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**The Ameniinae (Diptera: Calliphoridae) of
the Noona Dan Expedition, with other
new records from the Bismarck Archipelago,
New Guinea and Moluccas.**

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The Danish "Nona Dan" Expedition (see Petersen, 1966) obtained a small collection of flies of the little known subfamily Ameniinae, a group recently revised and assigned to the Calliphoridae in an earlier paper (Crosskey, 1965). Altogether 46 specimens were collected by the Expedition, of which only one was from the Philippine Islands and all the remainder from the Bismarck Archipelago. The main purpose of the present paper is to record this material, but I am taking this opportunity of recording also some other material from the New Guinea area that has become available since my earlier revision (*op. cit.*) was published; most of this extra material was obtained from my own collecting in New Guinea and New Britain during June and July, 1965, but some is from the collections of the Bishop Museum, Honolulu, made over the past few years, and a few specimens are in other museum collections. The museum depositories of all specimens are recorded in the paper and the following abbreviations are used:

AMNH	American Museum of Natural History, New York.
ANIC	Australian National Insect Collection, Canberra.
Bish. Mus.	Bernice P. Bishop Museum, Honolulu.
BMNH	British Museum (Natural History), London.
DEI	Deutsches Entomologisches Institut, Eberswalde.
MNHN	Muséum National d'Histoire Naturelle, Paris.
USNM	United States National Museum, Washington D.C.
UZM	Universitetets Zoologiske Museum, Copenhagen.

It should be noted that a few specimens at present in the British Museum (Natural History) or in the Bishop Museum may later be

deposited in the collection of Washington State University, Pullman, USA, as a result of exchange arrangements.

It is remarkable that so few specimens of Ameniinae from the Bismarck Archipelago existed in museum collections before the recent expeditions, as the brilliant metallic green flies of the genera *Platytropesa* and *Stilbomyella* are evidently common at certain times and alight and rest conspicuously on low level vegetation, often on the leaves of wild ginger, where they are easily seen and collected. During one week of my own visit to Keravat in New Britain a total of 213 specimens of *Stilbomyella nitens*, until then a species recorded only from the unique holotype, was obtained without special effort; flies of this species, together with *Platytropesa dubia*, were found to be attracted to the shells of the introduced giant snails of the genus *Achatina* Lamarck (Mollusca), up to four or five flies sometimes being observed on the shell of one living or dead snail. This clear interest in the snails supports the suggestion made previously (Crosskey, 1965) that the Ameniinae are biologically associated with land molluscs, though whether as true parasites remains unconfirmed. Some of the female flies of both the genera *Stilbomyella* and *Platytropesa* seen from the Bismarck Archipelago and New Guinea show a single moderately well developed larva protruding from the postabdomen, and specimens of the genus *Silbomyia* from Indonesia have now been seen with similar partially extruded larvae, thus confirming the statement deduced from female abdominal morphology and made in the earlier work (*op. cit.*) that the Ameniinae are undoubtedly larviparous; it is now certain that they retain the larvae in utero to an advanced stage of development, as in the South American subfamily Mesembrinellinae, and probably until almost ready for pupation (flies showing moderately developed protruding larvae had probably not been caught at larviposition but had partially ejected immature larvae in response to the killing agent). An interesting field of research awaits anyone able to work on the field biology of Ameniine flies in the Bismarck islands and New Guinea, and on their suspected ecological relationships with Mollusca.

Tribe AMENIINI

Silbomyia palawana Crosskey, 1965

Philippines. — BALABAC: 1 ♀, Dalawan Bay, 8.x.1961 (Noona Dan Exp.) (UZM).

The specimen is smaller and more violet-blue than other known material.

