

THE MAYFLIES OF CHINA*

(ORDER EPHEMEROPTERA)

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Genus **Neopotamantodes** n. gen.

FORM: Closely related with *Potamantodes* Ulmer.

WINGS: In the fore wing M_2 is not connected with M_1 at base, but with Cu_1 , thus M_2 and Cu_1 having the same stem. (This character resembles that of the genera *Potamantodes* and *Rhoenanthus*). In the hind wing R_1 is normal, not strongly bent against Sc and then parallel to it; costal projection normal, not very sharp. (these two characters differ from those of genus *Potamantodes*, but are similar with those of genus *Rhoenanthus*). (Fig. 44 .

TAILS: There are three long tails. (This character is similar to that of genus *Potamantodes*, but differs from genus *Rhoenanthus* which has only two tails).

GENOTYPE: *Neopotamantodes lanchi* n. sp

Key to the species of *Neopotamantodes*

- 1 - Penial lobes long, rounded and slightly notched at tip, fused only at base, posterior margin of 10th sternite not deeply and roundedly notched, form very large...
..... **lanchi** n. sp.
- Penial lobes sharply pointed and not notched at tip, fused to near the tip, posterior margin of 10th sternite deeply and roundedly notched, from smaller....
..... **nanchangi** Hsu

Neopotamantodes lanchi n. sp.

MEASUREMENTS: Length of body: Holotype ♂ subimago 18 mm., Allotype ♀ imago 18 mm., ♀ subimago 21.5 mm.; length of tails: Holotype ♂ subimago middle tail 10 mm., lateral tails 18 mm., Allotype ♀ imago lateral tails 24 mm., ♀ subimago middle tail 11 mm., lateral tails 19 mm.

♂ **Subimago (In alcohol)**

FORM: Very large and more or less depressed.

GENERAL COLORATION: Reddish brown above and pinkish to creamy below.

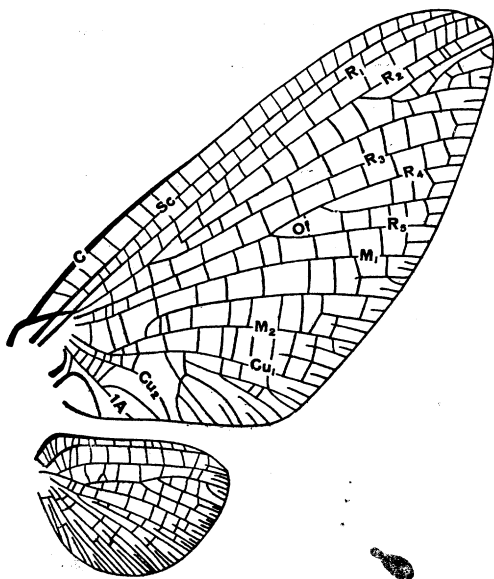


Fig. 44. *Neopotamantodes lanchi* n. sp. Fore and hind wings. (Original)

HEAD: Vertex quadrangular, longer than broad, reddish brown. Front light pinkish. Eyes large, round, dark gray, quite close together. Ocelli pinkish with dark reddish brown ring at base. Antennae light brown at base, terminal filament long and brown.

PRONOTUM: Much broader than long, middle portion pinkish brown, lateral portions reddish brown, posterior margin notched.

MESONOTUM: Light yellowish with two short median longitudinal brown streaks extending to the middle, and two long lateral longitudinal brown streaks.

METANOTUM: Yellowish brown.

VENTRAL SURFACE: Reddish brown to yellowish brown.

LEGS: Fore leg reddish brown, femur and tarsus about the same length, tibia $1/3$ longer than the femur, tarsal formula 1-3-2.5-2.5-3. Mid and hind legs light yellowish, femur and tibia equal in length, tarsus only $1/2$ the length of tibia. Claws dissimilar.

WINGS: Dull brown. In the fore wing outer fork (Of) forked a little before the middle, M_2 connected with Cu_1 having the same stem at base, 1A forked, four cross veins between Cu_2 and 1A. In the hind wing R_1 is not strongly bent against Sc, costal projection rounded. (Fig. 44).

ABDOMEN: Light yellowish brown above with reddish brown lateral and posterior margins on each tergite. Ventral surface pale with reddish lateral margins. Posterior margin of 10th tergite with a posterior lobe covering the base of the median tail and with two deep triangular lateral notches at the bases of the two lateral tails. Posterior margin of the 10th sternite convex.

TAILS: Red, several red segments alternate with one brownish segment, pubescent all over, 3 in number, middle tail shorter and slender.

GENITALIA: Forceps 3-segmented, basal segment very long, more than twice the length of the two distal segments together, pinkish. Penial lobes pinkish, long and narrow with a slit-like notch at the tip. (Fig. 45).

