

STUDIES IN PACIFIC BOMBYLIIDAE (DIPTERA)

V. Notes on the *Comptosia* group of the Australian Region,
with key to genera and descriptions of a new
genus and three new speciesBy Neal L. Evenhuis¹

Abstract. *Paramonovomyia*, n. gen. includes the following species: *Paramonovomyia halli*, n. sp. (type of the genus), *P. macfarlandi*, n. sp., and *P. australensis*, n. sp. Notes are given on the types of *Comptosia brunnipennis* and *Neuria indecora*. The following Australian species previously in *Lomatia* are transferred to *Alyosia*: *A. orientalis*, n. comb. (= *C. brunnipennis*), *A. anthracina*, n. comb., *A. australensis*, n. comb. and *A. sorbicula*, n. comb. *A. indecora*, n. comb. is transferred from *Comptosia*. The author concludes that the genus *Lomatia* is absent in the Australian Region.

Bowden (1971) and Hull (1973) recently treated the classification of the *Comptosia*-group. Though Hull placed *Aleucosia* Edwards and *Alyosia* Rondani as subgenera of *Comptosia* Macquart, I follow Bowden (1971) in placing *Aleucosia* in synonymy with *Alyosia* and raising *Alyosia* to generic status. The status of Hull's (1973) proposed subgenera *Anthocolon*, *Chelina*, *Epidosia*, *Opsonia* and *Paradosia* is questionable. The placement of *Anthocolon* within the Lomatiinae is doubtful if Fig. 423 in Hull (1973) of the wing of the type-species, *A. casimira*, is correct (it appears closer to a *Systropus* than a lomatiine species). *Anthocolon* is left here as a nomen dubium until the type of *A. casimira* can be located and examined. *Chelina* Hull is a subgeneric name based on the type-species *Comptosia norrisi* Paramonov. The late Dr S. J. Paramonov, in fact, never described *norrisi* (it is a manuscript name to which Hull had access), hence *Comptosia norrisi* must be treated as a nomen nudum, thus invalidating *Chelina*. I have examined a specimen from Hull's collection deposited in the Canadian National Collection determined by Paramonov as "*norrisi*" along with other similar specimens. These specimens represent a new genus, *Paramonovomyia*, described below. The status of the subgenera *Epidosia*, *Opsonia* and *Paradosia* is left open until the types of each subgenus can be examined and compared with the other genus groups within the *Comptosia* complex.

In addition to erecting the new genus *Paramonovomyia*, this paper clarifies the status of the genus *Lomatia* within the Australian Region and gives notes on the types of *Comptosia brunnipennis* Wulp and *Neuria indecora* Wulp from Indonesia.

Specimens in this study either were examined from or are deposited in the following institutions:

BISHOP Bishop Museum, Honolulu
CNC Canadian National Collection, Ottawa

1. Department of Entomology, Bishop Museum, P.O. Box 19000-A, Honolulu, Hawaii 96819, USA.

CSIRO Australian National Collection, Canberra
LEIDEN Rijksmuseum van Natuurlijke Historie, Leiden

KEY TO THE GENERA OF THE *Comptosia* GROUP OF THE AUSTRALIAN REGION

1. Hairy pubescence of thorax, abdomen and posterior wing fringe beadlike; tibial spines blunt; antennal segment III much elongate, sometimes with dilated style 2
Hairy pubescence of thorax, abdomen, and posterior wing fringe simple, not beadlike; tibial spines pointed; antennal segment III cone-shaped, style usually short **Comptosia**
2. Pleura sparsely pilose; occiput wrinkled behind ocellar tubercle, with 2 longitudinal rows of short black hairs extending from posterior angles of tubercle to median occipital sulcus; wings with numerous spots; radial and anal veins, and to a lesser degree, medial veins, often with numerous stump veins **Paramonovomyia**, n. gen.
Pleura densely pilose; occiput usually not wrinkled behind ocellar tubercle, longitudinal rows of black hairs on occiput absent; wing not infuscated as above; stump veins absent on all wing veins **Alyosia**

Paramonovomyia Evenhuis, new genus

This genus can be separated from *Alyosia* and *Comptosia* by the frequent presence of stump veins on many of the veins in the wing and the numerous spots in the wing. The mesopleuron of this genus is sparsely pilose, whereas it is commonly densely pilose in both *Alyosia* and *Comptosia*. Also, the occiput is somewhat inflated posteriorly and possesses 2 longitudinal rows of black hairs posterior to the ocellar tubercle leading to the median occipital sulcus. The occiput in *Alyosia* and *Comptosia* is usually not inflated posteriorly and lacks the rows of black hairs (however, small patches of black hairs may be present in some species).

