

NEW SPECIES OF SUBGENERA *ISOTHRIPS* AND
ISOCHAETOTHRIPS FROM OCEANIA
AND AUSTRALIA, WITH NOTE ON
CHANGES IN NOMENCLATURE
(Thysanoptera: Thripidae)¹

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Abstract: *Thrips (Isothrips) pallisetis* Sakimura from New South Wales, Australia, *T. (I.) rhabdotus* Sakimura from Tonga and Fiji, and *Taeniothrips (Isochaetothrips) bianchii* Sakimura from New Caledonia are described. *Thrips (Isothrips) compressicornis* Sakimura, new name for *T. (I.) brevicornis* Moulton & Steinweden, and *Taeniothrips varicornis* Moulton, reinstated replacement name for *T. setipennis* Karny are designated.

In my earlier papers (1967a, 1967b), all the following 3 species were mentioned and keyed as unnamed species. They are here described as new species.

Thrips (Isothrips) pallisetis Sakimura, new species Fig. 1-5.

DIAGNOSIS: Large species, brown body with fore tibia and apical 1/2 of mid and hind tibiae and all tarsi yellow, antenna brown with II lighter and III yellow, wing uniformly pale yellow, body setae all pale yellow; head long and occiput with 3 to 4 deep striae at middle zone, pronotum very shallowly striated (white line), metanotum elongate-reticulated, metepimeron finely reticulated; B3 of postocular seta series minute, mesal setae of metanotum by fore margin and metanotum II nearly as long as I, no accessory seta on sterna.

♀ (Holotype). Grayish chestnut brown with prothorax slightly more yellowish; legs brown as body with apical tips of fore femur and whole fore tibia (weak brown shading along outer margin), apical 1/2 of mid and hind tibiae and all tarsi yellow; antenna brown as head with II lighter, with III and extreme bases of IV-V yellow; wing uniformly pale brownish yellow; ocelli crescent dark red, body setae all pale yellow.

Occiput (fig. 1) covered with sparsely-spaced, anastomosing striae, 3 to 4 lines deep along middle zone and cheek deeply notched at middle, front deeply striated; antenna, I-II weakly striated, the rest nearly smooth and microtrichia yellow and inconspicuous; pronotum (fig. 1)

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with inconspicuous, sparsely-spaced striae (about 26 lines), premarginal bulge and its wrinkles very weak; mesonotum (fig. 2) sparsely striated, little anastomosing in cephalic 1/2; metanotum (fig. 2) elongately reticulated, deep, transverse in cephalo-mesal area, longitudinal in mesal area, sparse striae limited at lateral areas; metepimeron (fig. 5) finely and deeply reticulated; abdomen deeply striated, deep all over on tergum I, but deep on sides only and weaker on mesal areas of other terga, fairly deep all over tergum IX, very deep on lateroterga, fairly deep on sterna, pleura finely and longitudinally striated. Hind margins of terga and sterna practically smooth, lateroterga with sparsely-spaced short teeth, pleura with 5 clefted lobes.

