# **OPINION 2012** (Case 3041)

Cynodon Spix in Spix & Agassiz, 1829 and Rhaphiodon Agassiz in Spix & Agassiz, 1829 (Osteichthyes, Characiformes): conserved, and C. gibbus and R. vulpinus Spix & Agassiz, 1829 designated as the respective type species of Cynodon and Rhaphiodon

**Keywords.** Nomenclature; taxonomy; Osteichthyes; Characiformes; Cynodontidae; Characidae; Cynodon; Rhaphiodon; Cynodon gibbus; Cynodon vulpinus; Rhaphiodon gibbus; Rhaphiodon vulpinus; freshwater fish; South America.

## Ruling

- (1) Under the plenary power:
  - (a) the following names are suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy:
    - (i) Cynodon Cuvier, 1829 and all uses of the name Cynodon prior to the publication of Cynodon Spix in Spix & Agassiz, 1829;
    - (ii) vulpinus Cuvier, 1829, as published in the binomen Cynodon vulpinus, and all uses of the name Cynodon vulpinus prior to the publication of Cynodon vulpinus Spix & Agassiz, 1829;
  - (b) the name *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 is to be treated as the name of a new genus and not as a replacement name for *Cynodon* Spix in Spix & Agassiz, 1829;
  - (c) the name *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 is to be given precedence over *Cynodon* Spix in Spix & Agassiz, 1829 whenever the two names are considered to be synonyms;
  - (d) all previous type species fixations for the following nominal genera are hereby set aside:
    - (i) Rhaphiodon Agassiz in Spix & Agassiz, 1829 and Rhaphiodon vulpinus Spix & Agassiz, 1829 is hereby designated as the type species;
    - (ii) Cynodon Spix in Spix & Agassiz, 1829 and Cynodon gibbus Spix & Agassiz, 1829 is hereby designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) Rhaphiodon Agassiz in Spix & Agassiz, 1829 (gender: masculine), type species by designation in (1)(d)(i) above Rhaphiodon vulpinus Spix & Agassiz, 1829, with the endorsement that it is to be given precedence over the name Cynodon Spix in Spix & Agassiz, 1829 whenever the two names are considered to be synonyms;
  - (b) Cynodon Spix in Spix & Agassiz, 1829 (gender: masculine), type species by designation in (1)(d)(ii) above Cynodon gibbus Spix & Agassiz, 1829, with the endorsement that it is not to be given priority over the name Rhaphiodon Agassiz in Spix & Agassiz, 1829 whenever the two names are considered to be synonyms.

- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) gibbus Spix & Agassiz, 1829, as published in the binomen Cynodon gibbus (specific name of the type species of Cynodon Spix in Spix & Agassiz, 1829);
  - (b) *vulpinus* Spix & Agassiz, 1829, as published in the binomen *Rhaphiodon vulpinus* (specific name of the type species of *Rhaphiodon* Agassiz in Spix & Agassiz, 1829).
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) Cynodon Cuvier, 1829, as suppressed in (1)(a)(i) above;
  - (b) Rhaphiodontichthys Campos, 1945 (a junior objective synonym of Rhaphiodon Agassiz in Spix & Agassiz, 1829);
  - (c) Camposichthys Travassos, 1946 (a junior objective synonym of Cynodon Spix in Spix & Agassiz, 1829).
- (5) The name *vulpinus* Cuvier, 1829, as published in the binomen *Cynodon vulpinus* and as suppressed in (1)(a)(ii) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

## History of Case 3041

An application for the conservation of the usage of the names *Cynodon* Spix in Spix & Agassiz, 1829 and *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 and the designation of *C. gibbus* and *R. vulpinus* Spix & Agassiz, 1829 as the respective type species of *Cynodon* and *Rhaphiodon* was received from Dr M. Toledo-Piza (*Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil*) and Dr K.J. Lazara (*United States Merchant Marine Academy, Kings Point, New York, U.S.A.*) on 3 February 1997. After correspondence the case was published in BZN 57: 151–157 (September 2000).

A note in support of the application was published in BZN 58: 306 (December 2001).

A specimen of *Raphiodon vulpinus* in the Musée d'Histoire Naturelle, Neuchâtel (catalogue no. MNHN 822), recorded by Kottelat (1988, p. 84) as 'potential holotype', was accepted as the holotype by Toledo-Piza (2000, p. 74, fig. 28). Notice of the case was sent to appropriate journals.

#### Decision of the Commission

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 57: 154. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 25: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Rosenberg, Song, van Tol

Negative votes – 2: Patterson and Štys.

No vote was received from Dupuis.

## Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Camposichthys Travassos, 1946, Summa Brasiliensis Biologiae, 1: 132.

Cynodon Cuvier, 1829, Le règne animal distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée, Ed. 2, vol. 2, p. 312.

Cynodon Spix & Agassiz, 1829, Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et observationibus

anatomicis illustravit Dr. L. Agassiz, pl. 26.

gibbus, Cynodon, Spix & Agassiz, 1829, Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et observationibus anatomicis illustravit Dr. L. Agassiz, pl. 27.

Rhaphiodon Agassiz in Spix & Agassiz, 1829, Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et

observationibus anatomicis illustravit Dr. L. Agassiz, pp. 59, 76.

Rhaphiodontichthys Campos, 1945, Arquivos de Zoologia do Estado de São Paulo, 4: 473.

vulpinus, Cynodon, Cuvier, 1829, Le règne animal distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée, Ed. 2, vol. 2, p. 312.

vulpinus, Rhaphiodon, Spix & Agassiz, 1829, Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et observationibus anatomicis illustravit Dr. L. Agassiz, p. 76.