The wing has 3 submarginal cells. The placement of the interrarial crossvein forming the 3 submarginal cells is variable. The vein at the base of the 3rd posterior cell often possesses a long appendix projecting into the discal cell.

Type of the genus: *Paramonovomyia halli*, n. sp.

Paramonovomyia halli Evenhuis, new species

FIG. 1–3, 5

♂. Length: 7.0–11.0 mm. *Head* (FIG. 1): gray-black, black pilose; eyes separated above by width of ocellar tubercle; occiput gray-brown, sparse golden-orange tomentose dorsally, dense patch laterally in indentation of posterior eye margin, black hairs behind ocellar tubercle, occipital fringe short white pilose; gula and oral margin shining dark brown to black, bare; antenna (FIG. 2) with segments I and II gray-black, black pilose, segment III black, bare; stylar segment short, black, bare; antennal ratio: 2.5:1:4; proboscis dark brown, extending $\frac{1}{4}$ its length beyond oral margin; palpus black with black hairs. *Thorax*: mesonotum and scutellum gray, mottled with brown, sparse short erect black pilose and white tomentose dorsally, dense mixed black and white pilose anteriorly, 4 strong black macrochaetae anterior to wing base; humeral and postalar calli with black bristles; scutellum golden-orange tomentose on posterior margin; pleura gray, pteropleuron reddish brown; mesopleuron dense mixed white and orange-yellow pilose above from humeral callus to wing base forming a pleural stripe, sparse black hairs below; propleuron mixed white and black pilose; sterno- and metapleura sparse white pilose; metanotum mixed white and black pilose; halter stem yellow-white, knob yellow. *Legs*: coxae gray, white pilose, a few black hairs mixed in; femora black, fine black hairs ventrally and laterally, white scales on all surfaces; tibiae amber-yellow, hairs and setulae black; tarsi black, spines black; claw black; pulvilli as long as claw. *Wing*: tinting as in FIG. 5; veins dark brown; radial and A_2 veins with numerous stump veins; 3 submarginal cells; interrarial crossvein