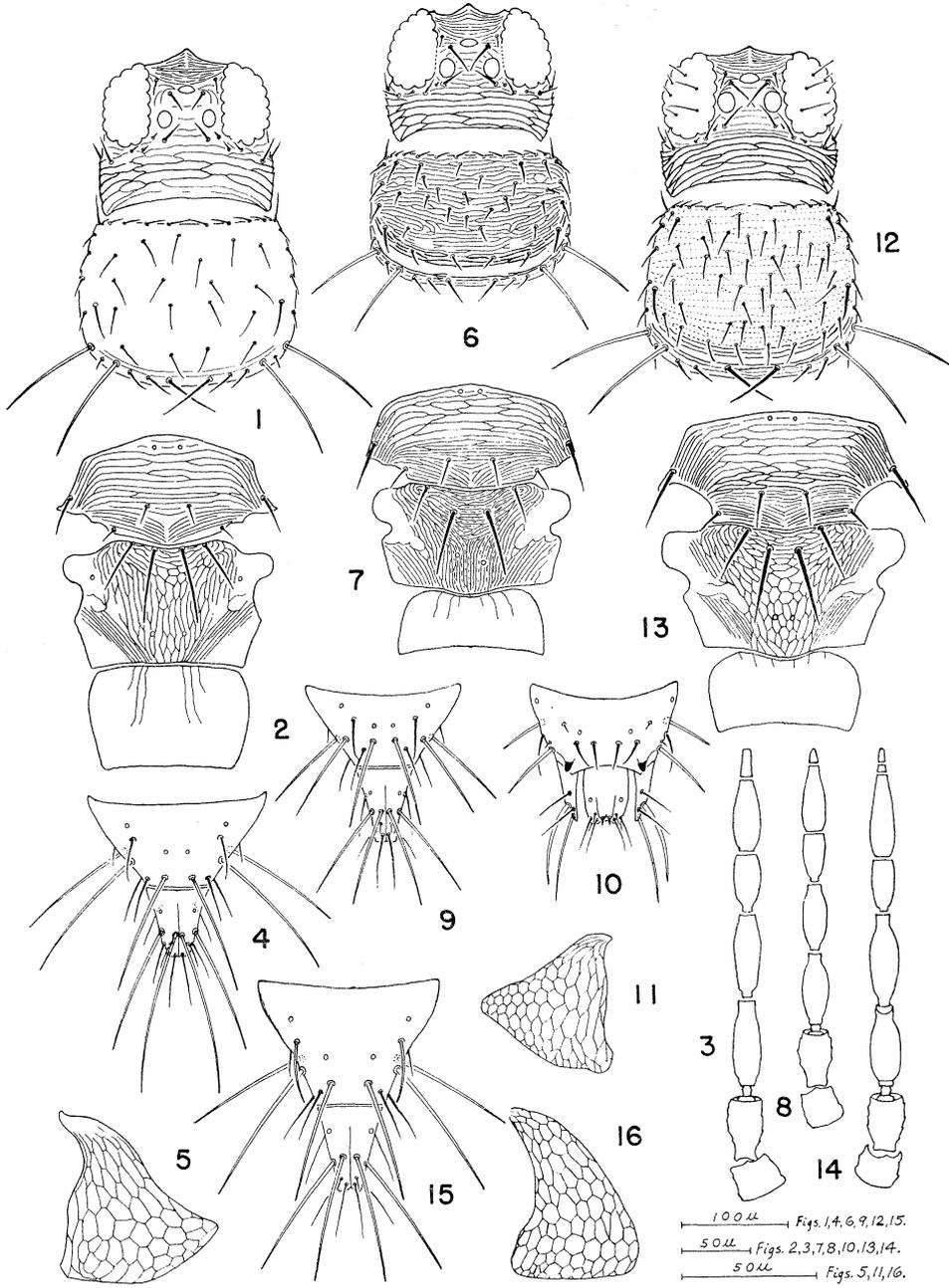
Body: 1600 (natural), 1770 (fully distended) long, (all measurements in μ).

Head (fig. 1): Head long with long cheeks (atypical for the subgenus). 138 long, 160 wide at eyes, 150 below eyes, 150 at bases of cheek; cheek slightly arched and little constricted below eyes (head of holotype slightly pressed and somewhat distorted): front slightly concave only immediately below anterior ocellus but straightened out beyond, ocellar hump only slightly elevated. Eye 78 long, 48 wide, 65 at interval; cheek 72 long laterally, occiput below eye 50 long, ocellar triangle 55 wide, 43 tall, ocelli 16 to 17 across. Setae on head moderately developed, ante-ocellar wanting, latero-ocellar 14 long, interocellar 20 long, caudolateral from and near anterior ocellus, 33 apart from each other; postocular seta series: B1 (innermost) 20 long, caudad from posterior ocellus, B5 23, B6 15 long, B2-B4 minute (minute B3 is atypical for the subgenus). Mouthcone 225 long, maxillary palpi 50 long for 3 segments combined. Antenna (fig. 3) 330 long, length (width) of segments: 28 (33, 25 at tip), 42 (25), 68 (18), 64 (18), 43 (19), 53 (19), 21 (8), III-IV almost rod shape, sense cones short, only 20 tall on III.