Genus **Stilbomyella** Malloch

In my revision of the Ameniinae (*op. cit.*) two species of this genus were tentatively recognised, the type-species *S. nitens* Malloch (at that time known only from the unique holotype) occurring in New Britain, and *S. nigrocostalis* (Doleschall) occurring in the Moluccas and New Guinea, but it was emphasised that *nitens* was only very doubtfully distinct from *nigrocostalis* and that the latter species showed some rather baffling variability over different parts of its range. The additional material of the genus now available (approximately 265 specimens) still leaves much doubt as to how many species ought to be recognised, or which characters can be relied upon to provide good specific (or subspecific) characters. The most striking feature that is now clear from the extra material is that specimens from New Britain are consistently much smaller than those from the New Guinea mainland, that their colour tends to be more brassy or coppery green, and that some or all of the genal and all the postbuccal hair is dark brownish to black; specimens from New Guinea are on average much larger than New Britain specimens, their colour is usually more emerald green or even bluish to violet, and all or almost all of the genal and postbuccal hair is golden-orange (the genae are also slightly wider and have the pollinosity a rich golden-orange colour).

The above-mentioned distinctions between New Guinea and New Britain specimens are clear, but it becomes more difficult to decide what taxonomic value should be placed on the observed differences when material from the Molucca islands is also taken into account, for most specimens from Amboyna resemble those from New Britain (dark genal and postbuccal hair), specimens from Buru most resemble those from New Guinea, and specimens from Batjan are rather intermediate (an admixture of pale and dark hair on genae and postbuccae); a specimen seen from Ceram has all dark head hair. Furthermore specimens from Amboyna (the type-locality of *nigrocostalis* and its synonym *costalis* Walker) are sometimes no larger than average specimens from New Britain.

Male specimens from New Guinea having golden genal and postbuccal hair and the gena slightly wider than usual have the mesolobes of the genitalia rather more straight in profile and more pointed at the extreme apices than specimens from elsewhere, and

it is possible that a distinct species exists in the New Guinea uplands; there is insufficient evidence at present to justify treating specimens from the New Guinea uplands as specifically or sub-specifically distinct from the true *nigrocostalis*, and it would be unwise to do so until more material of *Stilbomyella* has been collected in the Aru Islands. It is curious that the few female specimens so far known from these low-lying islands (including the holotype of *gloriosa* Walker, a name currently in synonymy with *nigrocostalis*) have the gena rather wide and all the genal and postbuccal hair, plus the hair of the gular region, deep yellow to golden-orange in colour, and are thus almost identical with material from the interior highlands of New Guinea. If the species from the latter area proves to be distinct from true *nigrocostalis* it is therefore possible that Walker's name *gloriosa* will apply to it. Unfortunately no male specimens are yet available from the Aru Islands (the type-locality of *gloriosa*) to determine whether the hypopygium has the mesolobes of the rather straight shape found in New Guinea mainland specimens.

In the Bismarck Archipelago the genus *Stilbomyella* is now known from the island of Lavongai as well as New Britain, but there is no evidence yet that it occurs in New Ireland (as appears probable) or in the Admiralty Islands.

As it is still very uncertain, in spite of the new material here recorded, what status should be accorded to the variant forms within *Stilbomyella*, it is considered best to follow my earlier revision and recognise *nitens* and *nigrocostalis* as separate species; the new material is listed accordingly below.

The two species tentatively recognised differ as follows:

- Size small, mean length 9.3 mm. (range 7.4—11.3 mm.: 200 specimens measured). At least some and often all of genal hair dark brown, all hair of postbuccae and gular region dark brown to blackish. Mesopleura shining metallic, almost no trace of whitish pollinosity in any light. Genal pollinosity not nearly reaching to gular suture, postbuccal region adjacent to gular suture semi-metallic and hardly at all pollinose. Colour usually brassy-green, sometimes cupreous, less often emerald green or bluish-green (never violet-blue in material seen). [Bismarck Archipelago only] *S. nitens* Malloch
- Size larger, mean length 12.6 mm. (range 9.7—14.9 mm.: 38 specimens measured). Genal hair usually pale yellow to golden-orange, sometimes dark brown, hair of postbuccae and gular