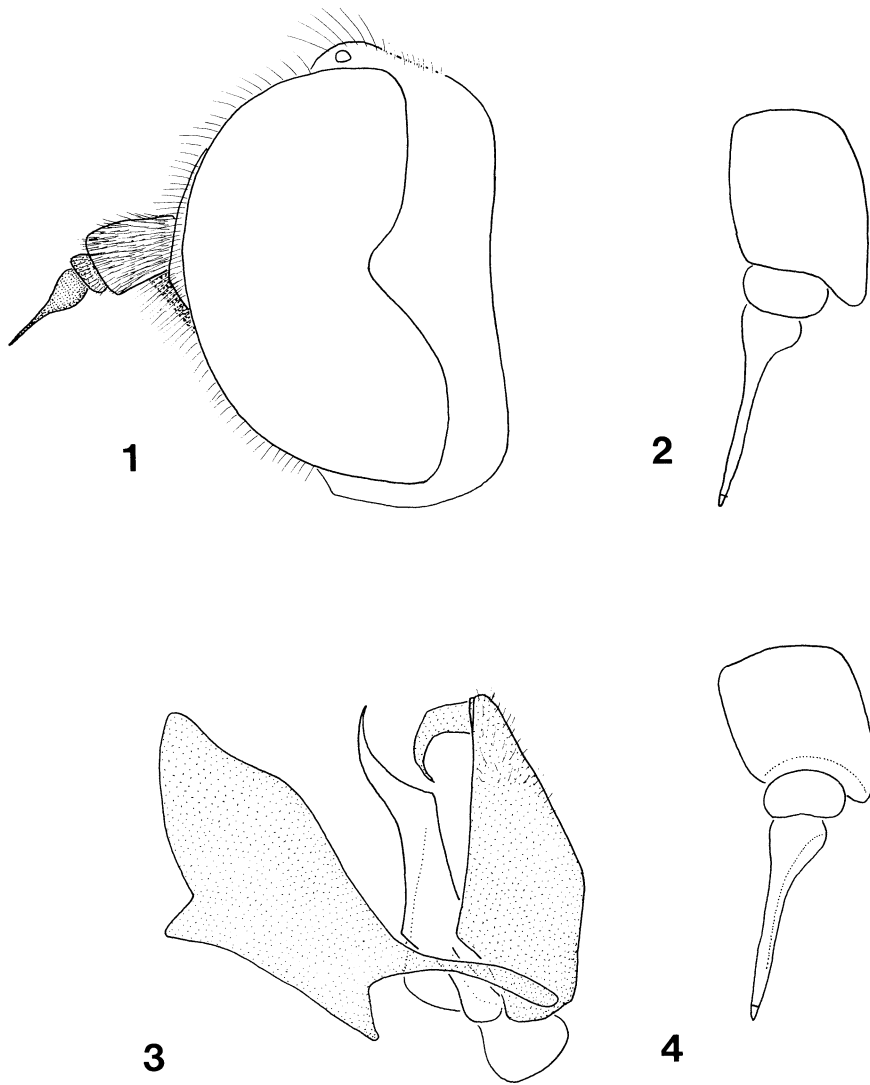


FIG. 1-4. 1-3, *Paramonovomyia halli*: 1, head, lateral view; 2, right antenna, dorsal view; 3, ♂ genitalia, lateral view. 4, *Paramonovomyia macfarlandi*, right antenna, dorsal view.

perpendicular to vein R_5 ; alula reduced; squama white pilose, a few black mixed in. *Abdomen*: tergites gray-black, black pilose, sparse white tomentose laterally; tergite I mixed black and white pilose anteriorly and laterally, dense patch of golden-orange tomentum posteromedially; sparse golden-orange tomentum medially on tergites II-V; sternites gray, sparse white pilose over sparse white tomentum, a few black hairs mixed in with white. *Genitalia* (FIG. 3): in lateral view with basistylus linear-triangular; dististylus much curved, tapering to hooked apex; epiphallus long, thin, tapering to neck; tip of epiphallus recurved ventrally, pointed at apex; basal apodeme small, subtriangular; epandrium small, subquadrate, with long ventral process.

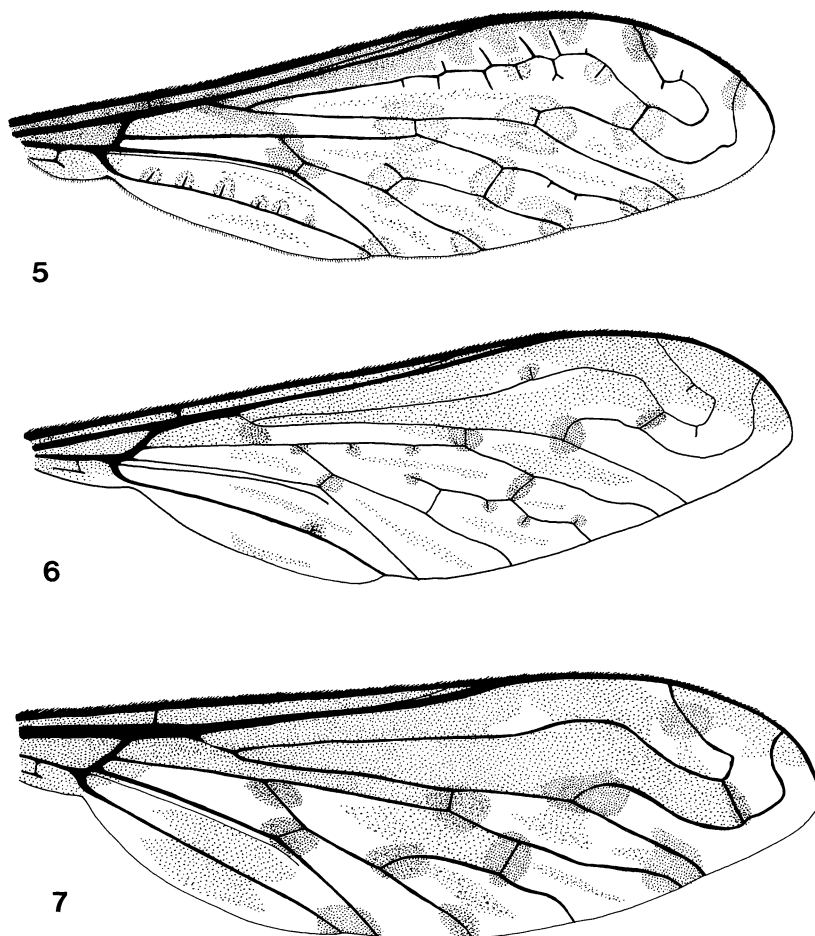


FIG. 5-7. Wings: 5, *Paramonovomyia halli*; 6, *P. macfarlandi*; 7, *P. australensis*.

♀. Similar to ♂ except as follows: eyes separated above by $2.5\times$ width of ocellar tubercle; front with golden-orange tomentum; gena mixed black and white pilose; mesonotum with golden-orange tomentum dorsally; wing tinting lighter than in ♂; abdominal tergites denser golden-orange tomentose than in ♂; posterior margins of tergites II-V with 6 small patches of black tomentum; genitalia not dissected.

