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## XVII. -Remarks on some new or little-known species of Thynnidæ (Hymenoptera) <br> Rowland E. Turner F.Z.S. F.E.S. <br> Published online: 08 Sep 2009.

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XVII.-Remarks on some new or little-known Species of Thynnidæ (Hymenoptera). By Rowland E. Turner, F.Z.S., F.E.S.

## Rhagigaster mandibularis, Westw.

This species is quite distinct from the Victorian form of R. unicolor, Guér. The male may be distinguished by the tubercle on the mandibles and the absence of the lateral spines at the base of the hypopygium and the female by the much greater breadth of the head.

## Telephoromyia tridentifera, sp. n.

才. Mandibles tridentate, the outer tooth much the longest. Clypeus short, slightly convex, with an obliquely depressed, concave, semicircular area on the middle of the apical margin, resembling a small but deep emargination, a minute tubercle above the base of the depression. Antennw further from each other than from the eyes, rather longer than the thorax without the median segment, the apical joints arcuate ; the interantennal prominence bilobed, a delicate median carina on the front almost reaching the anterior ocellus. Pronotum narrower than the head; the mesonotum as long as broad, with two longitudinal sulci on each side, the inner one much the deepest; scutellum rounded posteriorly; median segment longer than broad, with an obscure median sulcus from the base to the apex. Punctured; most finely and closely on the head, very sparsely on the scutellum, and rather sparsely on the abdomen. First abdominal segment with a sulcus from the base to the middle, the groove between the first and second ventral segments shallow. Abdomen elongate, longer than the head, thorax, and median segment combined, narrowed at the extremities. Epipygium narrowed to the apex and almost pointed, the hypopygium projecting beyond the epipygium, narrow, the sides almost parallel, deeply triangularly emarginate at the apex.

Black; the mandibles broadly in the middle, the clypeus above the depression broadly, two spots between the antennex, the inner margin of the eyes broadly as high as the base of the antennæ, a spot at the summit of the eyes, a spot between the posterior ocelli, a line behind the eyes connecting with a crescentic mark on the vertex, the posterior margin of the pronotum, a spot on either side of the pronotum near the middle connecting with the posterior band, an oblique mark on
each side of the prothorax, a broad vertical band strongly emarginate posteriorly on the anterior margin of the mesopleuræ, a large spot above the intermediate coxæ, a quadrate spot on the mesonotum, the tegula, the middle of the scutellum broadly and a spot on each of the anterior angles, the postscutellum, an oblique line on each side on the median segment, a transverse band near the apex of the five basal abdominal segments narrowly interrupted on all but the first, a large spot on each side of ventral segments 2-4, and a line on the posterior coxæ pale yellow; legs (except the coxæ) pale ferruginous; a yellow line on the anterior femora beneath. Wings hyaline, the radial cell, extending more faintly into the cubital cells, fuscous; nervures fusco-ferruginous, the stigma testaceous. Second and third cubital cells each receiving a recurrent nervure.

Length 14 mm .
Hab. Mendoza, Argentina; November.
Type in B.M. ex coll. Turner.
Closely resembling T. rufipes, Guér., in size and colour, but Guérin gives the abdomen as "simple en arrière," which could not be applied to the peculiarly shaped hypopygium of this species.

> Spilothynnus bituberculatus, Turn.
> Telephoromyia bituberculata, Turn. Trans. Ent. Soc. London, p. 70 (1908), ¢f.
$\delta^{7}$. Mandibles bidentate, the outer tooth long and acute, the inner tooth short and broadly truncate. Clypeus very narrowly emarginate in the middle of the apical margin, the angles of the emargination produced into short spines; a carina from the base produced anteriorly into an acute tubercle overarching the base of the emargination. Antenna inserted a little further from each other than from the eyes, rather short, not longer than the thorax and median segment combined, the apical joints arcuate; the front between the antennæ bilobed, with a delicate longitudinal carina almost reaching the anterior ocellus. Head and thorax very closely punctured, the pronotum and scutellum more sparsely, the mesonotum with two longitudinal sulci on each side; median segment as long as broad, with a shallow longitudinal sulcus from the base to the middle, closely punctured. Abdomen elongate, narrow at the base, closely punctured, the segments narrowly depressed and smooth at the apex; the basal segment longer than broad at the apex, with a longitudinal sulcus from the base to beyond the middle. Hypopygium
narrow, only slightly produced beyond the epipygium, rounded at the apex with a very feeble emargination in the middle. The maxillary palpi are rather long, similar to those of Telephoromyia. The second recurrent nervure is received at about one-quarter from the base of the third cubital cell.

