

Jpn. J. Ent., 58 (4): 895-896. December 25, 1990

Genitalia of *Drosophila cheda* (Diptera, Drosophilidae)

Hua-zhong CHEN

Institute of Genetics, Fudan University, Shanghai, China

and

Hide-aki WATABE

Biological Laboratory, Sapporo College, Hokkaido University of Education,
Ainosato 5-3-1, Sapporo, 002 Japan

Drosophila cheda TAN, HSU et SHENG, 1949 belongs to the *robusta* species-group of the subgenus *Drosophila*, but its genitalia have not been described excepting for the periphallalic organs by HSU (1949). We have recently collected four specimens of *D. cheda* in middle China. The present paper deals with its male and female genitalia.

We thank Dr. M. J. TODA of Hokkaido University for his advice. This work was supported by the National Science Foundation of China (No. 3880491).

Drosophila (Drosophila) cheda TAN, HSU et SHENG

Drosophila (Drosophila) cheda TAN, HSU et SHENG, 1949, Univ. Texas Publ., (4920): 199.

Periphallalic organs (Figs. 1-2): Epandrium pubescent on posterior portion, with ca. 5 bristles on upper half and ca. 14 on lower half. Surstylus with ca. 9 primary teeth in straight row and a few bristles at caudoventral corner; caudodorsal corner somewhat expanded like lobe. Cercus pubescent.

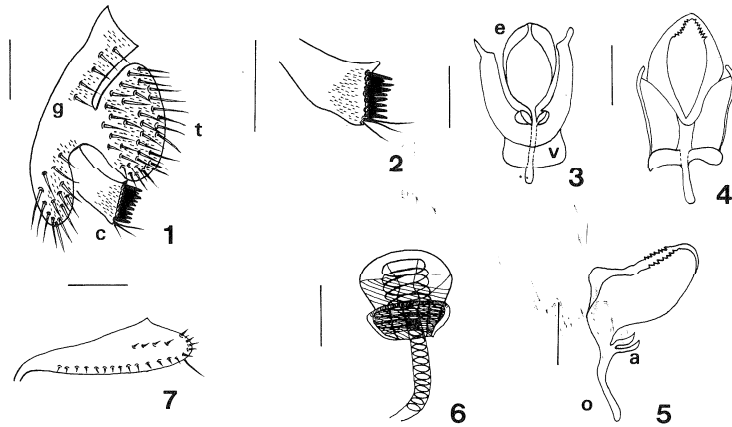
Phallic organs (Figs. 3-5): Aedeagus elliptical in ventral view and rhombic in lateral view, with ca. 7 serrations on dorsal margin. Anterior paramere plate-shaped. Vertical rod rudiment. Novasterum broad, without submedian spines. Ventral fragma nearly quadrate.

Female reproductive organs (Figs. 6-7): Lobe of ovipositor apically roundish, with ca. 19 marginal and ca. 4 discal teeth. Spermatheca heavily constricted at ca. 1/3 basal portion, with oblique wrinkles on ca. 2/3 basal portion; introvert deep, ca. 6/7 height of outer capsule.

Specimens examined. 1 ♂, 1 ♀, Mt. Wu-Yi (alt. ca. 500 m), Fujian Province, 29.V.1988. (H. Z. CHEN leg.); 1 ♂, 1 ♀, Mt. Dayan (alt. ca. 500 m), Zhejiang Province, 11.VIII.1988 (H. Z. CHEN leg.); deposited in the Institute of Genetics, Fudan University, Shanghai, China.

Distribution. Korea, China: Zhejiang Province, Guangdong Province, Fujian Province (n. loc.).

Relationships. *Drosophila cheda* is most closely related to *D. pseudosordidula* KANEKO, TOKUMITSU et TAKADA, 1964 in having the heavily constricted spermatheca and ventrally curved aedeagus, but can be distinguished from the latter by the aedeagus with dor-



Figs. 1–7. Genitalia of *Drosophila cheda* TAN, HSU et SHENG 1949. — 1, Periphallallic organs; 2, surstylus; 3–5, phallic organs (3, ventral view; 4, dorsal view; 5, aedeagus and anterior paramere); 6, spermatheca; 7, ovipositor. Signs: a, anterior paramere; c, surstylus; e, aedeagus; g, epandrium; o, aedeagal apodeme; t, cercus; v, ventral fragma. Scale=0.1 mm.

sal serrations (cf. KANEKO *et al.*, 1964; WATABE & NAKATA, 1989).

Remarks. TAN *et al.* (1949) described *D. cheda* by using materials collected in Hangchow, Zhejiang Province, China, but its types have never been designated.

References

- HSU, T. C., 1949. The external genital apparatus of *Drosophilidae* in relation to systematics. *Univ. Texas Publ.*, (4920): 80–142.
- KANEKO, A., T. TOKUMITSU & H. TAKADA, 1964. *Drosophila* Survey of Hokkaido, XX. Description of a new species, *Drosophila pseudosordidula* sp. nov. (Diptera, Drosophilidae). *J. Fac. Sci. Hokkaido Univ.*, (VI-Zool.), 15: 374–377.
- TAN, C. C., T. C. HSU & T. C. SHENG, 1949. Known *Drosophila* species in China with descriptions of twelve new species. *Univ. Texas Publ.*, (4920): 196–206.
- WATABE, H., & S. NAKATA, 1989. A comparative study of genitalia of the *Drosophila robusta* and the *D. melanica* species-groups (Diptera: Drosophilidae). *J. Hokkaido Univ. of Education*, Sec. IIB, 40: 1–18.