Holotype ♂ (CSIRO), allotype ♀ (CSIRO), and 1♂, 3♀ paratypes (BISHOP), AUSTRALIA: Western Australia, Moresby Range, Mills Park, 8 mi [12.8 km] NE of Geraldton, 1.VIII.1973, N. McFarland. One ♀ paratype, [unknown locality] 36-3668, F.M. Hull Collection 1973 (CNC).

This species can be separated from its closest apparent relative, *P. macfarlandi*, n. sp., by the golden-orange tomentum on the head, thorax and abdomen and the presence of numerous stump veins on the radial and A_2 veins.

The Hull Collection paratype carries the label "*Comptosia norrisi* Param. ♀ Paramonov det." This is obviously a representative of the species alluded to in Hull (1973) as the type-species of Hull's "*Chelina*."

This species is named in honor of Mr Jack C. Hall of the University of California, Riverside.

Paramonovomyia macfarlandi Evenhuis, new species

FIG. 4, 6

♀. Length: 9.0 mm. *Head*: brown, black pilose; front with sparse yellow tomentum; eyes separated above by $2.5\times$ width of ocellar tubercle; face and gena mixed yellow-white and black pilose; gula and oral margin gray-black, bare; occiput sparse yellow tomentose, black hairs behind ocellar tubercle, occipital fringe short white pilose; antenna (FIG. 4) with segments I and II gray-black, black pilose, segment III black, bare; stylar segment short black, bare; antennal ratio: 2.5:1:3.5; proboscis reddish brown, extending beyond oral margin by $\frac{1}{6}$ its length; palpus gray-black with black hairs. *Thorax*: mesonotum and scutellum brown, sparse erect black pilose, sparse yellow tomentose, mixed black, white and sparse yellowish-orange pilose anteriorly, 3 strong black macrochaetae anterior to wing base; humeral callus pinkish, mixed sparse black and white pilose; postalar callus brown with black hairs and bristles; pleura brown; propleuron orange-yellow, orange pilose; mesopleuron mixed dense yellow and black pilose, sparse erect short black and white pilose below; meta- and upper sternopleuron sparse white pilose; metanotum mixed white and black pilose; halter yellow. *Legs*: coxae gray-black, white pilose, a few black hairs mixed in; femora black anteriorly, amber posteriorly, fine black hairs ventrally and laterally, dense white scales on all surfaces; black spines on mid and hind femora; tibiae amber-yellow, spines and scales black; tarsi brown, spines black; claw black; pulvilli as long as claw. *Wing*: tinting as in FIG. 6; veins dark brown; 1 stump vein on radial vein, vein A_2 without stump veins, other stump veins restricted to medial veins; 3 submarginal cells; interradiar crossvein perpendicular to vein R_5 ; alula reduced; squama with fringe of white pile, a few black hairs mixed in. *Abdomen*: tergites brown, orange laterally, erect black pilose, black tomentum on posterior margins of all segments, sparse white tomentose dorsally and laterally; tergite I mixed yellowish-orange and black pilose anteriorly and laterally; sternites orange, sparse black pilose over white tomentum. *Genitalia*: not dissected.

♂. Unknown.

Holotype ♀ (CSIRO), AUSTRALIA: Western Australia, Moresby Range, Red Peak, Chapman Val, 3.VIII.1973, N. McFarland.

This species can be separated from its closest apparent relative, *P. halli*, by the yellowish tomentum, amber femora, and orange sternites. *P. macfarlandi* is named in honor of its collector, Noel McFarland.

Paramonovomyia australensis Evenhuis, new species

FIG. 7

♀. Length: 10.0 mm. *Head*: dark brown; front and ocellar tubercle erect black pilose; lower front white pilose immediately above antenna; face and gena yellowish-white pilose; occiput sparse white tomentose, dense laterally in indentation of posterior eye margin, black hairs behind ocellar tubercle, occipital fringe short white pilose; gula and oral margin shining brown to tan, bare; antenna black, segment I mixed black and yellow-white pilose, segment II black pilose, segment III bare; stylar segment short, black, bare; antennal ratio: 2.5:1:3.5; proboscis dark brown, extending $\frac{1}{4}$ its length beyond oral margin; palpus reddish brown with long white hairs. *Thorax*: mesonotum and scutellum black, sparse erect short black pilose over white tomentum, mixed black and white pilose anteriorly, 4 strong black macrochaetae anterior to wing base; postalar callus black, orange anteriorly, black pilose; scutellum dense white pilose laterally, long black hairs on posterior margin; pleura black, pteropleuron reddish brown; mesopleuron mixed white and black pilose above, sparse black pilose below; pro- and upper sternopleura white pilose; metapleuron white pilose; metanotum white pilose; halter stem amber, knob brown. *Legs*: coxae and femora black; coxae white pilose, a few black hairs mixed in; femora with white scales, black hairs ventrally and laterally; mid and hind femora with black spines on apical $\frac{1}{2}$; tibiae and tarsi brown, spines black; claw black; pulvilli as