region partly or all pale yellow to golden-orange (sometimes all dark in Molucca specimens). Mesopleura (especially when viewed from above) showing extensive covering of whitish pollinosity, at least when seen in some lights, often with large conspicuous densely white-pollinose spot. Genal pollinosity usually nearly reaching back to gular suture, postbuccal region adjacent to suture usually therefore not broadly semi-metallic. Colour usually emerald green or bluish-green, sometimes blue or violet, only occasionally brassy-green or cupreous. [New Guinea and Moluccas] *S. nigrocostalis* (Doleschall)

***Stilbomyella nitens* Malloch, 1935**

Bismarck Archipelago. — NEW BRITAIN: 2 ♂, 6 ♀, Yalom, 1000 m., 8—23.v.1962 (Noona Dan Exp.) (UZM); 2 ♀, Komgi, 1000 m., 14.v.1962 (Noona Dan Exp.) (UZM); 35 ♂, 10 ♀, Keravat, 2.vii.1965 (R. W. Crosskey) (BMNH); 63 ♂, 19 ♀, Keravat, 29.vi.1965 (R. W. Crosskey) (BMNH); 51 ♂, 35 ♀, Keravat, 24—28.vi.1965 (R. W. Crosskey) (44 ♂ & 30 ♀ in BMNH, 4 ♂ and 2 ♀ in ANIC, 1 ♂ & 1 ♀ in DEI, 1 ♂ & 1 ♀ in MNHN, 1 ♂ & 1 ♀ in USNM); 2 ♂ [one in celluloid capsule], Keravat, 20—25.xi.1959 (T. C. Maa) (Bish. Mus.). — LAVONGAI: 1 ♂, Banatam, 23.iii.1962 (Noona Dan Exp.) (UZM).

***Stilbomyella nigrocostalis* (Doleschall, 1858)**

New Guinea and Moluccas. — AUSTRALIAN NEW GUINEA: 3 ♂, 5 ♀, Western Highlands, Olgolboly, 13 km. E. of Mt. Hagen, 4.vi.1965 (R. W. Crosskey) (BMNH); 3 ♀, Western Highlands, Olgolboly, 13 km. E. of Mt. Hagen, 6.vi.1965 (R. W. Crosskey) (BMNH); 2 ♂, Wau, 1200 m., 10 & 14.xi.1965 (P. Shanahan) (Bish. Mus. & BMNH); 1 ♀, Wau, 1250 m., 6.v.1965 (J. & M. Sedlacek) (Bish. Mus.); 3 ♀, Wau, Mt. Missim, 1100 m., 16.ii.1963 (J. Sedlacek) (Bish. Mus. & BMNH); 1 ♀, Wau, Mt. Missim, 1150 m., 11.iv.1964 (J. Sedlacek) (Bish. Mus.); 2 ♀, Missim, 1100 m., 16.ii. [no year date] (J. & M. Sedlacek) (Bish. Mus.) — WEST IRIAN (Indonesian New Guinea): 1 ♀, Star Mts., Sibil Val., 1245 m., 18.x.—8.xi.1961 (S. Quate) (Bish. Mus.); 1 ♀, Genjam, 40 km. W. of Hollandia, 100—200 m., 1—10.iii.1960 (T. C. Maa) (Bish. Mus.) — CERAM: 1 ♀, Paroe, ii.1909 (F. Muir) (Bish. Mus.) — AMBOYNA: 4 ♂, Amboina (F. Muir) (Bish. Mus. & BMNH).

It is of interest to note the exceptional colour of the Bishop Museum specimen from Genjam (West Irian) listed above: this has the abdomen entirely deep metallic violet, the scutellum violet-blue and the scutum and prescutum blue-green.