Prothorax (fig. 1): 150 long, 160 wide along fore margin, 185 along hind margin, 192 at broadest; premarginal bulge weak; postero-angle setae 93 (outer) and 100 (inner) long, mesal postero-marginal setae 60 long, 2 shorter setae between mesal and inner angle setae; about 10 pairs of fairly long disc setae (about 22 long) including 1 thicker pair of subpostero-angle (35 long), subantermarginal setae not any thicker than other disc setae.

Pterothorax (fig. 2): 240 long dorsally and 280 long laterally, 250 wide at shoulders of mesothorax; mesonotum 80 long, metanotum I 80 long, II 70 long (long II is atypical for the subgenus), an apodeme along fore margin of metanotum I conspicuous; apodemes on sterna well developed, mesospinula 110 long, meso- and metafurcae both 50 wide; lateral setae on mesonotum 40 long, mesal setae 22 long and 25 away from hind margin; mesal setae on metanotum 55 long and by foremargin, outer setae 45 long (metanotal chaetotaxy is atypical for the subgenus). Legs, hind tibia 200 long, with a row of 8 long setae (about 20 long), with 3 terminal setae (33 longest). Wing 980 long, 65 wide at middle, 93 wide at base; veinal setae regularly spaced on both veins, 36 setae on costa, last seta 65 long, 23 setae on fore vein, last seta 50 long, 17 setae on hind vein, last seta 65 long, 5 setae on scale vein, veinal last seta 53, penultimate 45, disc seta 45 long.

Fig. 1-5. *Thrips (Isothrips) pallisetis*, n. sp.: 1, holotype ♀, head and prothorax (very weak striae on pronotum are not shown); 2, holotype ♀, meso- and metanota; 3, holotype ♀, right antenna; 4, holotype ♀, abdominal segments IX-X; 5, holotype ♀, right metepimeron. Fig. 6-11. *Thrips (Isothrips) rhabdotus*, n. sp.: 6, holotype ♀, head and prothorax; 7, holotype ♀, meso- and metanota; 8, holotype ♀, right antenna; 9, paratype ♀, abdominal segments IX-X (Fiji, Moulton 5396, Bishop); 10, allotype ♂, abdominal segments IX-X; 11, paratype ♀, left metepimeron (Fiji, IBE 547, BMNH). Fig. 12-16. *Taeniothrips (Isochaetothrips) bianchii*, n. sp.: 12, paratype ♀, head and prothorax (Oua-Tom, 20.IX.1940, FXW, Priesner); 13, paratype ♀, meso- and metanota (Dothio near Thio, 8.X.1940, FXW, HSPA); 14, paratype ♀, left antenna, (Oua-Tom, 20.IX.1940, FXW, Priesner); 15, paratype ♀, abdominal segments IX-X, (Oua-Tom, 20.IX.1940, FXW, Priesner); 16, paratype ♀, right metepimeron (Oua-Tom, 20.IX.1940, FXW, Priesner). Setae, sense cones, microtrichia, striae, and wavy profile on III-IV, if any, are not shown on all antennae. (del. K. S.)



Abdomen: 1010 long, 310 wide on IV; chaetotaxy on abdomen normal, no accessory seta on sterna; comb on tergum VIII wanting (few short teeth visible); terga VIII-X (fig. 4): 88, 75, 66 long, X 60 wide at base, 20 wide at tip (well tapered tip), suture 3/4 way up. Terminal setae

very long, rather thin and yellow; on IX, B1 120, B2 135, B3 120 long, dorsal setae well developed but rather thin, 42 long, curved inward; on X, B1 155, B2 145 long. Ovipositor 250 long, 125 wide at base.

