

Cyclemys from Yunnan, a Description of a New Species and a New Record to China (Testudinata: Emydidae)

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From 1983 to 1984, three herpetological explorations of Xishuangbanna of southern Yunnan were made, within the two counties of Mengla and Menghai, from which seven specimens of four species of Testudinata were collected. The four species were *Platysternon megacephalum*, *Testudo impressa*, a new species of *Cyclemys* described below, and *C. dentata*. The last species is a new record to China.

Cyclemys tiannanensis sp. nov. (Fig. 1)

Type: RT 8311002, subadult male; Nanliang, Mengla County, Xishuangbanna of Yunnan Province, alt. 620 m; 5 November 1983.

Diagnosis: This new species is closely related to *Cyclemys dentata* but differs by having 1) first vertebral shield broader in behind than front, and longer than broad (Fig. 2); 2) there are 22 margin shields and 20 margin plates (Figs. 3A and 6). *Cyclemys dentata* has 24 margin shields and 22 margin plates; first vertebral broader in front than behind and nearly as long as broad.

Description: Carapace depressed, nearly as broad as long, second and third vertebral shield region flattened. Nuchal shield ladder-shaped and much

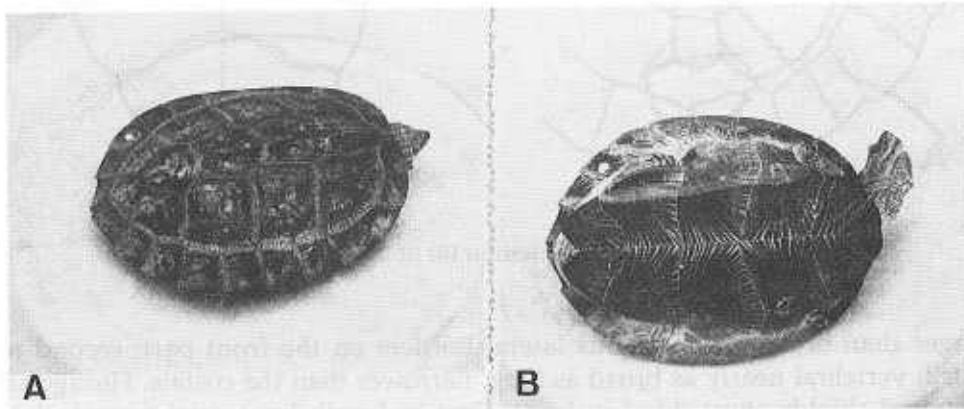


Fig. 1. Dorsal (A) and ventral (B) views of *Cyclemys tiannanensis*.

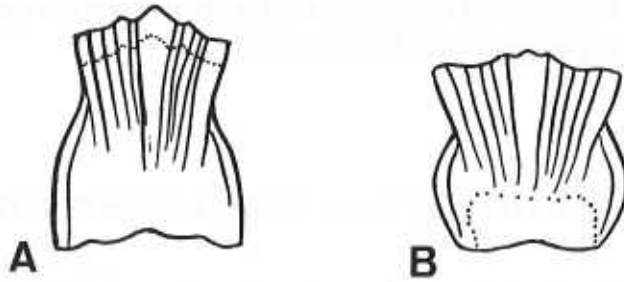


Fig. 2. First vertebral shield of *Cycllemys tiannanensis* (A) and *C. dentata* (B).