Genus *Platytropesa* Macquart

Since the revision of Ameniinae (Crosskey, 1965) was prepared another 175 specimens of the genus *Platytropesa* have become available for study, and it is now possible to form some more

positive conclusions about the distribution, status, and variability of the three species recognised; these are given below, following the data of the new material of each species.

***Platytropesa simulans* Crosskey, 1965**

New Guinea. — AUSTRALIAN NEW GUINEA: 15 ♂, 2 ♀, Western Highlands, Olgolboly, 13 km. E. of Mt. Hagen, 4.vi.1965 (R. W. Crosskey) (BMNH); 6 ♂, 2 ♀, Western Highlands, Olgolboly, 13 km. E. of Mt. Hagen, 6.vi.1965 (R. W. Crosskey) (BMNH); 1 ♂, 1 ♀, Morobe District, Wau, 3500—4000 ft., 16 & 17.v.1965 (R. W. Crosskey) (BMNH); 1 ♀, Morobe District, Wau, 1200 m., 13—19.ix.1962 (J. Sedlacek) (Bish. Mus.); 1 ♂, Morobe District, Wau, 1200 m., 12.iv.1963 (J. Sedlacek) (Bish. Mus.); 1 ♂, 1 ♀, Swart Valley, Karubaka, 1400 & 1450 m., 6 & 12.xi.1958 (J. L. Gressitt) (Bish. Mus.); 1 ♂, 1 ♀, Eliptamin Valley, 1200—1350 m., 1—15.viii.1959 (W. W. Brandt) (BMNH & Bish. Mus.); 1 ♀, Wampit Valley, nr. Gurakor village, 950 m., 7.vii.1957 (D. Elmo Hardy) (Bish. Mus.); 1 ♀, Finisterre Range, Saidor, Gubumi village, 24—30.vi.1958 (W. W. Brandt) (Bish. Mus.); 2 ♂ [in celluloid capsule], 1 ♀, Kasmam, 1350 m., 48 km. E. of Kainantu, 30.x.1959 (T. C. Maa) (Bish. Mus.); 1 ♀, 6 m. N.W. of Lae, 15 m., 9.vii.1957 (D. Elmo Hardy) (Bish. Mus.); 1 ♀, Bubia Agricultural Station, Lae, 15 m., 6.vii.1957 (D. Elmo Hardy) (Bish. Mus.); 1 ♀, Papua, Owen Stanley Range, Goilala, Loloipa, 1—15.ii.1958 (W. W. Brandt) (Bish. Mus.); 1 ♂, Papua, Normanby Is., Wakaiuma, Sawa Bay, 1—10.xii.1956 (W. W. Brandt) (Bish. Mus.); 1 ♀, Papua, Normanby Is., Wakaiuma, Sawa Bay, 11.xi.1956 (W. W. Brandt) (Bish. Mus.). — WEST IRIAN (Indonesian New Guinea): 1 ♂, 2 ♀, Central Mts., Archbold Lake, 760 m., 26.xi.—3.xii.1961 (S. Quate) (BMNH & Bish. Mus.); 1 ♀, Central Mts., Archbold Lake, 760 m., 26.xi.—3.xii.1961 (L. W. Quate) (Bish. Mus.).

This species appears to be confined to New Guinea (including Papua) and its immediately offshore islands, and is apparently absent from the Bismarck Archipelago and the Moluccas; it is also unknown from Queensland, where *P. auriceps* occurs. It is the most distinctive species in the male because of the very straight mesolobes of the genitalia (when seen in profile: Fig. 2), which have a trace of a small blunt anterior hook-like projection apically. *P. simulans* appears to be the only species of *Platytropesa* occurring in the interior highlands of New Guinea, and males examined from a variety of upland localities in both West Irian and Australian New Guinea show great constancy in the exact shape of the hypopygial mesolobes and paralobes (Fig. 2); furthermore males of *simulans* are always without proclinate orbital setae, to judge from material so far known, and both sexes always show a well developed large white pollinose spot on the mesopleuron. The latter feature distinguishes the females of *simulans*

