

A NEW SPECIES OF *PARALEUCOPHENG*A
(DIPTERA: DROSOPHILIDAE) FROM CHINA^①

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Genus *Paraleucophenga* Hendel

Paraleucophenga Hendel, 1914, *Suppl. ent.*, 3: 14. — Bächli, 1971: 128; Lin & Wheeler, 1972, *Univ. Texas Publ.*, (7213): 254; Okada, 1988: 620.

Type species: *Leucophenga invicta* Walker, 1857.

Diagnosis. Scutellum usually with exceptional setae; lower branches on arista fine; carina undeveloped; 3rd costal section without warts; R_{4+5} and M parallel; thoracic pleura with 3 stout sternopleurals (Bächli, 1971; Okada, 1988).

This genus has been represented by only four species: *P. invicta* (Walker, 1857) from Sarawak, Java, Sumatra, China (Taiwan), Japan; *P. javana* Okada, 1988 from Java; *P. semiplumata* (Duda, 1939) from Africa (Okada, 1988) and *P. shimai* Okada, 1988 from Thailand.

***Paraleucophenga shanyinensis*, sp. nov.** (Figs. 1-3)

Diagnosis. Surstylus with *ca.* 9 black teeth in convex row on medioventral margin and many small setae medially and ventrally (Fig. 1). Anterior paramere with comb of *ca.* 22 long teeth on distal inner margin (Fig. 2). Aedeagus distally densely haired (Fig. 2).

♂: Body length *ca.* 4.1mm. Thorax length (including scutellum) *ca.* 1.85mm (range: 1.83-1.86).

Head: Eye dark red, bare. Second antennal segment grayish brown; 3rd grayish yellow. Arista with *ca.* 10 long upper and *ca.* 6 fine lower branches. Frons mat blackish brown, medially with a few frontal hairs, *ca.* 0.35 (0.32-0.37, measured at level of anterior ocellus) as broad as head: periorbit mat yellow; ocellar triangle mat black. Posterior reclinate orbitals situated nearer to inner vertical than to proclinate orbitals; anterior

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recline orbitals *ca.* 3 times nearer to procline than to posterior reclinate, *ca.* 0.7 length of posterior reclinate; procline *ca.* 0.67 (0.63-0.70) length of posterior reclinate. Face and clypeus yellowish gray. Cheek yellowish white, very narrow, *ca.* 0.05 to 0.06 as broad as maximum diameter of eye. Vibrissa stout, long; other orals fine. Palpus yellowish gray, slender, with 1 somewhat prominent subapical and *ca.* 2 or 3 lateral setae.

Thorax orange brown, silvery pollinose. Mesoscutum with 4 obscure dark brown longitudinal stripes. Humeral callus paler, with 1 long humeral. Acrostichal hairs in *ca.* 10 rows. Anterior dorsocentral *ca.* 0.55 length of posterior; length distance of dorsocentrals *ca.* 0.30 cross distance. Anterior scutellars divergent; posteriors crossed, nearer to each other than to anterior; anterior/posterior *ca.* 1.1 (1.09-1.12). Sterno-index *ca.* 0.77 (0.74-0.80); mid sternopleural *ca.* 0.8 (0.62-0.92) length of posterior.

Legs pale yellow. Preapicals and apicals on all tibiae. Mid tarsus with 1 row of minute cuneiform bristles on outer underside. Fore and mid metatarsi as long as rest tarsal segments together; hind metatarsus slightly shorter than rest together.

Wing fuscous, especially along costa, R_{2+3} and R_{4+5} . Veins grayish brown; crossveins clouded. Discal and 2nd basal cells confluent. R_{2+3} apically slightly curved to costa. C1-bristle 1. Wing indices: C *ca.* 4.9 (4.84-5.00), 4V *ca.* 1.39 (1.38-1.39), 4C *ca.* 0.5 (0.48-0.52), 5X *ca.* 0.93 (0.92-0.94), Ac *ca.* 1.3 (1.24-1.39), C3-fringe *ca.* 0.6. Haltere white; stalk slightly grayish.

Abdomen: 1st tergite entirely silvery white; 2nd to 4th medially widely silvery white, sublaterally dark brown, with very narrow, grayish brown, caudal band; 5th and 6th with broad, dark brown caudal band medially and sublaterally protruded. Second to 4th sternites small, narrow, pale yellow; 5th large, posteriorly widened and dark brown.

Periphallic organs (Fig. 1): Epandrium broad below, slightly constricted dorsally, nearly entirely pubescent except for ventral margin, with *ca.* 22 or 23 bristles; anteroventral corner distinct. Surstylus large, quadrate. Cercus separate from epandrium, slender, slightly constricted below, nearly entirely pubescent, with *ca.* 41 (40-42) bristles.