Black ; the mandibles (except at the apex), the clypeus, the anterior margin of the face, a triangular spot between the eyes and the base of the antennæ, an oblique spot on each side above the base of the antennæ, a spot close to the summit of the eyes, a band belind the eyes produced more narrowly on the posterior margin of the head and broadly interrupted on the vertex, a small oblique spot on each side behind the posterior ocelli, the margins of the pronotum broadly united in the middle, with a small black spot in the middle of the anterior margin, a quadrate spot on the mesonotum, the tegulæ and a curved line above them, a spot on the propleuræ and a curved band on the mesopleuræ, a transverse band on the middle of the scutellum and a spot at each of the anterior angles, the postscutellum, a broad oblique band on each side of the median segment curved outwardly near the apex, a spot close to the apex of the median segment, a broad band on each of the five basal dorsal segments of the abdomen, narrowly interrupted in the middle on segments $2-5$, a spot on the first ventral segment, an interrupted band on ventral segments 2-4 and the coxæ and femora beneath yellow; the two apical abdominal segments, the tibiz and the tarsi ferruginous. Wings hyaline, clouded at the apex of the radial cell, nervures black, the stigma ferruginous.

Length 15 mm ., exp. 25 mm .
Hab. Mendoza, Argentina; February.
The limits of the genera in the Telephoromyia group, including Spilothynnus and Scotena, are not yet well understood, the females being very little known. The present species has the clypeus tuketculate as in S. loetus, but the emargination of the clypeus is much narrower. The mandibles differ in the truncation of the inner tooth from $S$. leetus and show some approach to Tel. excisa, Turn., but are not as broad as in that species.

## Pseudelaphroptera haarupi, sp.n.

q. Head twice as broad as long, convex, shining and smooth, with a few very fine scattered punctures; a short frontal sulcus; the front almost vertically depressed. Clypeus broadly and shallowly emarginate; the mandibles falcate with a small tubercle on the inner margin close to the base.

Antennæ scarcely longer than the head is broad, the scape stout and about balf as long as the flagellum. Pronotum broad, nearly twice as broad as long, narrower than the head, the median line rather broadly raised, the sides subconcave, the depressions not reaching the posterior margin. Median segment and scutellum of almost equal length, combined scarcely longer than the pronotum, the whole thorax shining, with a few fine scattered punctures. Abdomen broader than the thorax and much longer than the head, thorax, and median segment combined ; the first and second segments depressed on the apical portion, narrowly at the sides, much more broadly in the middle, the anterior portion smooth and shining, the depressed portion opaque and very finely shagreened; segments $3-5$ smooth and shining, very narrowly and shallowly depressed on the apical margin; the ventral segments sparsely punctured with a smooth depressed space, broadest in the middle, at the apex of segments 2-4. Pygidium oblique, twice as long as broad, the sides nearly parallel, the hypopygium projecting beyond the epipygium, having an exposed surface nearly half as long as the epipygium, rounded at the apex; the epipygium truncate at the apex, with a long whitish seta on each side near the base. Tarsal ungues bidentate.

Fuscous black; the head and legs dark fusco-ferruginous; the pygidium and antennm fusco-ferruginous; the depressed apical portion of the two basal dorsal segments and of ventral segments 2-4 pale testaceous.

Length $8-9 \mathrm{~mm}$.
Described from two specimens, one of which is apparently not quite mature and has the abdomen entirely ferruginousbrown.

Hab. Santa Rosa, Mendoza (A. C. Jensen-Haarup).
This species somewhat resembles Ornepetes albonotata, Andre, in the form of the pronotum, but otherwise is nearer to Pseudelaphroptera flavomaculata, André, except in the longer and narrower pygidium. It may prove to be the female of $P$. rollei, Turn.