from those of *P. dubia*, which are otherwise difficult to distinguish, and it is largely because of the presence of the white mesopleural spot that the female specimens recorded above from the lowland area of Lae have been identified as *simulans* (no males from this area are yet available for confirmation). Two specimens of *Platytropesa* have been seen (and are listed above) from Normanby Island, one of the D'Entrecasteaux Islands off the eastern end of Papua, and these are tentatively identified as *simulans*, although the shape of the hypopygial paralobes of the male specimen resemble those of *dubia* as much as those of *simulans*; however the Normanby Island specimens have almost no angulation of the inner eye margins, the male is without proclinate orbital setae, and the mesopleura have the white pollinose spot, and identification as *simulans* appears justified.

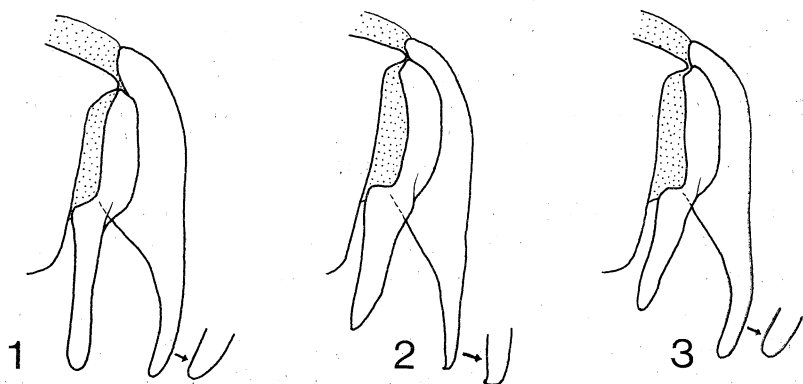
***Platytropesa dubia* (Malloch, 1935)**

Bismarck Archipelago. — NEW BRITAIN: 7 ♂, 7 ♀, Yalom, 1000 m., various dates from 9—22.v.1962 (Noona Dan Exp.) (6 ♂, 6 ♀ in UZM, 1 ♂, 1 ♀ in BMNH); 1 ♂, 2 ♀, Valoka, 5 & 7.vii.1962 (Noona Dan. Exp.) (UZM); 1 ♀, Bita Paka, 15 km. SE of Kokopo, 10.vii.1962 (Noona Dan Exp.) (UZM); 1 ♂, Warangai, 30.vi.1965 (R. W. Crosskey) (BMNH); 6 ♂, 32 ♀, Keravat, 27.vi.1965 (R. W. Crosskey) (5 ♂, 29 ♀ in BMNH, 1 ♂, 3 ♀ in UZM); 3 ♂, 23 ♀, Keravat, 1.vii.1965 (R. W. Crosskey) (3 ♂, 21 ♀ in BMNH, 2 ♀ in UZM); 1 ♂, 1 ♀, Gazelle Peninsula, Baining, St. Paul's, 350 m., 8.ix.1955 (J. L. Gressitt) (Bish. Mus.); 1 ♂, Linga Linga Plantation, W. of Willaumez Pen., 1 m., 13.iv.1956 (J. L. Gressitt) (Bish. Mus.) — NEW IRELAND: 1 ♂, 5 ♀, Lemkamin, various dates from 11—21.iv.1962 (Noona Dan Exp.) (1 ♂, 4 ♀ in UZM, 1 ♀ in BMNH); 2 ♀, Danu, Kalili Bay, 30.iv.1962 (Noona Dan Exp.) (UZM & BMNH); 8 ♀, Kandan, 1.i.1960 (W. W. Brandt) (6 ♀ Bish. Mus., 2 ♀ in BMNH); 3 ♂, 3 ♀, Schleinitz Mts., Lelet Plateau, x.1959 (W. W. Brandt) (2 ♂, 2 ♀ in Bish. Mus., 1 ♂, 1 ♀ in BMNH). — LAVONGAI: 4 ♂, 4 ♀, Banatan, various dates from 21.—24.iii.1962 (Noona Dan Exp.) (3 ♂, 3 ♀ in UZM, 1 ♂, 1 ♀ in BMNH).

