NEW LOCALITIES OF SAUROPTERIGIANS IN CHINA

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Since the publication of several remains of Sauropterigians from China, including Nanchangosaurus (Young, 1958, 1959; Wang, 1959) two new localities with similar fossils have been reported. The fossils in question have been collected by a field party of the Petroleum Prospection of the Szechuan Province and are quite fragmentary in preservation, being not capable for precise determination. Nevertheless, it is of interest to announce their occurrence and brief affities.

A. Probable nothosaur from Jenhui. N. Kweichou

There are two slabs of dark gray limestone containing much scattered pieces of bones. The first one (Plate I) shows a number of isolated vertebrae, ribs, and ventral ribs, a damaged humerus and a pair of coracoids. The presence of a scapula is probably indicated by a bone closely in connection with the coracoids. The second slab contains a number of gastralia only and still less satisfactorially preserved. Field number F. 2158. Cat. No. of the Institute of Vertebrate Paleontology and Paleoanthropology, V. 2468.

The best preserved part of the bones is the two coracoids and yet the lateral border of the right one is covered partly by the left one which is fully exposed. Comparing with that of *Keichousaurus* the coracoid of Jenhui is broad and short and the inner embayment is more distinctly marked. The posterior lateral border is straight, or even somewhat convex. It is 42 mm long and 27 mm broad, much larger than that of *Keichousaurus*. The humerus is damaged but looks short and broad and distinctly curved in much stronger way than that of any Pachypleurosauridae and thus more close to that of Nothosauridae. The ribs are very slender, in sharp contrast with that of Pachypleurosauridae.

The foregoing characteristics of the specimen shows clearly that we could not identified it with *Keichousaurus*. But the specimen is so poorly known that we refrain to give a name of it. It represents probably a new nothosaur from the same province. The locality of the type is: Yueliangtien, Hsinchiao, north of Maotai, Jenhui Hsien, N. Kweichou¹⁾ almost three hundred kilometers due north of Shingyi, the locality of *Keichousaurus*. The previously described nothosaurian skeleton from Kwangsi is much larger

¹⁾ 貴州仁怀县茅台新桥月亮田。

than the present form. It lacks the anterior limbs and the pectoral girdle, so that a direct comparison is impossible. The geological age of the Jenhui form is probably lower middle Triassic. It was collected by Mr. S. T. Fang of the named field party.

B. A humerus of Pachypleurosauridae from Chungking, Szechuan

A completely preserved right humerus was found by the same field party as named above. Locality: Machiapao, Taping, Chungking, Szechuan¹⁾, V. 2467. Geological age: probably Lower middle Triassic (Fig. 1).

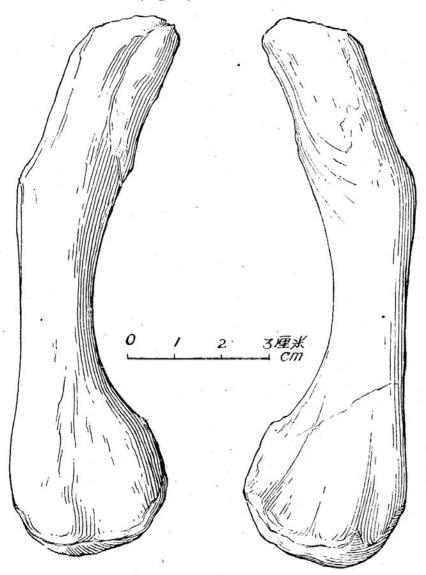


Fig. 1. Right humerus of a Pachypleurosaurian from Chungking in two aspects. Natural size.

This mentioned humerus belongs to the right side. It is 116 mm long, proximal breadth, 23 mm and distal breadth, 34 mm (The dimensions of the Phygosaurus per-

¹⁾ 四川重庆大坪馬家堡。

ledicus Arthaber redescribed by Peyer are: Ca. 48, 11, 20 mm respectively). In spite of much difference in size, the humerus shows remarkably resemblance in structure to that of the named form from Perledo, Comersee. Comparing with the right humerus by H. v. Meyer reproduced by F. v. Huene (1956, p. 384) our specimen identifys almost in