Elaphroptera promissa, sp. n.
q. Head subrectangular, strongly rounded at the posterior angles, more than twice as broad as the pronotum, nearly half as broad again as long, thick and scarcely concave above ; the eyes small and broadly ovate; the front divided by a longitudinal sulcus. Pronotum small, broader than long, scutellum small and narrow, rounded posteriorly ; the median
segment as long as the pronotum, very narrow at the base, broadened and obliquely truncate posteriorly, with a small tubercle in the middle just before the base of /the truncation. Head shining, very sparsely and finely punctured, the thorax opaque and more closely punctured, the pronotum not excavated. Abdomen broad, sparsely and shallowly punctured ; the basal segment with a shallow transverse groove before the apex and without hairs at the base; the second segment transversely and coarsely rugose, with a deep transverse groove at the apex bordered by raised transverse carinæ. Pygidium longer than broad, finely longitudinally striated, the apex smooth and broadly rounded, the epipygium broad at the base and produced laterally into prominent angles, thence narrowed sharply. Fifth ventral segment punctured, with obscure longitudinal strix near the apex; the first ventral segment carinate from the base, with a triangular truncation at the apex, the groove between the first and second ventral segments deeply marked.

Ferruginous brown; the thorax and median segment fuscous; the front of the head and the anterior tibiz above ochraceous.

Length 9 mm .
Hab. Chile.
Type in B.M.
This is a true Elaphroptera, but differs in the much longer median segment and the absence of hair at the base of the abdomen from most of the known females. It will probably prove to be the female of E. hyalinipennis, Spin., but it would be unjustifiable to place it with that species until absolute certainty is attained.

## Ariphron excisus, sp. n.

9. Head large and moderately flattened, subrectangular, but strongly tounded at the posterior angles, broader than long, sparsely punctured, the vertex shining, the front subopaque and minutely punctured between the coarser punctures. The front prominent between the antennæ and bilobed, the antennæ inserted near to each other in a space strongly depressed below the front, the clypeus also depressed. Eyes very small, almost round, situated near the base of the mandibles, which are large and prominent. Pronotum coarsely punctured, much narrower than the head, the median portion longitudinally elevated and $\boldsymbol{\Lambda}$-shaped, pointed on the anterior margin, with a large, deep, smooth excavation on each side. Scutellum very narrow; the mesopleuræ
finely and closely punctured, very prominent anteriorly, and almost toothed at the lower angle; a very deep groove between the pro- and mesopleura for the reception of the anterior femora. The anterior tibio are produced beneath into a compressed carina which is very deeply and narrowly incised before the middle. Median segment shorter than the pronotum, broadened and obliquely truncate posteriorly, closely punctured, the sides of the segment delicately aciculated. Abdomen broader than the thorax, closely punctured, with rather long greyish pubescence on the sides; the first segment narrowed and truncate at the base; the second punctured rugose, with a low transverse carina near the base and the apical margin slightly raised; the pygidium narrow and convex, with a low, median, longitudinal carina, a small elongate-ovate truncation at the apex, the carina continued on the surface of the truncation almost to the apex. All the ventral segments are rather closely punctured.

Fuscous, the legs fusco-ferruginous, the front of the head fulvous. The tarsal ungues are bluntly toothed near the base.

Length 9 mm .
Hab. S. Australia (?).
Type in B.M., purchased in 1867, apparently from Bakewell's collection.

I place this peculiar species in Ariphron with doubt. The sculpture of the abdomen is more like Tachynomyia, but in the excavated pronotum, the prominent mesopleura, and the shape of the head it is much nearer Ariphron. The remarkable form of the anterior tibiæ seems to be peculiar to the species, but they are not normally formed in A. bicolor or A, tryphonoides. In tryphonoides there is a prominent projection on the anterior tibiæ above near the base.

Tachynomyia adusta, Sm.
Thynnus adustus, Sm. Cat. Hym. B.M. vii. p. 43. n. 122 (1859), ㅇ.
庄iurus pilosulus, Sm. Cat. Hym. B.M. vii. p. 56. n. 10 (1859), $\delta^{\circ}$.
Several pairs taken in copula by Mr. G. A. Waterhouse at Killara near Sydney early in October.

