

河南盧氏始新世一新種 *Platypeltis* 屬鼈類

周明鎮 葉祥奎

(中国科学院古脊椎动物研究所)

中国科学院古脊椎动物研究所 1957 年河南工作队在河南西部盧氏盆地进行脊椎古动物的調查和发掘工作时,除了获得好些哺乳动物化石有待詳加研究外,还很有意义地发现了一块鼈甲的标本。这标本虽不完整,但尚保存有若干重要構造,可以作屬和种的鑑定。

標本記述

科 Trionychidae

屬 *Platypeltis* Fitzinger

Platypeltis subcircularis sp. nov.

(图版 I)

標本: 不完整的鼈的背甲一块,包括右边第一、二、三、四片肋板,頸板的右半部,以及第一、二、三、四、六块椎板的一部分和左边第五对肋板的近中部分殘片。产地——河南盧氏孟家坡。层位——上始新統盧氏层。V. 914。

特征: 个体小,背甲長寬几相等,整个背甲上滿布着紋帶和凹斑。肋板估計七对和可能有第八对的殘余,第一对与頸板的关接不紧密。頸板闊,略呈半月形,中央部分最寬。椎板估計仅六,最后一块可能退縮。

標本描述: 本鼈甲的主要特征是沒有上皮板 (epidermal),也沒有前椎板 (preneural) 和緣板 (marginal)。外形扁闊。肋板薄 (厚 3 mm)。所有肋板自前至后形狀变化不大。各板間的縫合綫近似平行,第一对肋板稍大,外緣向后向外成銳角与第二肋板相接,这与其他肋板以括弧形的外緣与其后的肋板相接者不同。第八对肋板完全退化或仅存部分殘余;第六、七对在中綫处部分 (第六对) 或完全相接。第一对肋板前緣与頸板相接,但从較為平滑的縫合綫看来,鉸接得并不很紧。頸板闊,呈半月形,弧形朝前,平直的后緣分別与第一椎板、第一肋板相接。頸板的外緣傾斜成銳角終止于第一肋板外緣的約 1/3 处。椎板也薄,厚約 2 mm,大都殘缺,第三块保存較完整,呈長六角形。第一、二块椎板的外形也略似此。从第五块椎板的印痕看来 (原板缺失),似已收縮甚小,而成狹的長条狀,故第六块椎板的后端可能已退縮 (只保留前端一部分),致使第六对肋板的后部和第七对肋板在中綫处相遇。所有背甲上滿布凹斑,但頸板上、椎板上以及肋板的內半側上的凹斑,远不如肋板外半側上的粗大而醒

目。除頸板和椎板外，背甲上还裝飾着縱直的紋帶，每一紋帶由二股凸綫併合而成，蜿蜒貫穿于前后肋板之間。也与凹斑一样，紋帶以肋板的外半側为显著，而內半側者只能隱約可見。

標本測量 (單位 mm)

背甲估計長度 (Estimated length of the Carapace)	94
背甲寬度 (Width of the Same, behind the 4th Costal)	94
頸板寬度 (Width of the Nuchal, at midline)	12
頸板估計長度 (Estimated length of the Nuchal)	55

椎板和肋板 (Neural & Costal Plates) 的測量

椎板 (N. pl.)	最大長 (L.)	最大寬 (W.)	肋板 (C. pl.)	最大長 (L.)	最大寬 (W.)
N ₁	14	*8	C ₁	36	13+ (在內緣)
N ₂	10	*7	C ₂	41	14 (在外緣)
N ₃	12	8	C ₃	44	13+ (在外緣)
N ₄	11	7	C ₄	45	14 (在外緣)
N ₅	10	4	C ₅	*43	*14 (在外緣)
N ₆	—	5	C ₆	*35	—

* Estimated

比較與討論

河南的鼈化石标本由于缺少前椎板 (preneural)，且背甲上明显地具有紋帶和凹斑；并根据縮小了的第五块椎板看来，第六、七对肋板似应在后面中綫处相遇，而第八对肋板可能缺如或仅存残余，这些特征，說明該标本应归 *Platypeltis* 屬。

如把 *P. subcircularis* (新种) 拿来与北美 *Platypeltis* 屬的各种加以比較，它与始新世的 *P. serialis* (Cope) 和 *P. trepida* Hay (尤以前者) 最为接近。它們都具有凹斑和紋帶，且肋板間縫合綫大致都近似平行。但 *P. trepida* 在椎板上具有凸隆，且第一肋板前緣呈鋸齒狀，示其与頸板有牢固的縫合而与 *P. subcircularis* 不同。*P. serialis* 虽与 *P. subcircularis* 相同之点更多，但由背甲長大于寬及背甲上的紋帶前低后突等特征可与新种相区别。

Platypeltis 屬的化石标本在北美发现最多，共有十多个种，而其中有一种现在还生活着。这一屬鼈类的分布，照文献記載，不論化石种或現生种，主要只限在北美，欧洲虽也有少数記載，但都未十分确定。河南的标本还是亞洲的第一次发现。

这一屬 (或亞屬) 的鼈类最早发现于北美上白堊紀，在始新世时最为繁盛，此后即驟趋衰落，仅有一个种 (*P. ferox*) 延存至今，生活在美洲。

A NEW EOCENE *PLATYPELTIS* FROM LUSHIH, HONAN

CHOW MINCHEN YEH SIANG-KUEI

(Institute of Vertebrate Paleontology, Academia Sinica)

SUMMARY

DESCRIPTION OF THE SPECIES:—

Family Trionychidae

Genus *Platypeltis* Fitzinger*Platypeltis subcircularis* sp. nov.

