

山西武鄉加斯馬吐龍

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本文所記述的標本是一個頭骨的前端,主要為上顎骨,前邊向下彎的,主要由前上顎骨組成的部分才曾保存,兩個下顎雖保存,但只是前端一部分。這個標本的產地是武鄉樓則峪(參看圖 1),野外號碼是 5537A,室內號碼是 V. 2301,和它共生的化石,據初步鑑定為大小不同的二齒獸類,可能為水龍獸和肯氏獸等。除水龍獸外,都是在地表上收集的。

從標本的上邊看,標本保存得很不佳,並且曾經受過擠壓。但一般構造尚可清楚地看出。顏面骨前部尚局部保存,右前眼孔尚可看出,但均上下擠壓。殘破的鼻骨尚可認識出來。其左邊的很低的長形孔似代表頭骨下側的前孔。

從兩側看,都有一部分上顎骨,左側者保存較好,但其上邊殘破。共約有 14 個牙齒,但其尖端已破,有著僅有牙孔。這些牙齒代表所有上顎的牙的前中部。各牙少有間隙,大小相若。右邊上顎共保存有四牙和一個自前端算起的第一和第三牙的牙孔。這四牙向後彎曲的情形很清楚,牙後沿的鋸齒狀構造也十分清楚,特別是前向後算起的第四個牙。

頭骨的下邊為兩下顎骨所遮蓋,所以看不出什麼構造。

兩個下顎只有前端保存。左邊保存較好,特別是最前端,看來比之新疆的袁氏加斯馬吐龍較為粗大。其向上彎曲的程度也較顯著。這個下顎共保存了十個牙齒,代表連續的前部牙齒。這些牙齒都微向後彎曲。右下顎的最前端少有損壞。其上部為右上顎所蓋,沒有牙齒露出。但是有興趣的是其內側可以看出尚保存有牙最後的夾板骨,其後端業已消失。兩者之間的連接線尚可辨認。

主要尺度(以毫米計算)

保存總長.....	103
前端破處之寬(大約為前顎骨與顎接連處).....	34
前眼孔長.....	17.5
下顎第三與第四牙間高.....	13

(在袁氏加斯馬吐龍為左 21.4 右 21.0)

加斯馬吐龍在武鄉的發見,具有雙重重要性。第一,這個屬把中國已知的兩個下、中三疊紀獸形類動物羣聯係起來,起了對比作用。第二,因為加斯馬吐龍在南非和新疆都是下三疊紀所謂水龍獸層的標準化石,因之極有可能在武鄉,除了位於較高層位的中國肯氏獸外,還有標準的下三疊紀層位。當然武鄉化石的最後地層分佈和與其他地方的對比,還要等待所有化石研究完畢之後。