long as claw. *Wing*: tinting as in FIG. 7; veins brown; stump veins absent from wing veins; 3 submarginal cells; interradiar crossvein parallel to vein R_5 ; alula much reduced; squama with fringe of white pile, a few black hairs mixed in. *Abdomen*: black; tergites erect black pilose, dense yellowish-white tomentose posterolaterally on all segments; tergites I–II mixed black and white pilose; tergite I with posteromedial patch of yellowish-white tomentum; sternites sparse long black pilose over white tomentum. *Genitalia*: not dissected. ♂. Unknown.

Holotype ♀, AUSTRALIA: Western Australia, Swan River, September, D. Swan (CNC).

P. australensis can be separated from its congeners by the lack of stump veins in the wings and the black ground color of the thorax and abdomen.

P. australensis is the odd one out in this genus but is best placed here on the basis of the sparse pile of the mesopleuron, in combination with the black hairs posterior to the ocellar tubercle and the spotting of the wing.

Genus *Alyosia* Rondani

Alyosia Rondani, 1863: 54. Type of genus: *Comptosia maculipennis* Macquart, 1846, designated by Hardy, 1922: 54.

Comptosia (Aleucosia) Edwards, 1934: 95. Type of genus: *Neuria corculum* Newman, 1841, by original description.

Species of *Alyosia* can be separated from *Paramonovomyia* by the denser pile on the mesopleuron and sternopleuron, the lack of stump veins in the wing, and the absence of rows of black hairs posterior to the ocellar tubercle.

Alyosia orientalis (Evenhuis), new combination

Comptosia brunnipennis Wulp, 1868: 110.—Bowden, 1975: 173.

Lomatia brunnipennis (Wulp): Edwards, 1934: 103.—Hull, 1973, 311 (preocc. *brunnipennis* Macquart, 1838).

Lomatia orientalis Evenhuis, 1978: 103 (n. n. for *brunnipennis* Wulp).

Type ♂ deposited in LEIDEN. An analysis of the description by Wulp (1868), plus examination of drawings and notes of the type specimen kindly supplied to me by Dr P. J. van Helsdingen of the Leiden Museum, lead me to place *orientalis* in the genus *Alyosia* based on the characters given by Bowden (1971) in separating *Alyosia* and *Comptosia*.

Alyosia indecora (Wulp), new combination

Neuria indecora Wulp, 1885: 85.

Lomatia indecora: Edwards, 1934: 103.

Comptosia indecora: Hull, 1973: 353.—Bowden, 1975: 173.

Type ♂ deposited in LEIDEN. The original description cites the type-locality of *Neuria indecora* as "Poeloe Gamoe." Bowden (1975) cited the country as "?Indonesia." Dr P. J. van Helsdingen of the Leiden Museum examined the type specimen and

noted the location on the type-label as "Poeloe Samoe." Poeloe Samoe [Pulau Semau] is an island just west of Timor in Indonesia (10°13'S 123°23'E).

Both *A. orientalis* and *A. indecora* are representatives of the species group of *Alyosia* which resembles *Lomatia* species in wing venation (the distal loop of vein R_{2+3} is very shallow when compared to the deep looping of other *Comptosia* group genera). This looping of vein R_{2+3} was most likely the reason for the allocation of 3 other Australian species of the *Comptosia* group to *Lomatia* (*anthracina*, *australensis* and *sorbicula*). Examination of numerous examples of each of these 3 species and other specimens of this group in the Bishop Museum shows this group to be congeneric with *Alyosia* (the amount of looping in vein R_{2+3} being a varying character within this genus). New combinations thus include the following: *Alyosia anthracina* (Thomson), n. comb., *A. australensis* (Schiner), n. comb., and *A. sorbicula* (Walker), n. comb.

Hull (1973) pointed out the uncertainty of the genus *Lomatia* being found in the Australian Region. After examinations presented here, it is concluded that *Lomatia*, s. str. is confined in its distribution to the Palaearctic and Ethiopian Regions and absent from the Australian fauna.

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