

AMPHIBIA: CAUDATA: PLETHODONTIDAE

HEMIDACTYLIUM

NEILL, WILFRED T. 1963. *Hemidactylium*, p. 1. In W. J. Riemer (ed.), Catalogue of American Amphibians and Reptiles. American Society of Ichthyologists and Herpetologists, Bethesda, Maryland.

***Hemidactylum* Tschudi**
Four-toed salamander

Hemidactylum Tschudi, 1838:59. Type-species *Salamandra scutata* Schlegel in Temminck, Schlegel, & de Haan [1833-1850] 1833, by monotypy.
Cotobotes Gistel, 1848:xi. Replacement name for *Hemidactylum*, proposed in the erroneous belief that *Hemidactylum* was preoccupied by *Hemidactylus* Oken, 1817, a lizard.
Desmodactylus Duméril, Bibron, & Duméril, 1854:117. Replacement name for *Hemidactylum*. See REMARKS.
Dermodactylus David, 1871:95. Incorrect subsequent spelling of *Desmodactylus*, without status in nomenclature.

• CONTENT. One species is recognized, *Hemidactylum scutatum* (Schlegel in Temminck, Schlegel, & de Haan). *Dermodactylus* [= *Desmodactylus*] *pinchonii* David (1871) is based on an Asiatic hynobiid salamander, and *Hemidactylum pacificum* Cope (1865) is now placed in *Batrachoseps*.

• DEFINITION. The premaxillae have long, separate, nasal processes enclosing a fontanelle; the tongue is broadly attached in front; the hindfoot is 4-toed; the habitus is much as in *Plethodon cinereus*, not vermiform; and the tail has a basal constriction. Larvae are aquatic, with a dorsal fin extending onto the body.

• DESCRIPTIONS, DISTRIBUTION, FOSSIL RECORD, and PERTINENT LITERATURE. See *Hemidactylum scutatum*.

• NOMENCLATURAL HISTORY. The generic name *Hemidactylum* has been in general use since the 1850's; *Cotobotes* and *Desmodactylus* were never widely accepted.

• REMARKS. Dunn (1926:196), followed by Stejneger & Barbour (e.g. 1939:17), Schmidt (1953:41), and others, attributed the name *Hemidactylum* to Tschudi as author, citing the date as 1838, but the place of publication as the Mémoires de la Société des Sciences Naturelles de Neuchâtel. This is incorrect. Tschudi's 1838 paper was a preprint (which has nomenclatural standing); the article did not appear in the Mémoires until 1840. See Schulze & Kükenthal (1926) and Sherborn (1927).

Some nomenclators imply that J. Gistl and J. Gistel were different authors. Neave (1939) and Sherborn (1927) indicate one writer on *Hemidactylum* to have been "Gistl"; but Schulze & Kükenthal (1926), who were in a better position to know, indicate "Gistel" to have been the writer on this salamander.

The name *Desmodactylus*, first appearing in volume 9 of *Erpétologie Générale*, was credited to "Duméril & Bibron" by Dunn (1926:196) and others. However, volumes 7 (both parts), 9, and the Atlas of the *Erpétologie Générale* were by A.-M.-C. Duméril, G. Bibron, & A. H. A. Duméril. The other volumes were by A.-M.-C. Duméril & G. Bibron only.

The name *Dermodactylus* David was not considered by Stejneger & Barbour (e.g. 1939:17) or Schmidt (1953:41).

Hemidactylum has been misspelled as "*Hemidactylum*" on several occasions, but the misspellings have no nomenclatural standing and need not be cited.

• ETYMOLOGY. The name *Hemidactylum* is from Latin *hemi-* or Greek *hēmi-*, signifying "half"; and Greek *daktylion*, neuter of *daktylios*, signifying "dactylion," an old medical term for fusion of the digits. The allusion is to the reduced number of digits on the hindfoot.

Hemidactylum is of neuter gender.

LITERATURE CITED

- Cope, Edward D. 1865. Third contribution to the herpetology of tropical America. Proc. Acad. Nat. Sci. Philadelphia, 17:185-198.
 David, Armand. 1871. Journal d'un voyage en Mongolie et en Chine fait en 1866-68. Nouvelles des Arch. du Mus. Hist. Nat., Paris, Bull. (7):75-100.
 Duméril, André-M.-C., Gabriel Bibron, & Auguste H. A. Duméril, 1854. Erpétologie générale ou histoire naturelle complète des reptiles, vol. 9, xx + 440 pp. Paris.
 Dunn, Emmett R. 1926. The salamanders of the family Plethodontidae. Smith College 50th Anniversary Publ., Northampton, Massachusetts. viii + 441 pp.
 Gistel, Johannes. 1848. Naturgeschichte des Thierreichs. Für höhere Schulen bearbeitet durch Johannes Gistel . . . mit einem Atlas von 32 Tafeln (darstellend 617 illuminierte Figuren) und mehreren dem Texte eingedruckten Xylographien. Stuttgart.
 Neave, Sheffield A. 1939. Nomenclator zoologicus: vol. 1 (A-C); vol. 2 (D-L). Zoological Society of London, London.
 Schmidt, Karl P. 1953. A check list of North American amphibians and reptiles. Sixth edition. American Society of Ichthyologists and Herpetologists. viii + 280 pp.
 Schulze, F. E., & W. Kükenthal. 1926. Nomenclator animalium generum et subgenerum: erster Band A-B, Einleitung, Litteraturverzeichnis. Berlin.
 Sherborn, Carolo D. 1927. Index animalium: vol. 1801-50, H-L. British Museum (Natural History), London.
 Stejneger, Leonhard, & Thomas Barbour. 1939. A check list of North American amphibians and reptiles. 4th ed. Harvard University Press, Cambridge, Massachusetts. xvi + 207 pp.
 Temminck, C. J., H. Schlegel, & W. de Haan. 1833-1850. Siebold's Fauna Japonica sive descriptio animalium, quae in itinere per Japoniam . . . annis 1823-30 collegt, notis, observationibus et adumbrationibus illustravit Ph. Fr. de Siebold. Conjuratis studiis C. J. Temminck et H. Schlegel pro vertebratis atque W. de Haan pro invertebratis elaborata. Leiden. 6 vols. [The "Reptilia" of the Fauna Japonica was issued in three parts. Part III Saurii et Batrachii (pp. 85-144, plates 1-8), by Temminck & Schlegel, and which included the latter's description of *Salamandra scutata* (p. 119), was dated January 1838, but appeared probably in September of that year. The volume also included prefatory remarks by Philippo F. de Siebold.]
 Tschudi, J. I. 1838. Classification der Batrachier, mit Berücksichtigung der fossilen Thiere dieser Abteilung der Reptilien. [A preprint, later appearing in] Mém. Soc. Sci. Nat. de Neuchâtel, 1839 [1840]: 1-99.

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