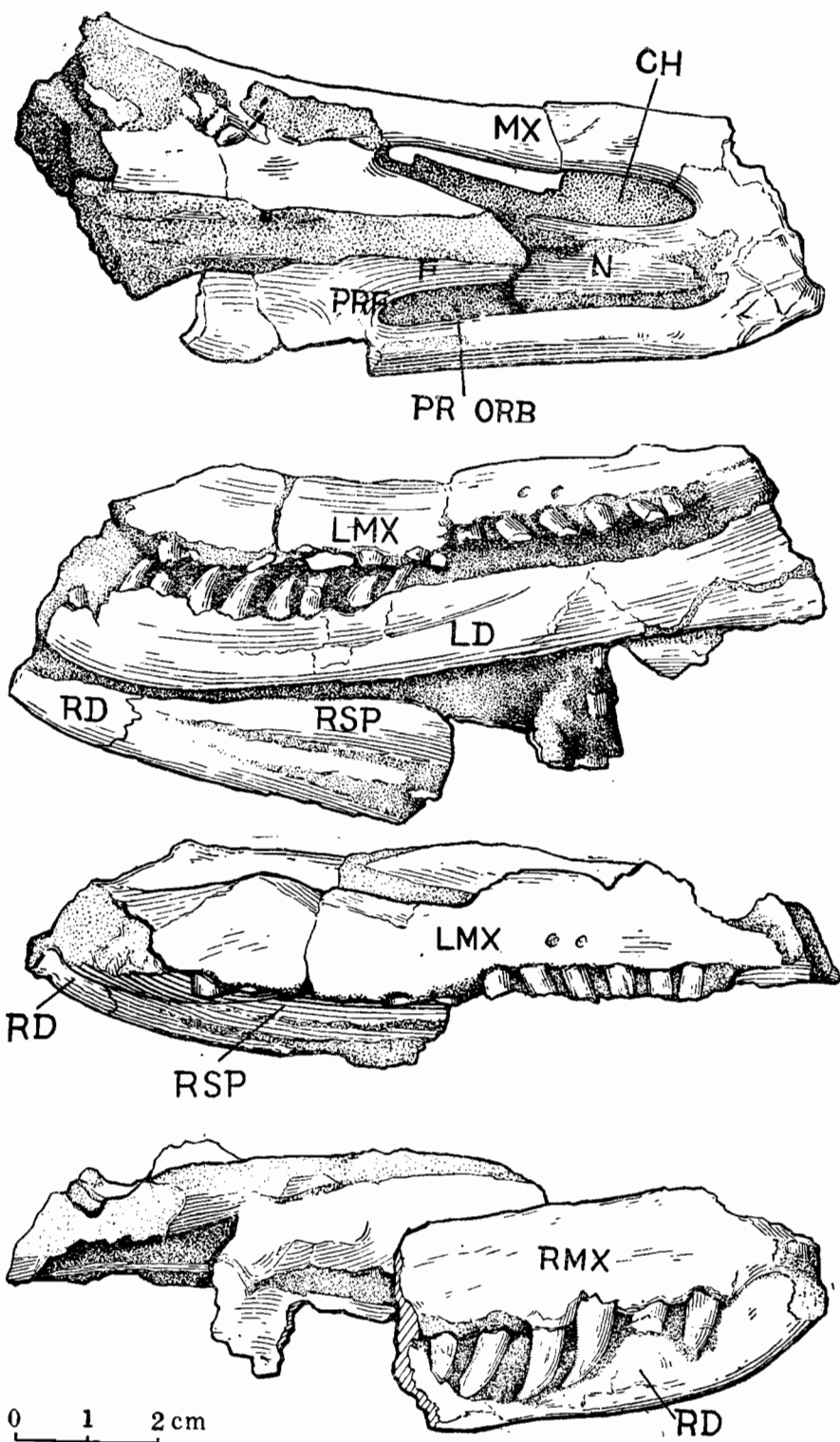


圖1 袁氏加斯馬吐龍，從上而下為上觀、腹觀、左觀及右觀，均原大

Fig. 1. *Chasmatosaurus yuani* Young, in four views. From upper to lower: dorsal view, ventral view, left side view and right side view. All in nat. size. Abbreviations as usually adopted.

ON THE OCCURRENCE OF *CHASMATOSAURUS* FROM WUHSIANG, SHANSI

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(Abstract)

An anterior part of the skull with the two lower jaws attached represents the presence of the genus *Chasmatosaurus* in the Triassic Reptilian collection of Wuhsiang. The downwards bent part made chiefly of the premaxillae is, however, broken off. This interesting specimen was derived from Lutzeyu, Wahsiang, in association with *Lysirosaurus* and *Sinokannemeyeria*. Field number 5537A; Cat. No. V 2301.

In superior view the skull is very much damaged and also deformed. Nevertheless, its general structure can be clearly seen. Part of the frontals is preserved and the right preorbital opening is for most part preserved. Its actual height is, however, unknown due to deformation. The damaged nasals are also preserved in part, and in the left of them, part of the choana is shown.

Both maxillae are shown partly in both side views. The left one is better preserved but its superior part is badly damaged. There are 14 teeth preserved but the tips of them are all broken off. Those teeth represent the middle part of the whole series of the dentition and are subequal in size. The right maxilla bears five more or less preserved teeth and the aveole between the first and the third preserved tooth, counting from the anterior end. The backwards bending of the teeth are well shown. The fine serrations along the posterior edge of the tooth are also well preserved, particularly on the fourth one counting from the anterior end.

The inferior view of the skull is wholly covered by the two lower jaws, so that there is nothing to say about its structure.

Both the lower jaws are partly preserved. The left one is in better condition, particularly the intact anterior end which looks a little stouter than that of *Chasmatosaurus yuani*. The upwards bending of the anterior part is also more obvious. There are ten more or less preserved teeth, representing the anterior part of the whole row of the dentition. They are all bending weakly backwards. The right lower jaw is preserved nearly up to the tip. The superior part is concealed and no single tooth is visible. In the inner side, the part of the plenial is well shown. The suture between the dental and the named bone is even clearly traceable.

Measurements (in millimeters)

Preserved length	103 mm
Approximate breadth of the skull between the premaxillae and the maxillae, near the broken end	34 mm

Length of the anteorbital opening 17.5 mm
 Depth of the left lower jaw between the third and the fourth tooth 13 mm
 (The same of *Ch. yuani* is 21.4 in left and 21 in right.)

Although the unique specimen is quite imperfect and damaged, but the detectable facts indicate that we have to deal unquestionably with the genus *Chasmatosaurus*. I failed even to find out any character described above which is not identical with *Ch. yuani* known from the *Lystrosaurus* Beds of Sinkiang, except that our specimen is somewhat smaller and the anterior end of lower jaw bends more upwards. Thus I refer it to the named species.