It appears justified on the basis of the new material listed above to treat *Platytropesa dubia* as a distinct species, although as pointed out in my earlier paper (Crosskey, 1965) it is very close to *P. auriceps* and could perhaps be regarded as a subspecies of the latter; for the two forms are evidently allopatric, *dubia* occurring only in the Bismarck Archipelago (New Britain, New Ireland and Lavongai so far recorded) and *auriceps* being absent from these islands. However, there are constant differences between the two forms, and I prefer to accept *dubia* as a valid species.

Both sexes of *dubia* constantly lack any well developed white pollinose pleural spot and the mesopleura are shining metallic, whereas in both of the other species (*auriceps* and *simulans*) there is a very distinct large white pollinose area on each mesopleuron, and the male genitalia of *dubia* specimens (which are very constant in form among specimens from New Britain, New Ireland and Lavongai) differ slightly but apparently constantly from those of the other species: in *dubia* the paralobes of the male hypopygium are much shorter than the mesolobes (as in *simulans*) but the mesolobes are curved in profile with rounded tips (much as in *auriceps*), so that together when seen in profile they have a different form from those of the other two species (see Fig. 3).

In *P. simulans* the male is always without proclinate orbital setae and in *P. auriceps* it always has two pairs of such setae, but *dubia* from Bismarck Archipelago shows complete variability in these setae in the male over the whole range, although the setae tend to be either present or absent in different islands. In male specimens of *P. dubia* from New Britain, proclinate orbital setae are almost always absent (out of 23 specimens seen none has two pairs of proclinate orbitals, only one — namely the lectotype of *ralumensis* Enderlein, synonym of *dubia* — has one pair, and one specimen has such a seta on one side of the head but not on the other); but in specimens from New Ireland and Lavongai proclinate orbital setae seem always to be present in the males, either one or two pair (of four males seen from Lavongai two have one



Figs. 1—3. Left lateral view of paralobe and mesolobe of ♂ hypopygium, showing shape of these structures in: (1) *Platytropesa auriceps*; (2) *P. simulans*; (3) *P. dubia*. Hair vestiture omitted.

pair and two have two pairs of such setae, and of four males seen from New Ireland three have two pairs of proclinate orbital setae and the remaining specimen has two such setae on one side of the head and one on the other). In the earlier paper (*op. cit.*) it was suggested, from the very few specimens then available, that *dubia* males did not have two pairs of proclinate orbital setae, but the material now known from New Ireland and Lavongai shows that they often do. Variation in number of these setae is not associated with any differences in the male genitalia, and the males that differ in this character are certainly all conspecific.

As only very few specimens were seen previously, no description of *dubia* was then given, and it may now be useful to give the following notes from the much more extensive material now to hand. The colour in *P. dubia* usually ranges from brilliant metallic brassy-green to emerald-green and blue-green, but a few specimens are deep metallic blue or slightly violaceous; many specimens have the abdomen distinctly more blue than the thorax. The extent and intensity of the brown colouring of the wings is extremely constant, and the golden-yellow head colouring shows very little variability in intensity. Almost all specimens of both sexes, but most noticeably in the males, have the inner margins of the eyes slightly but distinctly angulate near the level of the lunula when seen in facial view (as described and figured for *P. auriceps* by Crosskey, 1965). Almost all specimens have the lower calypter dark brown on about the posterior quarter to third, but in a few specimens dark infuscation covers nearly half the calypter. Body size is very variable, as shown by the following body length measurements:— mean length 10.65 mm. (range 8.2—13.0 mm.) [75 specimens measured]. As with other Ameniinae there is no significant difference in size between males and females, and the same overall variability is found in specimens from different islands of the Bismarck Archipelago as shown by the following:— New Britain specimens [48 measured], mean length 10.7 mm. (range 8.4—13.0 mm.); New Ireland specimens [20 measured], mean length 10.6 mm. (range 8.2—12.4 mm.); Lavongai specimens [7 measured], mean length 10.2 mm. (range 9.2—12.5 mm.); the measurements for the species as a whole, given above, are based on all of these specimens taken together.