Holotype ♀ (Moulton 4711), Australia, New South Wales, Louth (corrected from Queensland previously mentioned—Sakimura, 1967a: 431, 434), "flowers", 27.V.1928, S. E. Flanders (California Academy of Sciences). 2♀♀ paratypes, same data as holotype.

Pallisetis, n. sp. is closely related to *setifer* Karny from Queensland, and both constitute a separate group from the congeners, being characterized by the elongated head, undeveloped B3 of postocular seta series, mesal seta by fore margin of metanotum, and peculiar pattern of metanotal sculpture. *Pallisetis* is, however, readily separated by its uniformly pale wing, yellow setae, and long metanotum II (nearly as long as I) from *setifer* which has brown wing with a clear base band, dark brown setae, and short metanotum II (1/2 as long as I). In a preliminary review of the subgenus *Isothrips* (Sakimura 1967a), an unnamed species appearing in the key as No. 11, corresponds to *pallisetis*.

The holotype and 2 paratypes were found in the CAS Collection with a manuscript name by Moulton. No additional material was found in any one of the other collections visited.

Thrips (*Isothrips*) *rhabdotus* Sakimura, new species Fig. 6-11.

DIAGNOSIS: Body and legs brown but fore tibia and apical 1/3 of mid tibia and all tarsi pale brown, antenna brown with II darkest but apically pale mesad and III brownish yellow, wing gray brown with slightly lighter basal 1/4 area, body setae dark brown; occiput and prothorax deeply striated, metanotum finely striated, metepimeron finely reticulated; cheek strongly arched and deeply notched; setae on head and pronotum moderately developed, no accessory seta on sterna.

♀ (Holotype). Chestnut brown with head and 3 to 4 terminal segments of abdomen slightly darker; legs brown with fore tibia and all tarsi pale brown, hind femur and tibia as dark as body but apical tip of tibia lighter brown, mid femur and tibia lighter brown but apical 1/3 of tibia pale brown, fore femur pale brown but slightly darker along outer margin, leg color ranges broadly; antenna grayish brown as head with II darkest but apically pale in mesal area, with III pale brownish yellow; wing grayish brown with basal 1/4 slightly lighter and next 1/5 slightly darker; ocellar crescent red, body setae dark brown, some nearly black.

Occiput (fig. 6) with deep, sparsely-spaced, little anastomosing 5 to 6 striae across (5 to 6 deep and sharply pointed notches on cheek), front deeply striated; antenna I-II deeply striated and sharply notched, III-VI weakly striated and profile wavy; pronotum (fig. 6) deeply striated with about 28 lines including very thick 2 or 3 wrinkles on premarginal bulge; mesonotum (fig. 7) deeply striated, sparsely spaced and freely anastomosing on cephalic 1/2, finely spaced and little anastomosing on caudal 1/2; metanotum (fig. 7) deeply and finely striated on entire area, transverse at cephalomesal area but longitudinal or somewhat slant on remainder; metepimeron (fig. 11) shallowly but finely reticulated; abdomen striated moderately deep on terga and sterna, very deeply on lateroterga, shallowly and finely on pleura. Hind margins of terga irregularly and shallowly serrated at sides only, shallowly serrated on lateroterga, 5-clefted on pleura, practically smooth on sterna.

Body: 1320 (natural), 1400 (full distended) long, (all measurements in μ).

Head (fig. 6): 110 long, 153 wide at eyes, 143 below eyes, 155 on cheeks, 138 at bases of cheek; cheek strongly arched but moderately constricted below eyes and strongly narrowed at base, front strongly concave below anterior ocellus but practically straightened at bases of antenna, ocellar hump moderately elevated. Eye 75 long, 43 wide, 68 at interval; cheek 58 long laterally,

occiput below eye 43 long, ocellar triangle 58 wide, 35 tall, ocelli 17 to 18 across. Setae on head moderately developed, ante-ocellar wanting, latero-ocellar minute, interocellar 30 long, caudolaterad from and near anterior ocellus, 35 apart from each other, postocular seta series; B1 (innermost) 25 long, caudad from and near posterior ocelli, B3 15, B5 18, B6 15 long, B2 and B4 minute (in very rare cases attain some length). Mouthcone 215 long, maxillary palpi 45 long for 3 segments combined. Antenna (fig. 8) 280 long, length (width) of segments: 28 (29, 25 at tip), 43 (25), 55 (19), 52 (17), 36 (16), 52 (17), 13 (6), total length or dimension of each segment was found fairly constant among different specimens; sense cones moderate in size, 25 tall on III.

