

TRIBE CALLIPHORINI FROM AUSTRALIAN AND ORIENTAL
REGIONS, III. A NEW *CALLIPHORA* FROM PHOENIX
ISLAND, WITH AN ESTABLISHMENT OF A NEW
SUBGENUS (Diptera : Calliphoridae)¹

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Abstract : A new subgenus *Oceanocalliphora* is erected with a new species *Calliphora bryani* from Phoenix Island. This species may be intermediate between the subgenera *Papuocalliphora* and *Paracalliphora*.

Genus *Calliphora* Rob.-Desvoidy

Calliphora Rob.-Desvoidy, 1830, Essai Myod. : 433. Type-species : *Musca vomitoria* Linné, 1758.

Subgenus *Oceanocalliphora* Kurahashi, new subgenus

Type-species : *Calliphora bryani* Kurahashi, n. sp.

Distinguished from the other subgenera and genera of Calliphorini by the following characteristics :

Diagnosis : Thoracic squama haired on basal half ; subcostal sclerite pubescent ; eyes bare, dichoptic in ♂, widely separated in ♀ ; accessory *oc* indistinct ; mesothoracic spiracle yellowish brown, marginal portion sometimes darkened ; epaulet and basicosta brown ; epistome remarkably protruding ; hypopygium as normal in size and shape as that of *Paracalliphora* ; harpes normally broadened, curved at least at the apex, fused with phallic tube for their full length, and distinctly separated from one another for a distance from harpes basis to apex ; vesicae well developed, but without cornu, vesicae and posterior paramere of *Paracalliphora*-type ; ovipositor intermediate between the types of *Calliphora* and *Onesia* (fig. 2e, f) ; ♀ internal genitalia of *Onesia*-type.

Bionomics : Viviparous.

DISTRIBUTION : Phoenix Island.

Calliphora (*Oceanocalliphora*) *bryani* Kurahashi, new species Fig. 1, 2.

♂. *Head* : eyes bare, dichoptic, separated at narrowest point by a distance more than three times the width of ocellar triangle ; frontal stripe broad, brown, darkened towards vertex, the width at narrowest point equal to twice the width of one of parafrontalia ; parafrontalia and parafacialia densely silver-dusted, with minute setulae ; about 5 pairs of *ori* developed ; face

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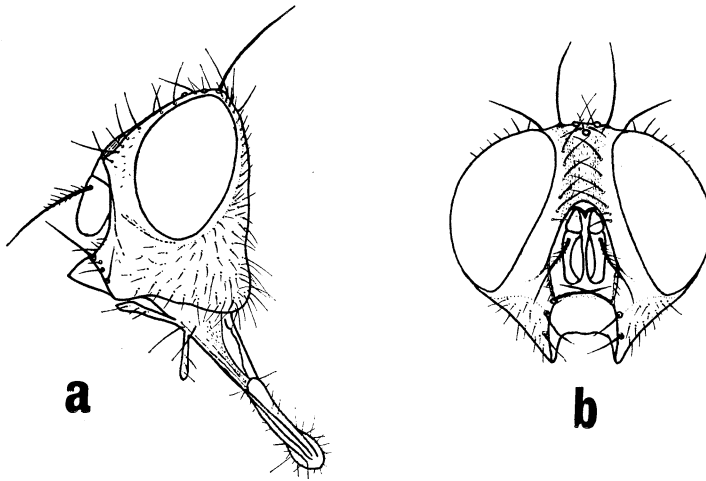


Fig. 1. *Calliphora (Oceanocalliphora) bryani* Kurahashi, n. sp., ♂ head; a, lateral view; b, frontal view.

light brown, slightly silver-dusted, without median carina; facialia, vibrissaria and medianae light brown, covered with silver dusting, facialia with several black fine setulae above vibrissae; vibrissae strongly developed; epistome light brown, remarkably projecting forward (fig. 1a); jowls brown, fuscous in part, silver-dusted, sparsely covered with fine black hairs, yellowish golden hairs present on post-jowls and occiput; antennae brownish orange, the 3rd segment darkened apically, about $2 \times$ as long as 2nd; arista pectinated on basal half, ventral side sometimes with some fine and inconspicuous hairs (fig. 1a).

