

researchers advocate that those layers represent the Daohugou Bed (Formation), whereas others regard them as part of the Tiaojishan Formation that has been assigned to the Middle Jurassic, Late Jurassic or Late Jurassic- Early Cretaceous.

The new species shares several features with the non-pterodactyloid Scaphognathus from the Late Jurassic deposits of southern Germany, such as a deep anterior end of the lower jaw, a piriform lower temporal fenestra with the ventral margin broader than the dorsal one and the interalveolar spacing of the maxillary teeth about three alveolar spaces, allowing its assignment to the Scaphognathidae.

The main diagnostic features of Jianchangnathus robustus include the large maxillary process of the jugal, the convex alveolar margin of the lower jaw and the procumbent disposition of the first three pairs of dentary teeth. The new taxon also differs from Fenghuangopterus lii, which comes from the same deposit and is here regarded as Scaphognathidae incertae sedis, mainly by the lower number of teeth and several proportions of the wing elements.

“Beside wukongopterids, only Fenghuangopterus lii has been described from those deposits so far and was regarded to be a member of the Scaphognathinae. Jianchangnathus robustus can be unequivocally assigned to clade Scaphognathidae”, said the first author of the study CHENG Xin, a paleontologist graduate student of the IVPP, “The new find increases the diversity of [flying reptiles](#) from this region, indicating a large potential of those deposits for the study of non-pterodactyloid flying reptiles that lived comparatively close or at the Jurassic–Cretaceous boundary.”

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