Prothorax (fig. 6): 123 long, 163 wide along fore margin, 175 along hind margin, 180 at broadest, premarginal bulge and trough prominent; posteroangle setae both 70 long, mesal posteromarginal setae 28 long, 2 short setae, between mesal and inner angle setae, about 14 pairs of disc setae (about 13 long) including 2 thicker pairs of subanteromarginal (18 long) and 1 thick pair of subpostero-angle (22 long).

Pterothorax (fig. 7): 185 long dorsally and 240 long laterally, 255 wide at shoulders of mesothorax; mesonotum 73 long, metanotum I 78 long, II 34 long; apodemes on sterna well developed, mesospinula 83 long, meso- and metafurcae both 55 wide; lateral setae on mesonotum thick and 38 long, mesal setae thin, 20 long and away from hind margin, mesal setae on metanotum thick, 48 long, 13 away from fore margin. Legs normal, hind tibia 170 long, a row of 12 rather thin setae, 3 thick terminal setae (28 longest). Wing 700 long, 45 wide at middle, 75 wide at base; veinal setae regularly spaced on both veins, 27 setae on costa, last seta 68 long, 21 setae on fore vein, last seta 50 long, 16 setae on hind vein, last seta 63 long, 5 setae on scale vein, last 2 setae and disc seta subequal in length, veinal last seta 52, penultimate 60, disc seta 48 long, chaetotaxy on scale is typical for the subgenus.

Abdomen: 850 long, 280 wide on IV; chaetotaxy on abdomen normal, no accessory seta on sterna; comb on tergum VIII poorly developed, about 14 pairs of very short setae (about 4 long) over entire margin; terga VIII-X (fig. 9): 70, 63, 68 long, X 60 wide at base, 25 wide at tip, suture 3/4 way up. Terminal setae: on IX, B1 88, B2 93, B3 95 long, dorsal setae well developed, 35 long, thick, curved inward; on X, B1 98, B2 90 long; ovipositor 240 long.

♂ (Allotype). Yellow with head and abdominal segments VIII-X chestnut brown, pterothorax with more orange pigmentation, light grayish-brown blotchings broadening and darkening from tergum II to VII, occupying mesal 1/3 on II and entire area on VII; legs yellow with weak brown shading along outer margin of hind femur; antenna brown as head, I-II light brown, III yellow with brown shading on apical 1/3; wing pale gray brown, basal 1/4 somewhat paler but not clear; body setae dark brown, some nearly black. Sculpture on integument as ♀.

Body: 980 (natural), 1050 (fully distended) long.

Head: 98 long, 135 wide at eyes, 128 below eyes, 138 on cheeks, 123 at bases of cheek. Eye 60 long, 38 wide, 59 at interval; cheek 50 long laterally, occiput below eye 38 long, ocellar triangle 51 wide, 32 tall, ocelli 14 to 15 across. Latero-ocellar seta 8 long, interocellar setae 28 long, 28 apart from each other, postocular seta series from innermost: 24, minute, 15, minute, 15, 15 long, minute B2 and B4 sometimes move out of the regular positions or particularly B4 attains a length as long as B3 or B5, this irregularity and monstrosity is rather common among the ♂♂, but strongly limited among the ♀♀. Mouthcone 190 long, maxillary palpi 39 long together. Antenna 270 long, length (width) of segments: 22 (26, 23 at tip), 40 (22), 53 (18), 49 (17), 33 (15), 51 (17), 10 (5); sense cone on III 20 tall.

