

California Academy of Sciences

ANNOTATED CHECKLISTS OF FISHES

Number 28

February 2004

Family Gibberichthyidae Parr 1933

gibberfishes

By

Alexander N. Kotlyar

*P. P. Shirshov Institute of Oceanology, Russian Academy of Sciences
36 Nakhimovskiy Prospect, 117851, Moscow, Russia
email: kotlyar@sio.rssi.ru*

Gibberfishes are a small family of stephanoberycoid fishes known from a few specimens collected from tropical marine waters. The juveniles differ markedly from the adults. Body moderately robust in adults, deep in young specimens, compressed posteriorly. Head moderately large, with large mucous cavities on top of head separated by thin ridges; mucous cavities covered by thin skin. Eyes large in juveniles and small in adults. Mouth large, oblique, jaws extending to posterior margin of eye (in adult). Adults with semi-isolated series of 5–8 spines before dorsal fin and 4–5 spines before anal fin, about 8–9 and 7–9 soft rays in each fin, respectively; pectoral fins with 12–15 rays; pelvic fins subabdominal, with 1 spine and 5–6 soft rays. Prejuvenile with long appendage off third pelvic ray. Villiform teeth on jaws; no teeth on vomer, palatines, endopterygoid, and ectopterygoid. One supramaxilla. Branchiostegal rays 10. Orbitosphenoid, subocular shelf, antorbital absent; basisphenoid present. Scales cycloid. Lateral line as vertical rows of papillae on sides of body; lateral line tubes 28–33. Vertebrae 28–32. Color brown-black or black. Maximum length 13 cm (5.1 in). Meso- to bathypelagic and benthopelagic, known from tropical waters of the western Atlantic and Indo-West Pacific. Adults at depths of 320–2,000 m, larvae and juveniles shallower, to 0–60 m. Feed on zooplankton. Two species in one genus.

Parr (1933 [ref. 2273]) erected the family Gibberichthyidae when he described *Gibberichthys pumilis*. The unusual prejuvenile stage of *G. pumilis* was discovered later and described as a new genus and species, *Kasidoron edom*, and type of a new family Kasidoroidae, by Robins and de Sylva (1965 [ref. 5936]). Rosen and Patterson (1969:456 [ref. 27330]) suggested that *Kasidoron* was based on the young of *G. pumilis*, and de Sylva and Eschmeyer (1977 [ref. 5936]) confirmed the relationship and classified Kasidoroidae as a junior synonym of Gibberichthyidae. Kotlyar (1990 [ref. 26698], 1996 [ref. 23292]) reviewed the family.

Genus *Gibberichthys* Parr 1933

Gibberichthys Parr 1933:5 [ref. 3373]. Type species *Gibberichthys pumilus* Parr 1933. Type by monotypy.

Kasidoron Robins & de Sylva 1965:190 [ref. 3788]. Type species *Kasidoron edom* Robins & de Sylva 1965. Type by original designation (also monotypic).

REMARKS: *Kasidoron* is based on a highly modified juvenile of *Gibberichthys* (de Sylva and Eschmeyer 1977 [ref. 5936]).

***Gibberichthys latifrons* (Thorp 1969)**

Kasidoron latifrons Thorp 1969:63, Figs. 1–4 [ref. 7851] (w. Indian Ocean off Zanzibar, Tanzania, 8°34'S, 42°37'E [stomach content]). Holotype (unique): BMNH 1967.8.24.1.

DISTRIBUTION: Tropical waters of Indian and western Pacific oceans to east of Marquesas Islands. Meso-, bathy- and benthopelagic; adults at depths of 750–2,000 m, larvae at 0–60 m.

***Gibberichthys pumilus* Parr 1933**

Gibberichthys pumilus Parr 1933:5, Fig. 1 [ref. 3373] (Caicos Passage, Bahamas, *Pawnee* sta. 48, 6/4, 1927, 21°44'N, 72°43'25"W, 7,000 ft. wire out). Holotype (unique): YPM 2838.

Kasidoron edom Robins & de Sylva 1965:190, Figs. 1–2 [ref. 3788] (w. North Atlantic, R/V *Pillsbury* sta. 165, 28°25'–28°27'N, 73°42'W, 50 m over bottom depth of 4,462 m). Holotype: ANSP 102061.

DISTRIBUTION: Tropical western Atlantic (30°N to equator). Adults at depths of 320–1,100 m, larvae at 0–50 m.

Summary Lists

Genus-Group Names of Family Gibberichthyidae

Gibberichthys Parr 1933 = *Gibberichthys* Parr 1933

Kasidoron Robins & de Sylva 1965 = *Gibberichthys* Parr 1933

Incertae Sedis Genus-Group Names

None

Unavailable Genus-Group Names

None

Species-Group Names of Family Gibberichthyidae

edom, *Kasidoron* Robins & de Sylva 1965 = *Gibberichthys pumilus* Parr 1933

latifrons, *Kasidoron* Thorp 1969 = *Gibberichthys latifrons* (Thorp 1969)

pumilus, *Gibberichthys* Parr 1933 = *Gibberichthys pumilus* Parr 1933

Incertae Sedis Species-Group Names

None

Unavailable Species-Group Names

None

Literature Cited

- de Sylva, D. P. and W. N. Eschmeyer. 1977 (18 Aug.) [ref. 5936]. Systematics and biology of the deep-sea fish family Gibberichthyidae, a senior synonym of the family Kasidoroidae. *Proc. Calif. Acad. Sci. (Ser. 4)* v. 41 (no. 6): 215–231.
- Kotlyar, A. N. 1990 [ref. 26698]. Osteology of the fishes of the suborder Stephanoberycoidae. I. Stephanoberycidae and Gibberichthyidae. *Voprosy Ikhtiologii*. v. 30 (no. 5): 804–816. [In Russian.]
- Kotlyar, A. N. 1996 [ref. 23292]. Beryciform fishes of the World Ocean. VNIRO Publishing, Moscow. 1–368. [In Russian.]
- Parr, A. E. 1933 (Dec.) [ref. 3373]. Deepsea Berycomorphi and Percomorphi from the waters around the Bahama and Bermuda islands. (Scientific results of the third oceanographic expedition of the “Pawnee” 1927.) *Bull. Bingham Oceanogr. Collect. Yale Univ.* v. 3 (art. 6): 1–51.
- Robins, C. R. and D. P. de Sylva. 1965 (Mar.) [ref. 3788]. The Kasidoroidae, a new family of mirapinniform fishes from the western Atlantic Ocean. *Bull. Mar. Sci.* v. 15 (no. 1): 189–201.
- Rosen, D. E. and C. Patterson. 1969 (30 June) [ref. 27330]. The structure and relationships of the paracanthopterygian fishes. *Bull. Am. Mus. Nat. Hist.* v. 141 (art. 3): 357–474, Pls. 52–78.
- Thorp, C. H. 1969 (20 Jan.) [ref. 7851]. A new species of mirapinnaform fish (family Kasidoroidae) from the western Indian Ocean. *J. Nat. Hist.* v. 3 (no. 1): 61–70.

Acknowledgments

The Alfred P. Sloan Foundation provided funding toward preparation of this account. The CAS annotated checklist team provided technical assistance and editing.

Suggested citation format:

Kotlyar, A. N. 2004. Family Gibberichthyidae Parr 1933 — gibberfishes. Calif. Acad. Sci. Annotated Checklists of Fishes No. 28. 3 pp.

Copyright © 2004 by the California Academy of Sciences
San Francisco, California, U.S.A.