Thorax: fuscous, densely silver gray-dusted entirely, without obvious dark stripe on dorsum; scutellum concolorous with the thoracic dorsum; propleura with brownish hairs; the other pleura usually with sparse black hairs as well as black bristles; lower part of sternopleuron sometimes with some yellowish brown hairs; prosternum brownish hairy; supraspiracular convexity pubescent; pleurotergite black setulose above; suprasquamal ridge bare, some brownish tympanic hairs usually present; post-alar declivity with several black hairs; thoracic spiracles yellowish brown except for fuscous margin. Chaetotaxy: *ac* 2+3, anterior presutural *ac* short, *dc* 2+3, *ia* 1+2, presutural *ia* fine, *h* 3, *ph* 2, *prs* 1, *sa* 3, *pa* 2-3, *n* 2, *sc* 3+1, *st* 2+1, propleural and propleural and prostigmatic bristles present, 1-2 additional bristles present on anterior extremity of dorsocentral line.

Wings: hyaline, slightly infuscated at base; epaulet and basicosta brown; subcostal sclerite covered with tawny pubescence; node of 2nd and 3rd longitudinal vein some black setulae above and below; 4th longitudinal vein bent with a right angle; squamae pale brown, thoracic one with sparse yellow hairs on basal half. Halteres yellowish brown.

Legs: fuscous, sometimes brownish on knees, coxae and tibiae; front tibia with 1 *p* and some short *ad*; mid tibia with 1 *ad*, 2 *pd* and 1 *v*; hind tibia with 1-2 *ad*, 2 *pd* and 1 *av*.

Abdomen: bronzy, sometimes reddish on lateral sides of 3rd and 4th segments, densely silver-gray dusted, 3rd and 4th tergites dark marginal banded; 3rd tergite with decumbent marginal bristles; 4th and 5th tergites with erect marginal bristles, several discals also developed on the last; hypopygium inconspicuous, aedeagus without cornu of vesica (fig. 2a, b).

♀. *Head*: eyes separated at vertex by a distance slightly more than $1/3$ of head-width; fron-