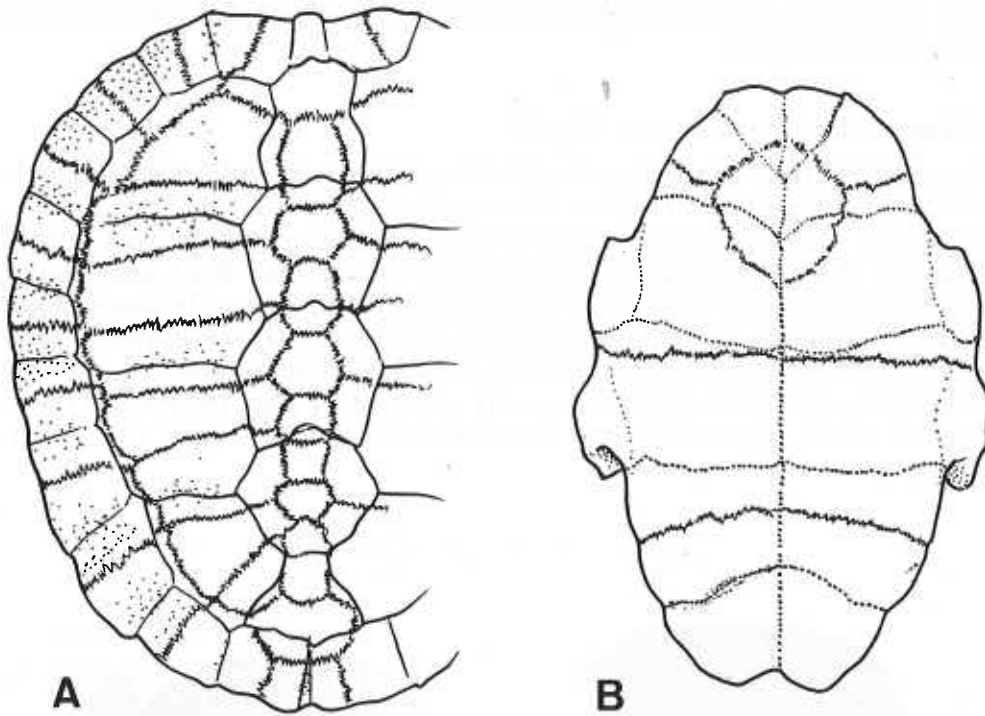


Fig. 3. Carapaced (A) and plastron (B) of *Cycllemys tiannanensis*.

longer than broad with sinuous lateral borders on the front part; second to fourth vertebral nearly as broad as long, narrower than the costals. Hexagonal vertebral shields short-sided in front. First to fourth hexagonal neural plate short-sided behind, fifth nearly square, sixth and seventh short-sided in front. Nuchal and pygal plate with a strong obtuse keel. Twenty-two margin shields and 20 margin plates (Fig. 3A).

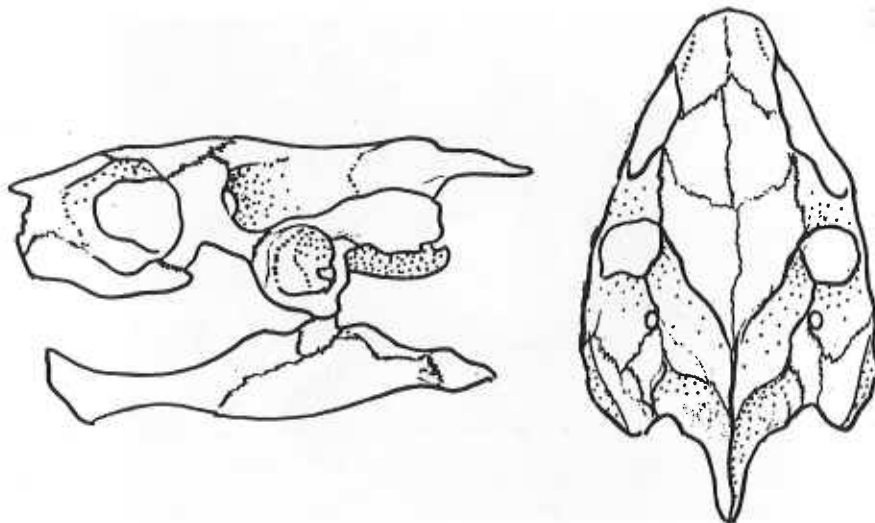


Fig. 4. Skull of *Cyclemys tiannanensis*.

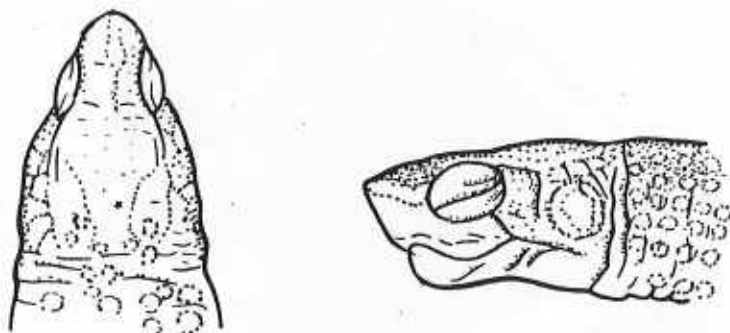


Fig. 5. Head of *Cyclemys tiannanensis*.

Plastron narrower than the opening of the shell, truncate anteriorly, notched posteriorly; the longest median suture is between the pectoral shields, the shortest between the humeral suture. Entoplastron intersected by the humero-pectoral suture. Bridge short but distinct, about one-third the length of the plastron; the hyo- and hypoplastral bones contribute in a nearly equal degree to the formation of the bridge; the transverse hinge between them is not developed, but front lobe of plastron feebly movable, the median part of the transverse hinge corresponds with the curved suture between the pectoral and abdominal shields; a small axillary and inguinal shields are present (Fig. 3B).

Skull with a bony temporal arch; alveolar surface of jaws narrow; bony choanae on a level with the front part of the orbits (Fig. 4).

