

New data on the dentition of the scincomorphan lizard *Polyglyphanodon* sternbergi

Randall L. Nydam and Richard L. Cifelli *Acta Palaeontologica Polonica* 50 (1), 2005: 73-78

Polyglyphanodon sternbergi Gilmore, 1940 is a large-bodied lizard from the Late Cretaceous of North America distinguished by its transversely oriented, interlocking teeth. Initially the teeth of *P. sternbergi* were described as smooth and blade-like, but recent discoveries of new specimens from the type locality and re-examination of the original material indicate that the chisel-like teeth of *P. sternbergi* have small, irregular serrations along the blades. These serrations are similar in size to those found on the teeth of the modern herbivorous lizard Iguana iguana and were likely used in a similar manner to crop vegetation, but was also capable of a degree of oral food processing due to the transverse orientation and interlocking arrangement of the dentition of *P. sternbergi*. Additionally, the presence of transversely oriented teeth with V-shaped blades in the anterior portion of the tooth row of *P. sternbergi* represents an additional shared characteristic in tooth structure between *P. sternbergi* and *Dicothodon* moorensis, *Bicuspidon numerosus*, and *Peneteius aquilonoius*; all transversely-tooth polyglyphandontine lizards from the Cretaceous of North America. It appears that the unique dentitions of *Polyglyphanodon sternbergi* (large teeth with transverse, serrated blades) and *Peneteius aquilonius* (small teeth with mammal-like specializations) present by the end of the Cretaceous were derived from a bicuspid, transversely oriented precursor tooth with a V-shaped blade.

Key words: Squamata, Polyglyphanodontinae, Polyglyphanodon, dentition, Cretaceous, North America.

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