

## TAXONOMIC NOTES

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### *LAEVICALVATELLA*: NEW NAME FOR *BARNARDINA* TAYLOR, PATTERSON, AND CHOI, 1985, NON KALANTARI, 1970

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IT HAS been brought to my attention by Drew Haman that the genus name *Barnardina* Taylor, Patterson, and Choi, 1985, p. 20 (type species *Barnardina thanetana* Taylor, Patterson, and Choi, 1985), is preoccupied by *Barnardina* Kalantari, 1970, p. 128 (type species *Barnardina semirugosa*, 1970). *Laevalcatella* new name is proposed as a replacement. The name is derived from the Latin, *laevis*, smooth, polished, bald, and *calvatus*, bare, with reference to the smooth test of the type species. Gender feminine.

#### REFERENCES

- KALANTARI, A. 1970. A new genus and two new species with some Albian arenaceous foraminifera from northeastern part of Iran. The Bulletin of the Iranian Petroleum Institute, 38:127–135.  
TAYLOR, S. H., R. T. PATTERSON, AND H.-W. CHOI. 1985. Occurrence and reliability of internal morphologic features in some Glandulinidae (Foraminifera). Journal of Foraminiferal Research, 15:18–23.

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### ON THE TAXONOMIC STATUS OF *MOANASAURUS MANGAHOUANGAE* WIFFEN (SQUAMATA: MOSASAURIDAE).

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THE MOSASAUR genus *Moanasaurus* (Wiffen, 1980) was based on a partial, disarticulated skull and a number of limb elements and vertebrae. The holotype and only known specimen of the taxon (CD43, cataloged in the New Zealand Geological Survey Register of fossil Chordata) was collected between 1974 and 1978, on the North Island of New Zealand, from boulders in the bed of Mangahouanga Stream (a tributary of the Te Hoe River) weathered from "sandstone beds of the Piripauan–Haurian" stage (Campanian–Maastrichtian). Wiffen (1980, p. 508) stated that "a detailed study of this skeletal material, and comparison with known forms of mosasaurs, has shown that the significant differences present warrant the recognition of the fossil as a new genus and species." The specimen was named *Moanasaurus mangahouangae* and placed within the subfamily Mosasaurinae (see Russell, 1967, p. 123–124, for diagnosis of this subfamily).

The diagnosis of *Moanasaurus* presented by Wiffen (1980, p. 508), however, is not differential, and fails to include any characters that would justify the erection of the new genus. The characters given in the diagnosis for the genus fall into three categories, following the taxonomic diagnoses of Russell (1967, p. 123–124, 131–132). 1) Characters found in all mosasaurs generally (superfamily Mosasauroidae)—". . . hypapophyses not fused (to centrum of vertebrae). . . ." 2) Characters common to

all the Mosasaurinae (=tribes Mosasaurini, Globidensini, Plotosaurini, after Russell, 1967)—"A mosasaur of moderate size . . . skull widest in region of postorbitofrontal parietal union. . . . Haemal arches long and fused (to caudal centra). Humerus short and massive, carpals rounded, metacarpals and phalanx hourglass shaped." 3) Characters diagnostic of *Mosasaurus*—"Skull length estimated at 750 mm., large broad frontal . . . 15 maxillary teeth. . . . Anterior cervicals horizontally compressed with broad low synapophyseal bases. . . . Ventral hypapophyseal penduncle of axis facing posteriorly, continuing dorsoventrally. . . . Functional zygapophyses, zygosphenes, and zygantra present on vertebrae into dorsal region."

Only two of the characters listed in the diagnosis appear unique to the specimen: "Basioccipital is a solidly sutured unit with prootics, opisthotic-exoccipitals, supratemporals, supraoccipital, and squamosals. Atlas centrum fused to axis." Neither character has been recognized previously in other mosasaurs. However, it is strongly suspected that both are artifacts of preservation and/or observation, not morphology. It is fairly unusual to find an articulated mosasaur cranium or an atlas centrum in contact with the anterior face of the axis. In the articulated mosasaur crania the author has examined, it has often been difficult, and sometimes impossible, to distinguish the points of contact between independent elements, because such details are