1975. New species of Trichoptera from Western North America. Pan-Pacific Entomologist 51:324-325, fig. 6, 6A-D (lateral view of male genitalia, dorsal view of tergum 10 and cerci, ventral lobe of tenth tergum, lateral view of aedeagal complex).

TYPE MATERIAL: *Holotype:* Adult male - California: Shasta Co.; creek near Castle Crags State Park, 17 May 1973, D.G. Denning. Deposited in California Academy of Sciences, type #16164.

RANKING/STATUS: G1G2S1S2 (NatureServe-CNDDDB).

GENERAL DESCRIPTION: Adult male 9 mm. General color dark brown. Wings with heavy black pilosity. Antennae and legs with dense blackish setation. Segments 3 to 5 with dark pigmented line through center, fifth segment also with circular invaginated area. Ninth tergum massive, projected caudad. Tenth tergum short, blunt, with black ventral margin irregular. Original description describes and illustrates the male genitalia in detail.

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 type locality. (According to Erman and Nagano, may be synonymous with *C. califca* Denning, 1968, also rare, from Sierra and Nevada Counties.)

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

LIFE HISTORY/BEHAVIOR: Adults emerge May through July. No other information on the life history or behavior of this species is known. 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 (Wisseman 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:

- 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.
- Wisseman, 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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