New data on cranial anatomy of the ceratopsian dinosaur *Psittacosaurus major*

Hai−Lu You, Kyo Tanoue, and Peter Dodson


An exceptionally preserved skull and mandible of ceratopsian dinosaur *Psittacosaurus major* revealed many anatomical details such as the existence of an elliptical median intermaxillary foramen, a prominent neurovascular canal on the internal wall of the beak, long, slightly divergent basipterygoid processes developed as vertical blades with a deep cleft between them, and horizontally oriented vomer. The new specimen shows two autapomorphies of *Psittacosaurus major* revealed many anatomical details such as the existence of an elliptical median intermaxillary foramen, a prominent neurovascular canal on the internal wall of the beak, long, slightly divergent basipterygoid processes developed as vertical blades with a deep cleft between them, and horizontally oriented vomer. The new specimen shows two autapomorphies of *Psittacosaurus major*, the transversely narrow dorsal skull roof and very prominent dentary flanges, confirming the presence of two large−skulled psittacosaur species in the Lujitun Bed of the Lower Cretaceous Yixian Formation in Beipiao City, western Liaoning Province, China, the long− and narrow−skulled *P. major*, and broad−skulled *P. lujitanensis*.

**Key words:** Dinosauria, Ceratopsia, *Psittacosaurus*, Cretaceous, Yixian Formation, Liaoning, China

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