Tachynomyia vulpina, Sm.
Elurus vulpinus, Sm. Cat. Hym, B.M. vii. p. 54. n. 7 (1859), ©
In my revision of the group (Proc. Linn. Soc. N. S.W. xxxii. p. 286, 1907) I gave this as a synonym of T. merens, Westw. A further examination has convinced me that the
species are quite distinct, the hygopygium of T. vulpina being broadly subtruncate at the apex, in addition to the difference in colour of the legs and wings; the abdomen is rather more shallowly punctured. The female described by me is that of true mœrens.

## Tachynomyia megacephala, sp. n.

$\delta^{7}$. Clypeus finely and closely punctured, the apical margin broadly smooth, a carina from the base not reaching the apex, narrowly produced and truncate at the apex. Head very large, broad and massive, deeply concave beneath, with a fringe of long, curved, pale fulvous hairs on the sides; the prominence between the antennæ broadly truncate at the apex, not bilobed; the antennæ inserted farther from each other than from the eyes, the scape scarcely longer than the two basal joints of the flagellum combined. The head is shining, deeply, but not very closely, punctured ; the posterior ocelli three times as far from the posterior margin of the head as from each other and more than half as far again from the eyes as from each other. Thorax closely and rather finely punctured, much more sparsely and coarsely on the disc of the mesonotum and scutellum; the pronotum narrower than the head, the anterior margin slightly raised and thickened, the scutellum strongly convex and raised above the mesonotum, rather short and broadly truncate at the apex; the mesonotum is broad, measuring nearly 3 mm . between the tegulæ. Median segment and pleuræ opaque, finely and very closely punctured, the median segment rounded, with an almost obsolete sulcus from the base. Abdomen smooth and shining, fusiform ; the basal segment half as broad at the apex as long, very narrow at the base, the second segment twice as broad at the apex as the first, slightly depressed at the base, the two apical segments sparsely punctured. Hypopygium short, projecting very little beyond the epipygium, triangular, produced at the apex into a short, blunt spine, the basal angles with a small acute spine.

Black; the apex of the clypeus, a narrow line on the apex of the interantennal prominence, the anterior margin of the pronotum narrowly interrupted in the middle, the tegula and the postscutellum pale yellow. Wings fusco-hyaline, darkest towards the apex, the posterior wings subhyaline; nervures black. The pleuræ and median segment thinly clothed with rather long white pubescence. The tibia without spines on the outer margin.

Length 14 mm .

Hab. Cape York, Q. (Turner) ; April. Type in B.M.
Very near T. flavopicta, Ritsema, the type of which came from Aru, but this is a more stoutly built insect and the wings are much darker, the head also is larger and more massive.

## Thynnus trisulcatus, Sm.

This female, of which the male is unknown, is certainly distinct from T. depressus, Westw., under which name I placed it with doubt in my recent revision of the family.

Thynnus (Zeleboria) monticolus, sp. n.
ס. Clypeus produced and rather narrowly truncate at the apex, very finely and closely punctured, not carinated. Antennæ inserted nearer to each other than to the eyes, as long as the head, thorax, and median segment combined, the apical joints rather feebly arcuate. Front very finely rugulose, with a delicate longitudinal sulcus reaching the anterior ocellus. Head transverse, finely and closely punctured. Thorax finely punctured, the mesonotum with two longitudinal impressed lines on each side. Median segment longer than broad, delicately aciculate, with sparse cinereous pubescence on the sides. Abdomen subpetiolate, fusiform, longer than the head, thorax, and median segment combined, smooth and shining, with sparse and fine punctures. Hypopygium longer than broad, slightly narrowed to the apex, the apical margin truncate with a very short apical spine.

Black; the mandibles at the base, the anterior margin of the pronotum very narrowly and interrupted in the middle, and the middle of the postscutellum very pale yellow. Wings hyaline, nervures black. The second recurrent nervure is received at one-quarter from the base of the third cubital cell.

Length 14 mm ., exp. 27 mm .
Hab. The Australian Alps, Victoria.
Nearest to T. (Zeleboria) nitidulus, Turn., from which it differs in the frontal sulcus and in the colour, especially of the legs, which are black instead of ferruginous as in the allied species.

Thynnus (Zeleboria) lavifrons, Sm.
Thynnus (Agriomyia) lavifrons, Turn. Proc. Linn. Soc. N.S.W. xxxiii. p. 166 (1908).