Head moderate; snout shorter than the orbit, slightly projecting beyond the

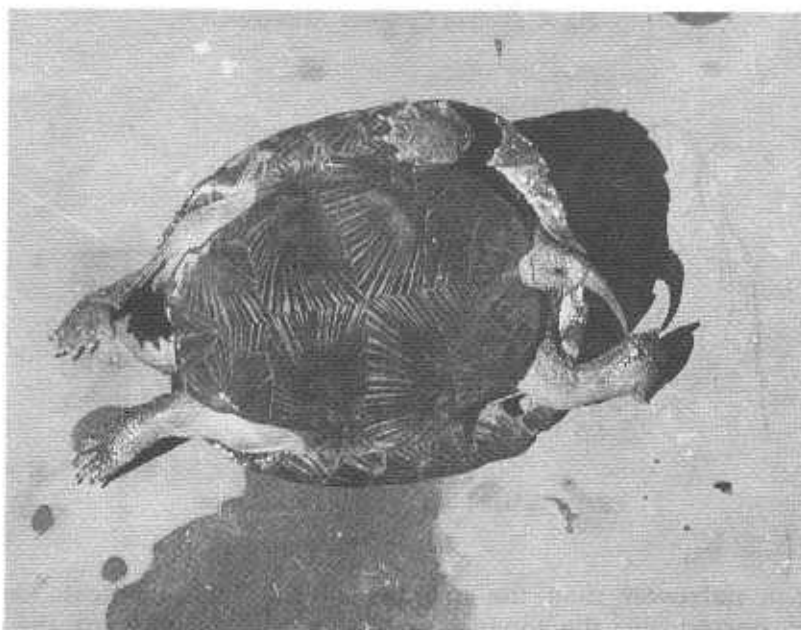
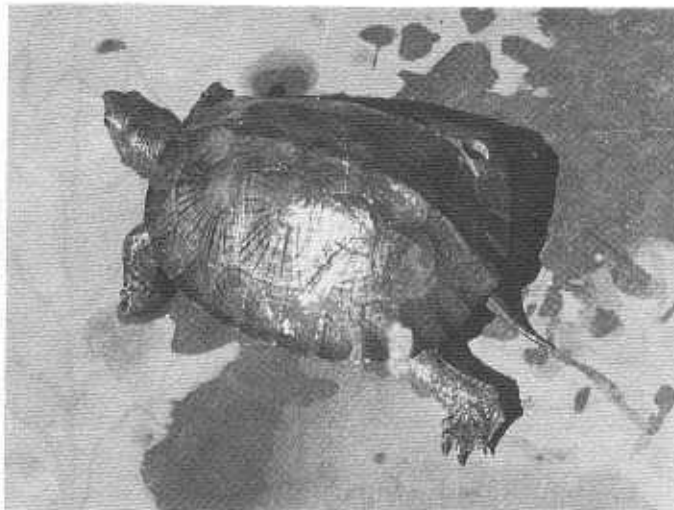


Fig. 6. Dorsal (A) and ventral (B) views of *Cyclemys dentata*.

lower jaw; upper jaw feebly bicuspid; the temporal skin of hinder part of head divided into rather large shields; digits fully webbed; limbs with transverse scales, tail moderate (Fig. 5).

Shell olive-brown above, with fine black rays; dark below, with yellowish rays. Head grey greenish, with small dark spots. Neck darkish grey with pale yellowish longitudinal streaks; limbs and tail with light yellowish, too (Fig. 1).

Food in captivity: meat and rice.

Length (in mm) of shell 135, breadth 110, depth 42, length of tail 29.

Cyclemys dentata Gray 1831 (Fig. 6).

Carapace depressed, much flattened and nearly as broad as long in the young; more arched and elongate in the adult; vertebral region with a strong obtuse keel in the young which disappears almost entirely in aged individuals; posterior margin serrated in the young, less marked in the adult. Nuchal shield moderate; first vertebral usually broader in front than behind in the young, the reverse in the adult, in which it has sinuous lateral borders; second to fourth vertebrae as broad as long or slightly broader than long, narrower than the costals. Twenty-four margin shields, 22 margin plates.

Plastron narrower than the opening of the shell, truncate or openly emarginate anteriorly, notched posteriorly; the longest median suture is between the pectoral shields, the shortest between the humerals. Bridge short but distinct, about two-fifths the length of the plastron; the hyo- and hypoplastral bones contribute in a nearly equal degree to the formation of the bridge; the transverse hinge between them is not developed until adult life, and the median part corresponds with the curved suture between the pectoral and abdominal shield; front lobe of plastron feebly movable, a small axillary and inguinal are present.

Skull with a bony temporal arch; alveolar surface of jaws narrow, bony choanae on a level with the front part of the orbits.

Head moderate; snout shorter than the orbit, slightly projecting beyond the lower jaw; upper jaw feebly bicuspid; skin of hinder part of head divided into rather large shields; digits fully webbed; limbs with transversely enlarged scales; tail moderate, longer in the young than in the adult.

Shell dark brown above, with fine black rays; yellowish below, with dark rays; juveniles have a handsome chestnut tinge all over the shell. Head greyish, with small dark spots; neck darkish grey, with pale yellowish longitudinal streaks.

Young: length (in mm) of shell 85, breadth 75; Subadult: length of shell 125, breadth 100, depth 45; Male adult: length of shell 196, breadth 155, depth 55.