

California Academy of Sciences

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**ANNOTATED CHECKLISTS OF FISHES**

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**Family Scytalinidae Jordan & Evermann 1898**

graveldivers

By

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Graveldivers are small (usually under 10 cm [4 in]), elongate and compressed, blennylike perciform fishes of the marine littoral zone. They are extremely agile and when disturbed rapidly escape by burrowing into the substrate. Their adeptness at going to ground earned them the specific name *cerdale*, meaning the wary one or the fox. Graveldivers are seldom observed or collected even though they occur in some locations in dense concentrations, and probably are most often seen by clam diggers. The generic name *Scytalina* is a diminutive of *Scytale*, from the Greek for viper, in allusion to the serpentlike appearance of the head: broad, with expanded cheeks and a distinct neck, and two strong canines in the upper and lower jaws. Eyes small, placed high on the head. Dorsal and anal fins supported by thin, flexible spines (no soft rays). Dorsal and anal fins both with 41–51 spines, deeply buried in skin, the fins beginning opposite each other about halfway back on the body and confluent with the caudal fin, which is rounded. Pectoral fins tiny and fleshy, with about 8 rays. Pelvic fins and girdle absent. One pair of nostrils (posterior absent). Cephalic mechanosensory canals opening through pores in deep, broad depressions with fleshy raised rims. Trunk lateral line canal, scales, pyloric caeca, and swim bladder absent. Teeth conical, present on jaws, vomer, and palatines. Gill membranes broadly united, free from the isthmus. Branchiostegal rays 6 or 7. Gill rakers practically obsolete. Pleural ribs absent. Vertebrae 69–71.\* Pinkish brown with purplish mottling, caudal fin margin reddish orange. Total length to 15 cm (6 in). Subarctic and cold-temperate North Pacific Ocean; intertidal and shallow subtidal in spaces under rocks and in gravel, broken shell, and sand substrates. One species.

Jordan and Evermann (1898:2454 [ref. 2445]) removed *Scytalina* from the Congrogadidae, where it had been placed by Jordan and Gilbert (1880:266 [ref. 2367]), and made it the type of a new family, Scytalinidae. Citing absence of the basisphenoid bone and loss of the posterior pair of nostrils as two unifying characters, Gosline (1968 [ref. 26848]) placed the Scytalinidae with the northern blennylike fishes, the suborder Zoarcoidei of Nelson's (1984 [ref. 13596], 1994 [ref. 26204]) classification. A cladistic analysis of zoarcoid families (Anderson 1984 [ref. 13634]) placed Scytalinidae in closest relationship to Pholidae; these two are the only zoarcoid families lacking pleural ribs.

**Genus *Scytalina* Jordan & Gilbert 1880**

*Scytalina* Jordan & Gilbert 1880:266 [ref. 2367]. Type species *Scytalina cerdale* Jordan & Gilbert 1880. Type by monotypy.

*Scytaliscus* Jordan & Gilbert 1883:111 [ref. 2477]. Type species *Scytalina cerdale* Jordan & Gilbert 1880. Type by being a replacement name.

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\*Vertebral counts of 61–62 recently reported by authors are incorrect, evidently resulting from inadvertent transposition of data pertaining to Zaprionidae in table 147 of Matarese et al. (1984 [ref. 26884]).

***Scytalina cerdale* Jordan & Gilbert 1880**

*Scytalina cerdale* Jordan & Gilbert 1880:267 [ref. 2367] (Waadda I., Neah Bay, near Cape Flattery, Washington, U.S.A.). Lectotype: USNM 27400.

DISTRIBUTION: Eastern North Pacific: Aleutian Islands to central California.

REMARKS: *Scytaliscus* is an unneeded new name for *Scytalina*. Jordan and Gilbert (1883) suggested the new name because they believed the name *Scytalina* was too close to *Scytalinus* Erichson in Coleoptera.

Jordan and Gilbert (1880) based their description of *Scytalina cerdale* on two specimens. Springer and Anderson (1997:8 [ref. 22953]) could account for only one specimen and designated that specimen as the lectotype. They reported the disposition of the paralectotype as “unknown; probably lost.” However, Jordan and Starks (1895:849 [ref. 2522]) stated that one of the syntypes had been destroyed by fire.

The illustration in Jordan and Starks (1895: pl. civ) depicts a specimen from the same locality as the types (Neah Bay) but collected later by E. C. Starks. The illustrated specimen exists in very good condition in lot CAS-SU 3389, with metal tag stamped “DRAWN” attached.

**Summary Lists**

**Genus-Group Names of Family Scytalinidae**

*Scytalina* Jordan & Gilbert 1880 = *Scytalina* Jordan & Gilbert 1880

*Scytaliscus* Jordan & Gilbert 1883 = *Scytalina* Jordan & Gilbert 1880

**Incertae Sedis Genus-Group Names**

None

**Unavailable Genus-Group Names**

None

**Species-Group Names of Family Scytalinidae**

*cerdale*, *Scytalina* Jordan & Gilbert 1880 = *Scytalina cerdale* Jordan & Gilbert 1880

**Incertae Sedis Species-Group Names**

None

**Unavailable Species-Group Names**

None

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