Platytropesa auriceps Macquart, 1851

New Guinea. — AUSTRALIAN NEW GUINEA: 1 ♀, Papua, Louisiade

Archipelago, Misima Island, Mt. Sisa, 350 m., 23.vii.1956 (L. J. Brass) (AMNH); 1 ♀, Papua, Louisiade Archipelago, Sudest Island [Tagula I.], 0—100 m., 10.ix.1956 (L. J. Brass) (AMNH); 2 ♀, Papua, Central District, Gaile Forest, 28 miles S.E. of Port Moresby, 8.v.1965 (R. W. Crosskey) (BMNH). — WEST IRIAN (Indonesian New Guinea): 1 ♂, 1 ♀, Vogelkop, Jef Lio I., Sele Straits, 1—5 m., 15.viii.1957 (D. Elmo Hardy) (BMNH & Bish. Mus.); 1 ♀, Vogelkop, Fak Fak, S. coast of Bomberai, 100—700 m., 4.vi.1959 (T. C. Maa) (Bish. Mus.); 2 ♀ [one in celluloid capsule], Genjan, 40 km. W. of Hollandia, 100—200 m., 1—10.iii.1960 (T. C. Maa) (Bish. Mus.); 1 ♀, Hollandia area, W. Sentani, Cyclops Mts., 150—250 m., 18.vi.1959 (J. L. Gressitt) (BMNH).

Aru Islands. — 1 ♀, no other locality data, 1916 (W. W. F[roggatt]) (Bish. Mus.).

The small amount of additional material now seen and listed above tends to confirm that *P. auriceps* is mainly a lowland and coastal species around New Guinea; it is not known from the true interior highlands, and has not yet been found in north-east New Guinea. In the earlier paper (Crosskey, *op. cit.*) it was suggested that *auriceps* must occur in Papua, although no Papuan specimens were then known, and this can now be confirmed from specimens collected by myself near Port Moresby (Gaile Forest) and from the specimens in the collection of the American Museum of Natural History, New York, from the Louisiade Archipelago at the extreme south-eastern tip of Papua: although these are all females they appear to be identifiable without any doubt as *auriceps*, but it would be desirable to have males from Papua for full confirmation of identity. *P. auriceps* is absent from the Bismarck Archipelago, where its place is taken by the very closely related species (or possibly subspecies) *P. dubia* (Malloch).

The Australian National Insect Collection at Canberra contains a male and a female specimen of *Platytropesa* with the data "Queensland, Iron range, 9.iv.1964 (I. F. B. Common & M. S. Upton)" and a female specimen with the data "S. E. Papua, Misima Island, xi.1963 (W. W. Brandt)" which may belong to *P. auriceps* or possibly to *P. simulans*; these specimens have not been to hand while preparing the present paper, and they are not positively identified to species at this time. However, it should be noted that the male specimen from Iron range, Queensland, has no proclinate orbital setae and would therefore be atypical for *auriceps* (but this is the only species yet certainly known from Queensland: see Crosskey, 1965). The paralobes and mesolobes of the male genitalia of *P. auriceps* as seen in profile are shown in Fig. 1, for comparison

with those of *simulans* and *dubia*; it should be noted that the paralobes are long, not tapering, and the apices are rounded, giving a different impression from those of the other two species in which the paralobes are conspicuously shorter than the mesolobes and distinctly taper towards the tips.