The find of this genus in the Triassic Beds of Wuhsiang is of double interest. First, it links the two well known Lower and Middle Triassic faunas in China, Chitai and Wuhsiang. Secondly, since the genus *Chasmatosaurus* is typically known from the *Lystrosaurus* Beds both in Sinkiang and in South Africa, it points most probably to that the Lower fossil-bearing Triassic Beds is present also in Wuhsiang, besides the rather higher zone with the well known *Sinokannemeyeria*.¹⁾ A final stratigraphical distribution and comparison of the Wuhsiang reptilian fossils must, of course, wait until the whole collection is studied.

References

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 [2] Young, Chung-chien, 1936. On a new *Chasmatosaurus* from Sinkiang. *Bull. Geol. Soc. China*. Vol. XV, No. 3, pp. 291—311. 13 textf. and four pls.

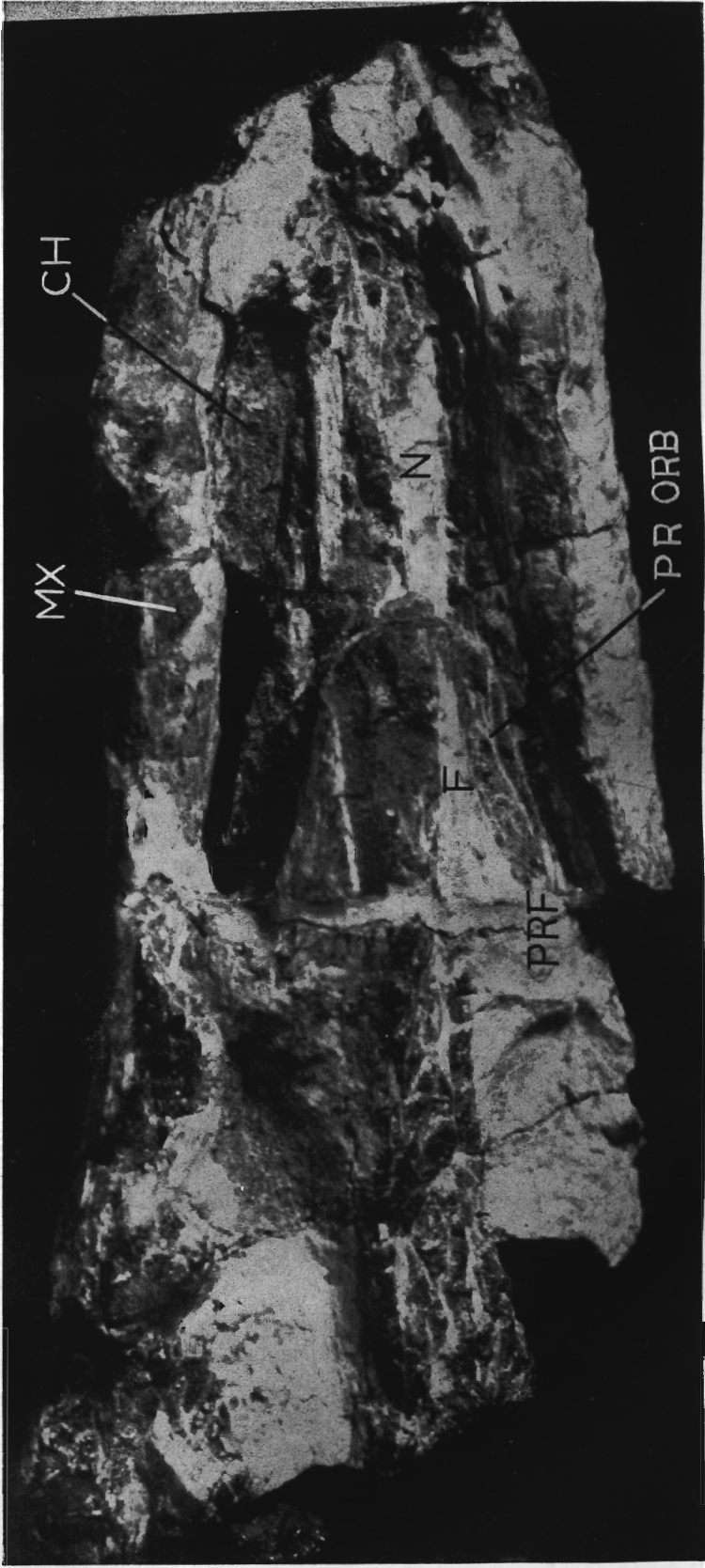
1) According to W. L. Huang, one of the members of the Wuhsiang Expedition in 1955, both the specimen here described and the humeri of the *Sinokannemeyeria* are surface Collection only, while the *Lystrosaurus*-like remains were collected *in situ*.