I placed this female in the subgenus Agriomyia in my revision of the family, but it is almost certainly a Zeleboria, probably the opposite sex of $Z$. sexmaculatus, Sm.

## Thynnus (FElothynnus) halophilus, sp. n.

$\delta^{\text {B }}$. Clypeus convex, large and long, truncate at the apex, the middle sparsely punctured, the sides almost smooth, the labrum exposed. Front long and narrow, rather strongly punctured, the inner margins of the eyes almost parallel, the eyes long and narrow ; the antennæ inserted much farther from each other than from the eyes and almost as far from the apex of the clypeus as from the anterior ocellus, the prominence between them not much raised, bilobed and deeply emarginate at the apex. Thorax closely and rather finely punctured, the pronotum as broad as the head, broadly emarginate anteriorly, the anterior margin raised. Mesopleuræ rather coarsely punctured; the mesonotum marked with two shallow longitudinal sulci on each side; the scutellum rather large, truncate at the apex. Median segment sparsely, but very deeply and coarsely, punctured at the base, subtruncate and rugulose posteriorly. Abdomen elongate, about as long as the head, thorax, and median segment combined, the segments constricted moderately at the base and with a raised transverse mark emarginate in the middle just before the depressed apical margin, all the segments sparsely and finely punctured. Hypopygium rather broad, tridentate at the apex, the central spine long and slender from the base, more than twice as long as the two lateral ones. The sixth ventral segment has a very short and blunt spine at each of the apical angles.

Black; the mandibles (except at the apex), the sides of the clypeus, the inner margin of the eyes broadly as high as the base of the antennæ, the margins of the pronotum, broadly interruped in the middle of the anterior margin, the tegulæ and a curved line above them, a square spot on the posterior margin of the mesonotum, a vertical band emarginate posteriorly on the mesopleuræ below the anterior wings, a spot before the base of the intermediate coxæ, a transverse mark near the apex of the scutellum and a spot on each side at its anterior angles, the postscutellum, an oblique band on each side on the apical portion of the median segment, curved at the apex and continued on the sides of the segment, and a short transverse band on each side of abdominal segments 1-5 pale yellow; the legs pale ferruginous. Wings hyaline, nervures pale testaceous, the stigma light ferruginous.

Length 6 mm .
Hab. Cape York, Q. (Turner) ; April and May.
Type in B.M.

Very near cerceroides, Sm., but the head and clypeus are much longer and narrower than in the typical form of that insect and the thorax is much more finely panctured. It is a much smaller and less robust species, and the colour of the legs is different.

In my key to the females of Thynnus I have placed those of the subgenus Folothynnus among those with the tarsal ungues simple; but in all except those of the westwoodii group there is really a minute tooth near the middle. In all the ungues are very feeble and small.

## Thynnus gravidus, Westw.

In my revision of the Thynnidæ I suggested that this might be the female of Oncorrhinus xanthospilus, but on a further examination of the type at Oxford I feel little doubt that Westwood was correct in connecting it with his T.klugii, and that the female which I described as that of T. klugiiz, Westw., should belong to the closely allied species T. poultoni, Turn., which was confused both in the Oxford and British Museums with T. klugii. The two females agree in the structure of the hind femora, the strongly developed spur of the anterior tibiæ, the shape of the pygidium, the sculpture of the first two dorsal segments of the abdomen, and the bituberculate prominence between the antennæ. The pronotum in T. poultoni is, however, not concave on the sides, and I have been unable to examine the mouth-parts; the fifth ventral segment in T. gravidus is longitudinally striated at the apex, whereas in $\boldsymbol{T}$. poultoni it is transversely striated. The difference in colour is striking, considering the close resemblance between the males.

## Thynnus bidens, Sauss.

In my recent revision of the Thynnidm (Proc. Linn. Soc. N.S.W. xxxiii. p. 249, 1908) I gave this as a synonym of T. gracilis, Westw., but the hypopygium is quite different, being shorter, without basal spines and with the sides bent upwards. Thynnus viduus, Sauss., is the female of this species, but is very near T. gracilis, 9 ; the head being rather longer in T. gracilis.