Tribe PARAMENIINI

Genus *Paramenia* Brauer & Bergenstamm

This little known genus occurs in Misöol, Aru Islands, New Guinea, and eastern Australia, but is absent from Bismarck Archipelago. Only very little material is yet known from the New Guinea area, and only a small number of specimens (recorded below) has become available since the genus was revised earlier (Crosskey, 1965).

Paramenia divitiosa (Walker, 1864)

New Guinea. — AUSTRALIAN NEW GUINEA: 1 ♂, Finisterre Range, Saidor, Gabumi, 1—21.vii.1958 (W. W. Brandt) (Bish. Mus.); 1 ♂, 1 ♀, Finisterre Range, Saidor, Gabumi, 24—30.vi.1958 (W. W. Brandt) (BMNH ♂ Bish. Mus.); 1 ♂, Wum, Upper Jimmi Valley, 840 m., 17.vii.1955 (J. L. Gressitt) (Bish. Mus.); 1 ♀, Madang District, near Madang, 11.vi.1965 (R. W. Crosskey) (BMNH). — WEST IRIAN (Indonesian New Guinea): 1 ♂, Vogelkop, Manokwari, 75 m., 21.vii.1957 (D. Elmo Hardy) (Bish. Mus.); 1 ♀, Vogelkop, Danowaria, 2.vi.1959 (T. C. Maa) (BMNH); 1 ♀, Ifar, Cyclops Mts., 300—500 m., 23—25.vi.1962 (J. Sedlacek) (Bish. Mus.).

The records, although few, of this species suggest that it is mainly distributed in western and northern New Guinea; it is still unknown from Papua. Some of the specimens now seen have the body colour greenish-blue or deep greenish, much as in *P. macularis*, but all are consistent in both sexes in having all of the parafacials except for a narrow part adjacent to the gena silvery-white pollinose (males of *divitiosa* are at once distinguished by this character from those of *macularis* in which the male head is all yellow). In known material the males are rather consistently smaller than the females, as shown by the following measurements of body length: male mean length 12.1 mm. (range 11.1—12.4 mm. : 4 specimens measured); female mean length 13.6 mm. (range 12.2—15.2 mm. : 12 specimens measured). But this size difference may not hold true when longer series of specimens are available. Not all males show the covering of whitish pollinosity on the dorsum of the third abdominal tergite that was recorded

in the earlier paper (*op. cit.*, p. 130) for the single male then known.

***Paramenia macularis* (Walker, 1859)**

New Guinea. — AUSTRALIAN NEW GUINEA: 2 ♀, Papua, Kiunga, Fly River, 15—24.vii. & 4—5.ix.1957 (W. W. Brandt) (Bish. Mus); 1 ♀, Papua, Kiunga, Fly River, 21—24.x.1957 (W. W. Brandt) (BMNH); 1 ♀, Papua, Central District, Kapogere, 60 m. S.E. of Port Moresby, 2.v. 1965 (R. W. Crosskey) (BMNH); 1 ♂, Karimui, 1080 m., 14—15.vii.1963 (J. Sedlacek) (BMNH); 1 ♀, Morobe District, Markham Valley, Umi River, 480 m., 14.xi.1959 (L. J. Brass) (AMNH).

The last two specimens listed above are from north-east New Guinea, not from Papua, and are identified as *P. macularis*, but it should be noted that in both of them the thorax is more blue and the abdomen more deep blue to violet-purple than is usual in *macularis*. The specimens from Papua, on the other hand, agree very exactly with the male holotype and other material from the type-locality of *macularis* (Aru Islands) and may be positively identified as this species: they are the first specimens known from the New Guinea mainland.

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Summary.

The Calliphoridae of the subfamily Ameniinae collected by the Danish "Noona Dan" Expedition are identified and listed, together with records of other material from the Bismarck Archipelago, New Guinea and the Moluccas not previously published.

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