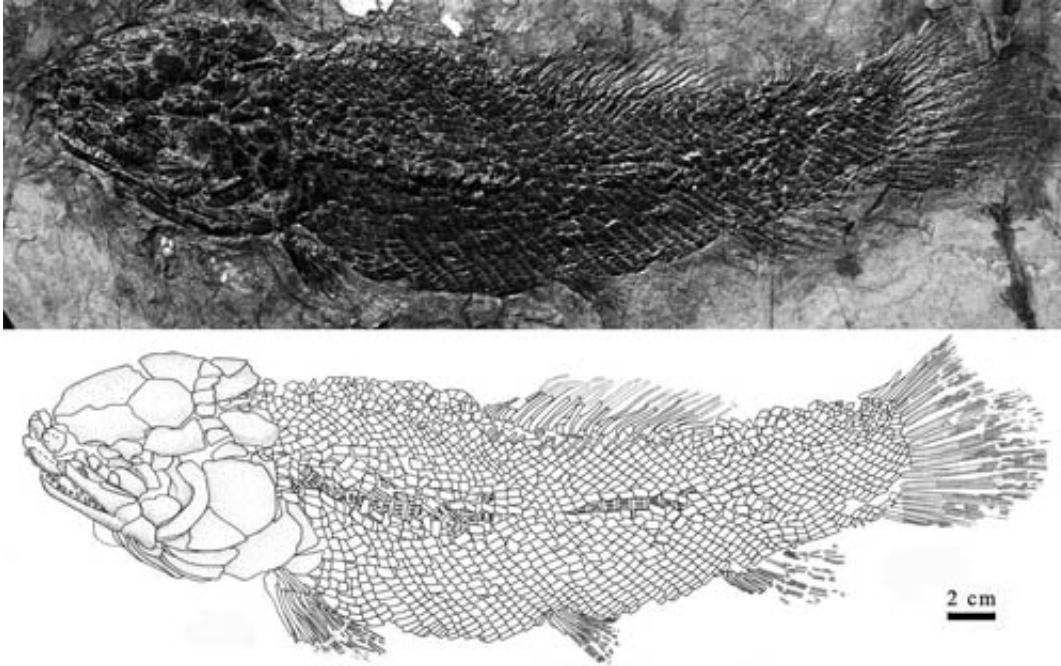


New species of *Sinamia* discovered

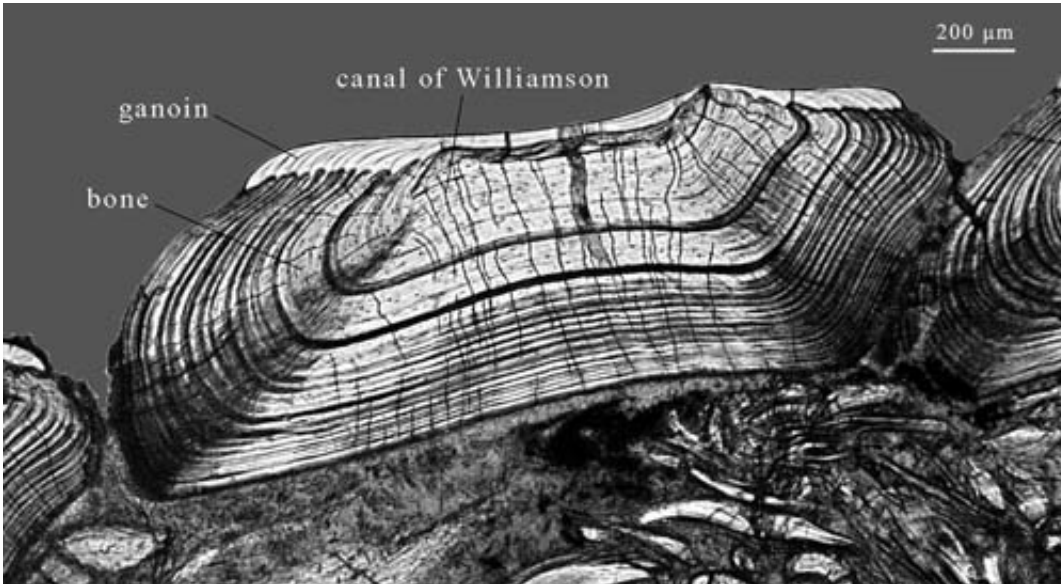
November 6 2012



Holotype of *Sinamia liaoningensis* (IVPP V 14608) in left lateral view. Credit: ZHANG Jiangyong

According to a paper published in the latest issue of *Vertebrata Palasiatica* 2012 (4), Dr. ZHANG Jiangyong, Institute of Vertebrate Paleontology and Paleoanthropology (IVPP), Chinese Academy of Sciences, described a new species of sinamiid fish, *Sinamia liaoningensis*, from the Barremian-Aptian Yixian and Jiufotang formations of western Liaoning, China. This finding helps better understand the evolution and biogeographic distribution of sinamiid fish.

The [new materials](#) reveal three commonly shared features (synapomorphies) of the Sinamiidae: the presence of only a single median parietal, three pairs of extrascapular bones, and short dermopterotic about equal in length to parietal length. Therefore, the new fish belongs to the family Sinamiidae undoubtedly.



Cross section of the scales of *Sinamia liaoningensis*. Credit: ZHANG Jiangyong

The new species was attributed to *Sinamia* based on the relative small postinfraorbitals, a long dorsal fin and rhombic scales.

Sinamia liaoningensis is a very large fish and has a much more podgy body form than the other species of the genus. It differs from all other species of the genus in the shape of the rostral, nasal, preopercle, the size and shape of infraorbitals, more subinfraorbitals (3), less dorsal fin rays (18), more caudal fin rays (16), more scale rows (32) between the origin of the anal fin and the dorsal margin of the body, and lack of serrated scales. The anterior half of the caudal fin rays of *S. liaoningensis* has

remains of thin fibrous actinotrichia.

"Thanks to the extensive excavations for [feathered dinosaurs](#) and birds in recent years, many specimens of Sinamia were discovered from both the Jiufotang and Yixian formations of western Liaoning and neighboring areas, including some exceptionally well preserved ones. This makes it possible to carry a detailed morphological study of the fish", said ZHANG Jiangyong.

Provided by Institute of Vertebrate Paleontology and Paleoanthropology

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