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圖版 I

Plate I



寰氏加斯馬吐龍。頭骨前端的上觀，× 2。

Chasmatosaurus yuani Young. Skull fragment in dorsal view. × 2.

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圖版 II

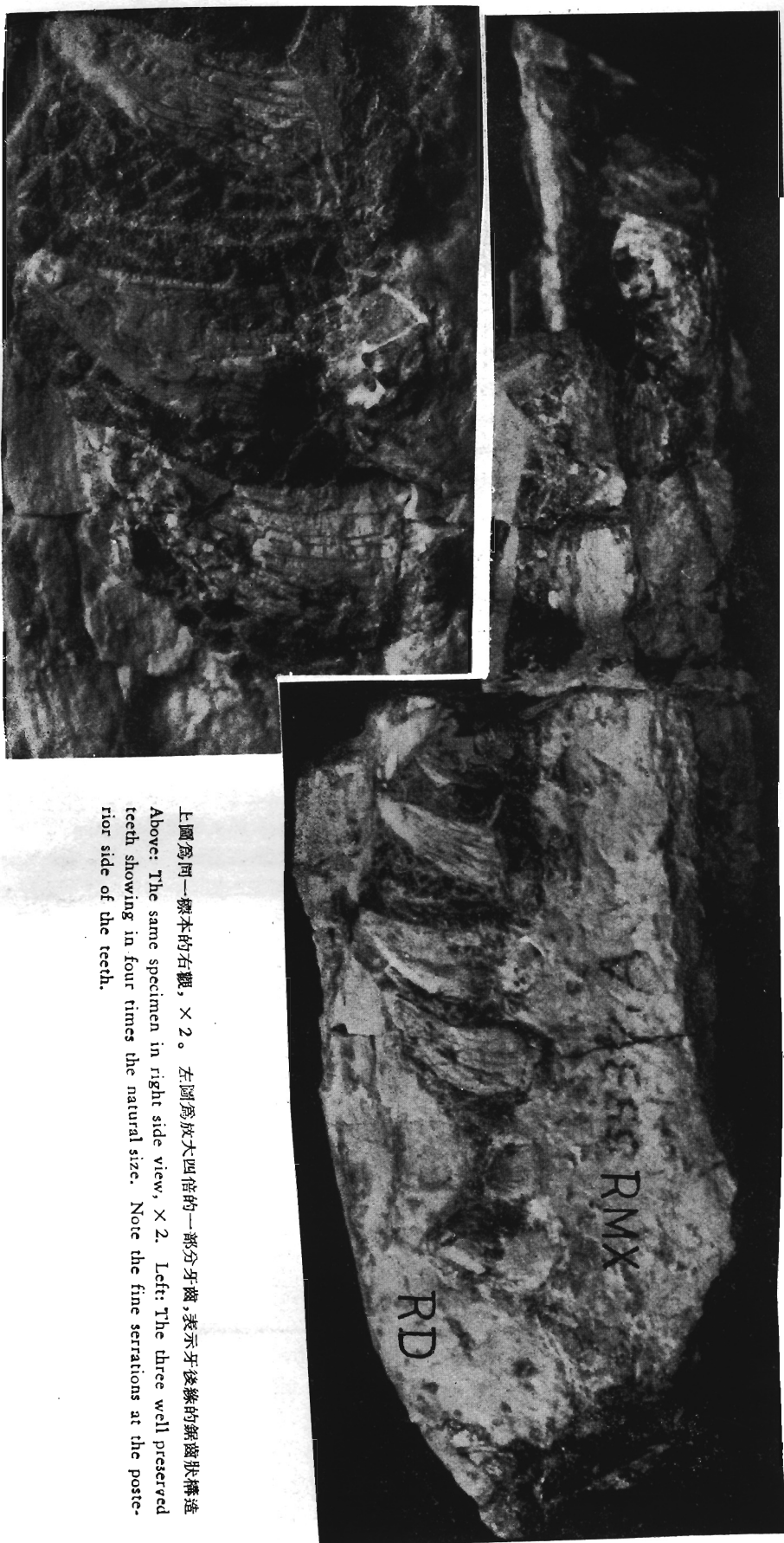
Plate II



同一標本的左觀，× 2。

The same specimen in left side view showing the maxilla, the left and right lower jaw, the latter with the splenial party preserved. × 2.

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上圖為同一標本的右觀，× 2。左圖為放大四倍的一部分牙齒，表示牙齒緣的鋸齒狀構造
 Above: The same specimen in right side view, × 2. Left: The three well preserved teeth showing in four times the natural size. Note the fine serrations at the posterior side of the teeth.