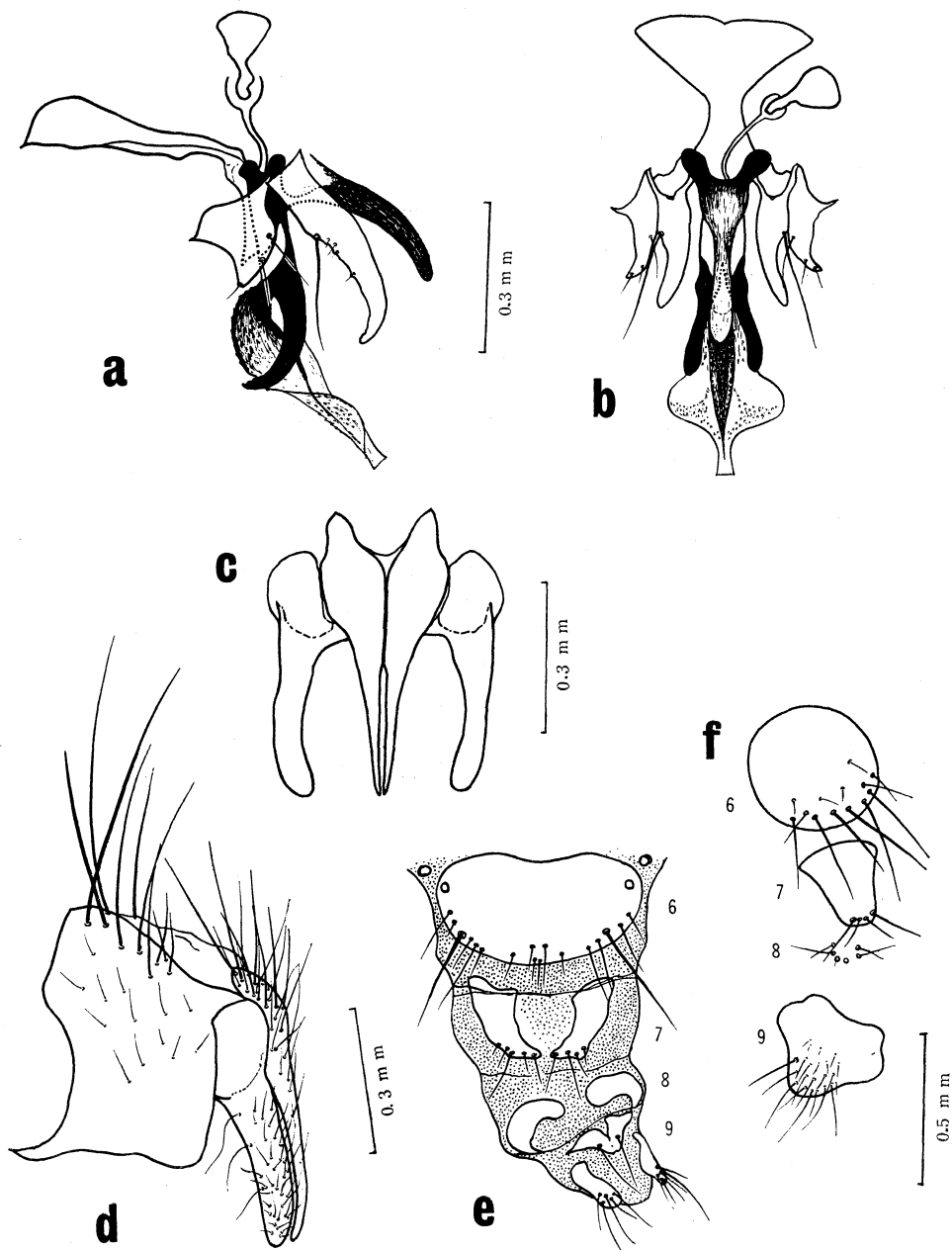


Fig. 2. *Calliphora (Oceanocalliphora) bryani* Kurahashi, n. sp., ♀ and ♂ genitalia; a, aedeagus and parameres, lateral view; b, aedeagus and parameres, posterior view; c, cerci and paralobi, caudal view; d, cerci and paralobi, lateral view; e, ovipositor and 6-9th tergites, dorsal view; f, 6-9th sternites, ventral view.

tal stripe red, slightly silver-dusted, parallel-sided, about $3 \times$ as wide as one of parafrontalia at the level of anterior ocellus; parafrontalia with approximately 5 pairs of *ori*; *ors* 2+1; *oc* developed; *ov* and *iv* strongly developed; *poc* divergent; 1 strong *occ* present. Otherwise as described for ♂ except for genitalia.

Length: 5.0-7.5 mm.

Holotype ♂ (BISHOP 9623), Phoenix Island, 3.X.1924, E. H. Bryan, Jr. Paratypes: 4 ♂♂, 4 ♀♀, same data as holotype. The type-specimens are deposited in the Bishop Museum, Honolulu.

BIONOMICS: Viviparous.

DISTRIBUTION: Phoenix Island.

Relationships: This new species is regarded to be closely related to *Calliphora* (*Papuocalliphora*) *toxopeusi* Theowald in the male dichoptic eyes and the characteristic epistome, contrasting with the other known species of the *Calliphora*. But, the general coloration and size of body, the lack of interfacetal hairs and the pectinated arista in this species may be enough to be separable from *Papuocalliphora*.

Acknowledgments: I wish to express my sincere appreciation to Dr J. Linsley Gressitt, Chairman, Department of Entomology and Mr E. H. Bryan, Jr., Curator of Collections, B. P. Bishop Museum, Honolulu for offering me an opportunity to examine this interesting material. I take pleasure in naming the new species after Mr E. H. Bryan, Jr.

REFERENCES

- Kurahashi, H. 1971. The tribe Calliphorini from Australian and Oriental regions II. *Calliphora*-group (Diptera: Calliphoridae). *Pacif. Ins.* 13: 141-204.