The Jiyuan tetrapod Fauna of the Upper Permian of China: New pareiasaur material and the reestablishment of Honania complicidentata

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Honania complicidentata and Tsiyuania simplicidentata are pareiasaur taxa based on material from the Shangshihezi Formation of Jiyuan, Henan Province, China that were earlier designated as nomina vana. Based on the study of new material, and the reexamination of old specimens, we determine that the pareiasaur material from Jiyuan represents a single species that differs from all known species from other localities. Thus, we resurrect the name H. complicidentata for the material from Jiyuan. H. complicidentata is characterized by maxillary teeth with high crowns, dentary teeth slightly posteriorly inclined compared to the dentary dorsal margin, nearly all preserved marginal teeth have a cusped cingulum on the lingual surface, and humerus without an ectepicondylar foramen. Phylogenetic analysis shows Honania is more basal than Shansiisaurus and Shihtienfenia from the Sunjiagou Formation of China.

Key words: Reptilia, Pareiasauria, phylogeny, Permian, Shangshihezi Formation, China, Jiyuan.

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