♀ Imago (In alcohol)

HEAD: Reddish. Vertex quadrangular, much broader than long. Eyes dark gray. Ocelli pale with dark ring at base. Antennae reddish brown at base, terminal filament brown.

LEGS: Fore leg reddish, mid and hind legs light yellowish.

WINGS: Reddish brown at base and along the costal margin with a reddish brown streak across the middle. Veins

reddish brown. Venation same as that in the male.

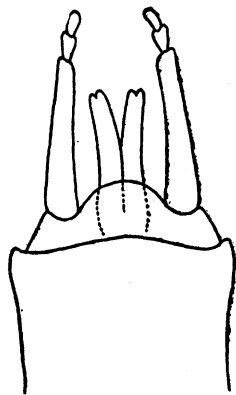


Fig. 45. *Neopotamanthodes lanchi* n. sp. ♂ Genitalia ventral. (original)

ABDOMEN: Reddish brown above and below. Posterior margin of each abdominal tergite and sternite with a transverse dark reddish brown streak. Posterior margin of 10th sternite rounded.

TAILS: Three in number, middle one shorter and slender, lateral ones reddish at basal $\frac{1}{3}$ and pale for the distal $\frac{2}{3}$ with few reddish rings, pubescent with very minute hairs.
♀ **Subimago (In alcohol)**

HEAD: Eyes small, round, and widely separated apart. Ocelli pale with dark brown basal ring, median ocellus smaller.

LEGS: Fore leg reddish brown, tarsus very short, being only $\frac{1}{3}$ the length of the tibia, tarsal formula 1-3-2-2-3. Mid and hind legs pale.

WINGS: Brown to reddish brown. Venation same as that in the male.

ABDOMEN: Yellowish with two red oblique lateral longitudinal streaks on each tergite. Posterior margin of each tergite reddish. Posterior margin of 10th tergite same as that in the male. Posterior and lateral margins of 10th sternite slightly sinuate.

TAILS: With alternation of red and brown rings, pubescent all over.

HOLOTYPE: One male subimago from Lanchi, Chekiang, collected by C. Y. Liu on July 21, 1935.

ALLOTYPE: One female imago from Wuchow, Kwangsi, collected by H. C. Tao on April 29, 1935.

PARATYPES: 1 ♀ from Wuchow and 1 ♀ subimago from Lanchi. All in Yin-chi Hsu's Collection.

Neopotamanthodes nanchangii Hsu

1936—Hsu—Peking Nat. Hist. Bull. 10:322 (*Potamanthodes*).

MEASUREMENTS: Length of body: Holotype ♂ imago 10 mm. Length of wing: Holotype ♂ imago 10.5 mm. Length of tails: Holotype ♂ imago 19 mm.

♂ **Imago (In alcohol)**

FORM: A medium-sized species.

GENERAL COLORATION: Yellowish brown.

HEAD: Light yellowish. Vertex very narrow. Eyes large, round, grayish brown, nearly contiguous. Ocelli prominent, pale with black ring at base. Antennae pale, terminal filament short.

THORAX: With pronotum yellowish, middle of posterior margin brownish and deeply notched. Mesonotum yellowish, lateral margins brownish. Metanotum brownish. Ventral surface of thorax yellowish. Legs light yellowish.

WINGS: Transparent white, stigmatic area dull white. M_2 connected with Cu_1 at base both arising from the same stem. 1A forked. Outer fork (Of) forked after the middle. In the hind wing R_1 not strongly bent against Sc, costal projection rounded.

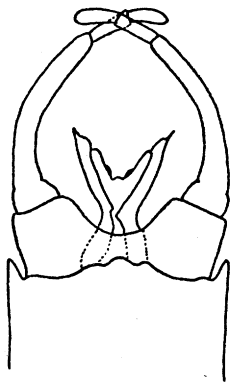


Fig. 46. *Potamanthodes nanchangi* Hsu
♂ Genitalia, ventral
(original)

ABDOMEN: Brownish above. Posterior margin of each abdominal tergite dark brown. Ventral surface light yellowish. Posterior margin of tenth tergite with a quadrangular extension at middle to cover the base of the median tail. Posterior margin of tenth sternite deeply and roundly notched.

TAILS: Light brown, dark brown ring at joints, 3 in number.

GENTILIA: Forceps consisting of four segments, basal segment very short, two distal segments together only half as long as the second segment. Penial lobes united, sharply pointed at tips, constricted at the middle a little posterior to the hind margin of the tenth sternite. (Fig 46).

HOLOTYPE: One male imago from Nanchang (南昌). Collected by Dr. Wei-I Yang on May 20, 1930. In Yin-chi Hsu's collection.

(To be continued)