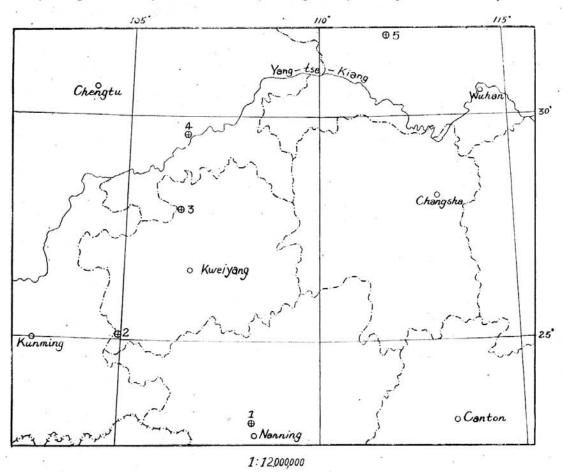


Fig. 2. Sketch map of part of S. W. China showing the various localities from where the sauripterigians were discovered in recent years. 1. Wuming with Kwangsisaurus orientalis Young; 2. Shingyi with Keichousaurus hui Young; 3. Jenhui with Pachypleurosauridae indet.; 4. Chungking with Pachypleurosauridae indet. and 5. Nanchang with Nanchangosaurus suni Wang, Scale much reduced.

every detailed features with the given picture. Comparing with the exemplar described by Peyer (1934, p. 95, Pla'e 39) the Jenhui specimen agrees well with it too, at least in general features and especially in the distal expansion and the straightness of the shaft. On the whole it seems beyond doubt that our specimen represents a member of the family Pachypleurosauridae. Nevertheless I would avoid to give a name for it at present, waiting for further material.

Significance of the Pachypleurosaurian and Nothosaurian Fauna in S. W. China

Although the above described two localities with pachypleurosaurian and nothosaurian are fragmentary in nature, they add considerably to our knowledge concerning the sauropterigians in China. Previously have described a Pachypleurosaurian from S. W. Kweichou, Keichousaurus hui and a true nothosaurian from Kwangsi, Kwangsisaurus orientalis. Their geological age are more or less Lower middle Triassic.

The present discoveries indicate that the geographical distribution of the Triassic sauropterigians is much wider than it was supposed. The huge triassic sea with the fauna of European affinities is also obvious.

According to Wang, the Nanchangosaurus suni from Hupei belongs also to Sauropterigia.

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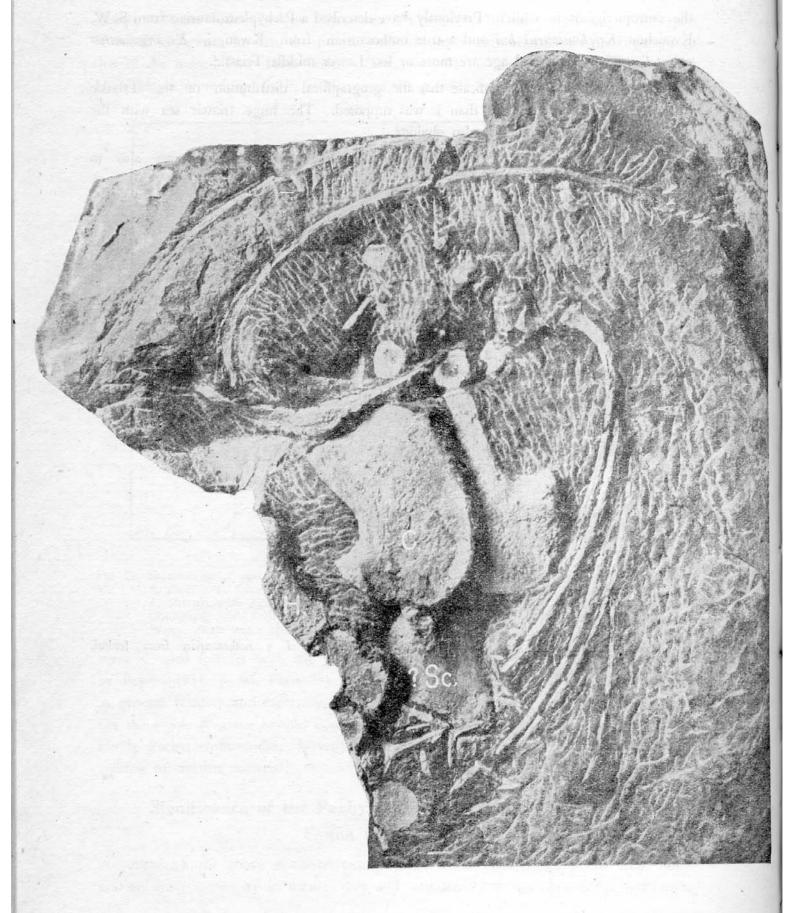
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Explanation of Plate I

A limestone slab with scattered remains of various bones of a nothosanrian from Jenhui, N. Kweichou. Nat. size. Young: New Localities of Sauropterigians in China



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