## Thynnus pseudomelleus, sp. n.

$\delta^{\text {. }}$. Clypeus truncate at the apex, the angles very slightly prominent, shallowly and rather closely punctured, very narrowly truncate at the base and connected by a broad
carina with the prominence between the antennm; the labrum scarcely visible. The antennæ inserted a little farther from each other than from the eyes, the prominence between them broadly $\mathbf{V}$-shaped and divided by a longitudinal sulcus. Head closely and rather shallowly punctured, covered with rather long greyish pubescence. Thorax closely punctured, the pronotum narrowed anteriorly, the anterior margin very slightly raised, straight and narrower than the head. The dise of the mezonotum is bordered on the sides by a raised curved carina above the tegulæ, and the longitudinal sulci usually present in the family are absent. The scutellum is large, broadly rounded at the apex. Median segment obliquely truncate from a little behind the postscutellum, rounded at the sides, closely and shallowly punctured and with rather long grey pubescence. Abdomen elongate, the segments slightly depressed at the base, shining and rather sparsely punctured; the transverse groove between the first and second ventral segments is shallow. Epipygium very coarsely punctured, without a produced dorsal plate, semicircularly depressed at the apex. Hypopygium short, produced into a stout spine projecting a little beyond the epipygium.

Black; the mandibles (except at the apex), the clypeus, the prominence between the antennæ, the margins of the eyes interrupted at the summit, continued in a narrow band on the posterior margin of the head bisinuate in the middle, the pronotum (except a small black spot on the middle of the anterior margin and a large transverse mark on each side), the mesopleure in front, a curved mark on the mesonotum above the tegulæ, two oblique marks uniting posteriorly on the disc of the mesonotum, the scutellum with the base rather broadly black and a narrow transverse black mark on each side near the apex, the postscutellum, a large mark trilobed posteriorly at the apex of the median segment and produced laterally on to the sides of the segment, the coxa and femora beneath, the tegulæ, and a broad band near the apex of each abdominal segment except the seventh pale yellow; the bands are continued beneath on ventral segments 2-5. Femora and tarsi dull ferruginous, the femora very pale yellow above. Wings hyaline, tinged with yellow at the base, nervures and stigma ferruginous.

Length 19 mm .
Hab. Glen Innes, N.S.W. (Froggatt).
Type in coll. Froggatt.
Near T. frenchi, Turn., but the scutellum is shorter and differently shaped in addition to the considerable differences
in colour; the clypeus is also rather shorter and not pointed at the base as in T. frenchi. The markings are very similar to those of T. melleus, Westw., but the colour is pale yellow instead of orange.

Thynnus atrocior, sp. n.
ठ. Clypeus coarsely punctured, some of the punctures confluent longitudinally, very prominent at the extreme base, then depressed and flattened to the apex, where it is broadly truncate, with very slightly prominent angles; the labrum projecting a little beyond the clypeus, not bilobed. Maxillw with a fringe of very long hairs on the outer margin. Head closely and rather deeply punctured, the antennæ of equal thickness throughout, a little further from each other at the base than from the eyes, the second joint of the flagellum only two-thirds of the length of the third; the prominence between the antennæ broadly rounded at the apex and connected by a very short carina with the pointed base of the clypeus; a delicate carina from just below the anterior ocellus reaching the apex of the interantenual prominence. Thorax closely punctured, the pronotum with a transverse groove just behind the anterior margin, the anterior angles scarcely prominent; the mesonotum with the usual two longitudinal sulci on each side, the inner one much the deepest; the scutellum about two-thirds of the length of the mesonotum, convex and longitudinally subcarinate in the middle. Median segment rather finely rugose, with a longitudinal depression from the base, oblique and shining posteriorly, with a deep sulcus on each side close to the apex. Abdomen closely, but not deeply punctured; the first segment as broad at the apex as the second, the segment feebly constricted at the base, and narrowly depressed on the apical margin, the first ventral segment divided from the second by a moderately deep groove, the sixth segment with a short spine on each side at the apical angle; the dorsal plate of the epipygium flatly produced, truncate at the apex and coarsely longitudinally striated. Hypopygium prominently rounded at the basal angles, but not toothed, thence rather broadly produced and rounded at the apex, without an apical spine; transversely striated above near the base, with a longitudinal, low carina near the apex; punctured beneath, with a longitudinal carina.