(Pl. I, Figs. 1—3)

Type: Anterior two third of a carapace of the right side including right half of the nuchal and most of the neural plates. Cat. No. V. 914.

Horizon and Locality: Upper Eocene; Lushih, Western Honan.

Diagnosis: Size small, carapace subcircular in outline, nearly as wide as long; surface of the plates ornamented with numerous shallow pits and relatively strong ridges or welts running in longitudinal direction and of which those on the peripheral side of the costals are much stronger and decrease in strength proximally. Seven complete pairs of costals and most probably with rudiments of the eighth pair, the first pair loosely in connection with the nuchal plate which is broad, crescents shaped and widened proximally; neurals six in number, the last one reduced caudally.

For measurements of the specimen references may be made to the table in the Chinese text and Plate I.

Remarks: In comparison with the known species of the genus (or subgenus) *Platypeltis* the new species from the Eocene of Lushih can be most closely comparable with *P. serialis* (Cope) and *P. trepida* Hay from the Eocene of North America, especially with the former. All the three have longitudinal ridges as well as numerous small pits, and the sutures between the costal plates are more or less parallel. The new species from Lushih differs from *P. serialis* in the indistinctness of welts on the medium portion of the shell rather than on the anterior, and from *P. trepido* in that the first costal is comparatively free from the nuchal instead of firmly connecting with it.

The discovery of the new species in Lushih represents the first occurrence of this group of trionychids in Asia. The genus (or subgenus) which was originating in late Cretaceous time, probably in North American, and became flourishing in Eocene and invaded

Asia possibly at that time. With the exception of one living species, *Platypeltis ferox* (Schneider) surviving still in North America they seemed to have been extinct in Asia after Eocene.

Bibliography

1. Carr, A., 1952. Handbook of Turtles. Comstock Publishing Associates, Cornell University Press, Ithaca, New York, pp. 411-440.
2. Hay, O. P., 1908. Fossil Turtles of North America. Carnegie Institution of Washington Publication, No. 75, pp. 536-548.
3. Hummel, K., 1929. Die Fossilen Weichschildkröten (Trionychia).
4. Piveteau, J., 1955. Traité de Paléontologie. Tome V, pp. 502-503.

EXPLANATION OF PLATE I

Platypeltis subcircularis, sp. nov.

1. Dorsal view of the type specimen (V. 914). × 1.
2. Part of 2nd and 3rd costals enlarged to show the pits and welts on the surface. × 2.
3. Restoration of the carapacic plates in dorsal view. × 1.

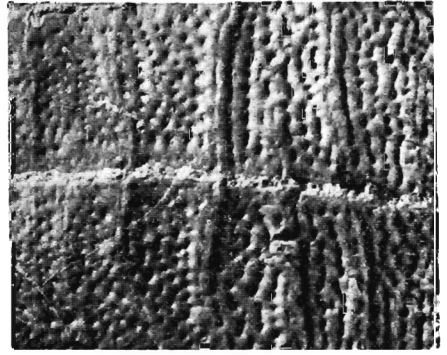
周明鎮：
葉祥奎：

河南盧氏始新世一新種 *Platypeltis* 屬鼈類

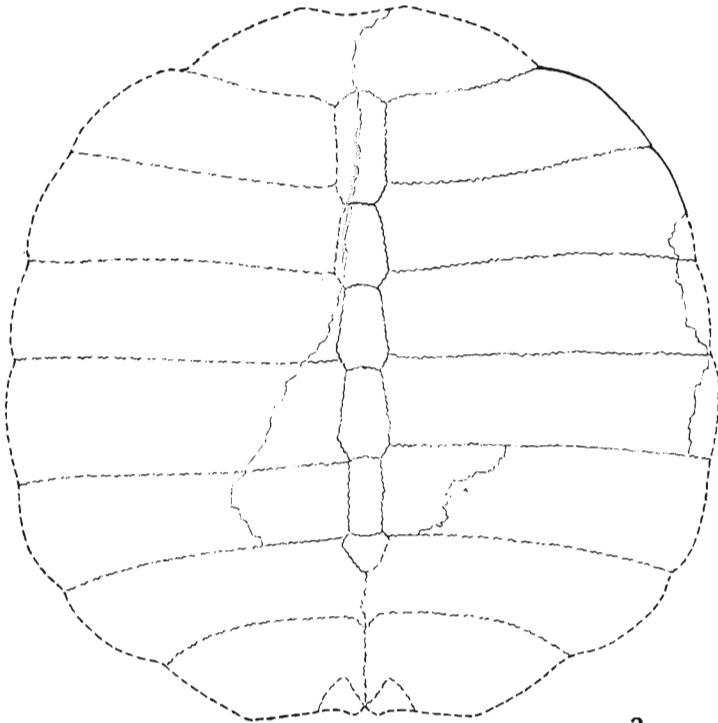
圖版 I



1



2



3