Phallic organs (Figs. 2, 3): Aedeagus very broad, membranous tube, dorsomedially with somewhat sclerotized, triangular projection; apodeme small, with very long, distally swollen, lateral arms. Anterior paramere blade-shaped, gently curved inward, with *ca.* 3 and 6 sensilla at anterior and posterior apices, respectively. Posterior paramere large, somewhat triangular, medioposteriorly protruded, anteriorly contiguous to aedeagus, anteroventrally with 2 asymmetric, strongly sclerotized processes. Hypandrium narrow, arcuate, subcaudally with 1 pair of somewhat triangular plates.

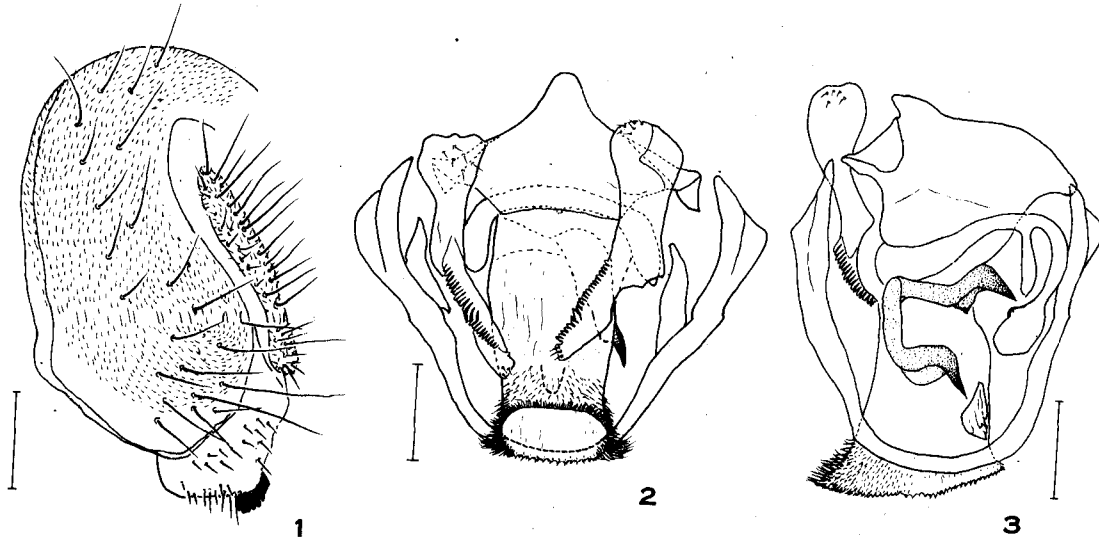
Holotype ♂, China: Huantan, Xiaoshan, Zhejiang Province, 5~12-VIII-1990 (H.-z. Chen); deposited in the Institute of Genetics, Fudan University, Shanghai (IGFU).

Paratype ♂, China: Jixi, Anhui Province, 11~15-VII-1990 (H.-z. Chen); in IG FU.

Distribution: China (Zhejiang, Anhui).

Relationship: This species is very close to *P. invicta*, but clearly distinguishable from the latter by the diagnostic characters.

Etymology: Pertaining to the old name of the type locality, Shanyin Old Road.



Figs 1-3 *paraleucophenga shanyinensis*, sp. nov.

1. peripheral organs; 2. phallic organs (ventral view); 3. phallic organs (lateroventral view) Scale 0.1mm

Reference

- Okada, T. 1988. A Revision of the Genera *Pararhinoleucophenga* DUDA and *Paraleucophenga* HENDEL (Diptera, Drosophilidae), with Special Regard to Archestinic Characters. *Kontyu*, Tokyo. **56**(3): 618-624. September 25.

中国副白果蝇属 *Paraleucophenga* 一新种

(双翅目: 果蝇科)

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关键词 果蝇科 副白果蝇属 新种 分类学 中国

摘要 本文描述了采自中国浙江萧山和安徽绩溪的果蝇科副白果蝇属 *Paraleucophenga* 一新种 (图 1-3): 山阴副白果蝇 *Paraleucophenga shanyinensis*。本新种近似 *P. Invicta*, 与后者的区别在于: 抱握器具 9 个黑齿, 中、腹部具许多细毛 (图 1); 前叶具 22 个长齿的栉 (图 2) 和阳茎远端具稠密细毛 (图 2)。

正模标本保存于复旦大学遗传学研究所 (中国, 上海)。

本属已记载的仅 4 种:

1. *P. invicta* (Walker, 1857), 分布于马来西亚 (沙撈越); 印度尼西亚 (爪哇); 印度尼西亚 (苏门答腊); 台湾; 日本。
2. *P. shimai* (Okada, 1988), 分布于泰国。
3. *P. javana* (Okada, 1988), 分布于爪哇。
4. *P. semiplumata* (Duda, 1939), 分布于非洲。