Black; with close grey pubescence, longest on the sides of the head and abdomen and on the pleuræ, the spines of the tibia mhitish, the mandibles dark fusco-ferruginous.

The flattened portion of the clypeus and the extreme apex of the median segment are without pubescence and shining, the remainder of the insect opaque. The anterior coxæ are very slightly concave beneath. Wings hyaline, nervures black.

Length 18 mm .
Hab. Gippsland, Victoria.
Very near T. atrox, Turn., from Western Australia, but the sculpture of the clypeus is different, and the spines at the basal angles of the hypopygium are not developed. The tubercle at the base of the second ventral segment, which is strongly developed in T. atrox, is absent in the present species.

## Thynnus multistrigatus, sp. n.

q. Head shining, very sparsely, but rather deeply punctured, more closely on the front between the antennæ, very slightly convex, more than half as broad again as long, and rounded at the posterior angles; the eyes oval, not tcuching the base of the mandibles. Thorax and median segment shining and very sparsely punctured; the pronotum as broad as the head, nearly twice as broad anteriorly as long, very slightly narrowed posteriorly, with a row of setigerous punctures on the anterior margin which is almost straight. 'The scutellum is narrowed and broadly rounded posteriorly; the median segment very short, obliquely truncated from just behind the scutellum ; the pleuræ smooth and shining. Abdomen shining, segments 3-5 almost smooth; the first segment truncate anteriorly, the face of the truncation strongly concave, the dorsal surface rugosely punctured at the base, with a patch of long pubescence in the middle, and with three transverse carinæ near the apex, which are separated from the recurved apical margin by a rather broad transverse groove. Second segment with about twenty transverse caring, those near the base low and fine, very near together, those near the apex much stronger and farther apart. Pygidium truncate posteriorly, strongly constricted before the base of the truncation and transversely striated, the surface of the truncation ovate and smooth, the hypopygium not emarginate at the apex. Fifth ventral segment coarsely longitudinally striated and deeply emarginate at the apex. The basal joint of the intermediate tarsi is broad and flat, but not as strongly so as in some of the allied species. 'The clypeus is transverse, convex in the middle bat not carinate, and closely punctured.

Black; the scutellum, a spot on each side of the first and
second abdominal segments, a band near the apex of the third and fourth, almost interrupted in the middle on the third and broadly interrupted on the fourth, the apex of the first ventral segment and a large spot on each side of segments 2-4 yellow; antennæ piceous; legs fusco-ferruginous beneath.

Length 18 mm .
Hab. Richmond, N.S.W. (Froggatt).
Type in coll. Froggatt.
This is the female of a species belonging to the section Zaspilothynnus, Ashm., but the head is not deeply grooved as in leachiellus, Westw., which Ashmead takes for the type of his genus. But other species in which the male does not seem to differ in structure from leachiellus (notably T. vernalis, Turn.) have the head of the female without grooves, so that I cannot regard this character as of more than specific importance.

In my key to the species of Thynnus (Proc. Linn. Soc. N.S.W. xxxiii. p. 84, 1908) I have placed T. seductor, Sm., among the species without a spine at the apical angles of the sixth ventral segment. This is an error, for the spine although short and blunt is distinctly visible. On the other hand, T. anchorites, Turn., has been placed, by an oversight on my part, among the species in which the spine is present, whereas there is no trace of a spine.

> Thynnus sabulosus, Turn.

Thynnus sabulosus, Turn. Proc. Linn. Soc. N.S.W. xxxiii. p. 208 (1908), ㅇ.

This will probably prove to be the female of T. zonatus, Guér. (nigropectus, Sm.), which is a wide-ranging species, the localities for specimens in the British Museum being Swan River, Roeburne, N.W.A., and Alexandria, near the eastern border of the Northern Territory. Though the head of T. sabulosus is not deeply grooved as in most species allied to T. dentatus, Fab., it certainly belongs to that group.

Thynnus picticollis, Turn.
Thynnus picticollis, Turn. Proc. Linn. Soc. N.S.W. xxxiii. p. 216 (1908), 오.

This belongs to the group Zaspilothynnus, Ashm., and may prove to be the female of T. ochrocephalus, Sm. The first joint of the intermediate tarsi is very strongly flattened and broadened, and the intermediate tibiæ are also broader
and stouter than in mosi of the allied species. The pygidium is not emarginate at the apex as it is in typical Thynnus, agreeing in this point with other species of the Zaspilothynnus group, which, when the family is more studied, may be raised to generic rank, as is done by Ashmead.

## Thynnus brisbanensis, sp. n.

$\delta^{8}$. Clypeus broadly truncate at the apex, the angles slightly prominent, pointed at the base and connected with the interantennal prominence by a short and narrow carina, sparsely punctured and very finely longitudinally striated; the labrum prominent. Antennæ inserted a little further from each other than from the eyes; the prominence between them broadly triangular, with a carina from the apex extending to the anterior ocellus. Front closely and finely punctured-striate, the vertex closely punctured. Pronotum broader than the head, closely punctured, with a very shallow transverse groove behind the feebly raised anterior margin. Mesonotum very closely punctured between the two longitudinal lateral sulci, the centre more sparsely punctured; scutellum large, very broadly rounded at the apex, and sparsely punctured; the postscutellum almost transverse, reaching but not projecting beyond the truncation of the median segment, which is broad and slightly oblique, not quite vertical, the surface very finely rugulose. Abdomen subconical, the first segment truncate anteriorly, slightly rounded at the anterior angles, as broad at the apex as the second segment, the whole abdomen shining and rather sparsely punctured, the segments not constricted. The dorsal plate of the epipygium is produced, longitudinally striated, and shallowly emarginate at the apex. Sixth ventral segment with a short spine on each side at the apical angles. Hypopygium with five spines, those at the basal angles blunt and not very prominent. The first ventral segment is longitudinally carinate and obliquely truncate at the apex, the groove separating it from the second segment is shallow.

Black; the mandibles (except at the apex), the clypeus, the labrum, a broadly V -shaped mark between the antennæ, the margins of the eyes narrowly interrupted at the summit, the anterior and posterior margins of the pronotum, a spot on the mesopleure below the anterior wings and another above the base of the intermediate coxæ, the tegulæ and a narrow oblique line behind them, a broad median mark on the posterior margin of the mesonotum, the apical half of the scutellum and a spot on each side at the anterior angles, the postscutellum, the median segment on the middle and the
sides, the coxe beneath, the projection of the mesosternum between the intermediate coxm, the truncation of the first abdominal segment with a longitudinal black mark in the middle and a small black spot on each near the base of the truncation, a broad band emarginate in the middle and less deeply on the sides posteriorly above the truncation and not separated from it, a broad band rather narrowly interrupted in the middle and emarginate on each side posteriorly on dorsal segments 2-6, the apex of the first ventral segment and a large spot marked with a narrow black lunule on each side of the ventral segments 2-5, largest on the second and gradually diminishing in size to the fifth, yellow. Wings hyaline, nervures black.

Length 21 mm .
Hab. Stradbroke Island (A. J. Turner); January. Type in coll. Froggatt.
Allied to typical Thynnus by the hypopygiam, but in some points nearer to Ashmead's group Zaspilothynnus. It is very nearly allied to T. elgneri, Turn., from Cape York, but in that species the hypopygium is narrower at the apex and the legs are ferruginous; it is also very much smaller than the present species. Until the female is known I think it better to connect these two species with the typical Thynnus group rather than with Zaspilothynnus, though it is quite possible that the females, when discovered, will prove to be nearer the latter.

Thynnus ventralis, Sm., var. desiccatus, var. n.
Specimens of this species received lately by the British Museum, collected by Mr. H. J. Hillier at Hermansburg, Central Australia, differ from the common form from the N.W. Coast as follows:-
$\delta$. The yellow spots on each side of the fuurth and fifth dorsal abdominal segments, which are always present in the specimens I have seen of veutralis, are absent in var. desiccatus, in which also the femora and tibiæ are ferruginous instead of yellow, and the mesopleuræ, mesonotum, metasternum, and intermediate and posterior trochanters and coxa black instead of yellow.

9 . The variety has the clypeus black instead of yellow and the anterior margin of the pronotum is distinctly raised, which is not the case in the type of the female, the sternum and cosæ are also black in the variety, except a small yellow spot at the base of the intermediate and posterior coxæ. There are four males and two females in the Museum collection.