Prothorax: 108 long, 153 wide along fore margin, 155 along hind margin, 163 at broadest; postero-angle setae both 65 long, mesal posteromarginal setae 25 long, about 13 pairs of disc setae (about 13 long) including 2 thicker pairs of subanteromarginal (20 long) and 1 thicker pair of subpostero-angle (25 long).

Pterothorax: 165 long dorsally, 213 long laterally, 215 wide at shoulders of mesothorax; meso-

notum 68 long, metanotum I 65 long, II 33 long; mesospinula 68 long, mesofurca (poorly developed) 50 wide, metafurca 40 wide; lateral setae of mesonotum 30 long, mesal setae 15 long and 15 away from hind margin, mesal setae of metanotum 38 long and 15 away from fore margin. Legs, hind tibia with a row of 7 short yellow setae and 3 terminal setae (28 longest). Wing 610 long, 43 wide at middle, 63 wide at base; 24 setae on costa, last seta 55 long, 17 setae on fore vein, last seta 45 long, 13 setae on hind vein, last seta 58 long, 5 setae on scale vein, last 2 setae and disc seta subequal in length, venial last seta 40, penultimate 43, disc seta 45 long.

Abdomen: 575 long, 160 wide on IV; comb on tergum VIII essentially absent (several tiny serration irregularly distributed); tympana on sterna III-VII, broad rod-shape, 12 to 13 long and 35 to 55 wide. Terminal IX-X segments (fig. 10) laterally 108 long together; subpostero-angle "horn-like" projection on tergum IX prominent, 18 long, 6 wide at base, darker colored ("horn" projection is not peculiar on this species, but common among all the other congeners); on IX, 2 long and thick setae on dorsum, B1 and accessory marginal setae I both 22 long, thick, the latter slightly curved inward, dorsal setae minute (chaetotaxy on dorsum is typical for the subgenus); B2 60 long at sides, accessory marginal setae II minute and cephalad from and near B2, B3 48 long, clasper (curved thick seta) and another long seta nearby at tip of sternum IX both 70 long; on X, B1 minute (about 3 long) black spurs separately on 2 elevated mounds (laterally elevated over a long distance but apically elevated over a short distance only) (stubby B1 is peculiar among the subgenus), B2 thin and short, 2 long accessory marginal setae (about 24 long); phallus 100 long, 43 wide basally.

Holotype ♀ (USNM 70062), Tonga, Tongatabu, Nukualofa, rose flowers, 8.VIII.1926, J. E. Hoffmeister. Allotype ♂, same data as holotype. Paratypes: Tonga: 2♀♀, 2♂♂, same data as holotype (USNM); 5♀♀, 2♂♂, same data as holotype except 12 & 16.VIII.1926 (USNM); 9♀♀, 5♂♂, Tongatabu, Nukualofa, *Leucaena glauca* flowers, II.1956, N. L. H. Krauss (Illinois Nat. Hist. Surv.); 5♀♀, 2♂♂, Vavau, Lifuku (sic, but probably Haabai, Lifuka I.), gardenia flowers, 23.VIII.1926, J. E. Hoffmeister (USNM); 4♀♀, 3♂♂, Vavau, Panga, II.1956, Krauss (INHS); 3♀♀, 3♂♂, Vavau, Neiafu, II.1956, Krauss (INHS). Fiji: 2♀♀, 2♂♂, Viti Levu, Suva, rose flowers, 4.IX.1926, Hoffmeister (USNM); 6♀♀, 3♂♂, Viti Levu, Lautoka, *Leucaena glauca* flowers, 25.VIII.1928, W. Greenwood (IBE 547) (BMNH); 4♀♀, Viti Levu, Lami quarry, 24.VII.1938, Zimmerman (Moulton 5396) (BISHOP); 2♀♀, Viti Levu, Singatoka, 17.V.1941, Krauss (Moulton 5625) (CAS, BISHOP); 1♀, Viti Levu, Nandarivatu, 6.IX.1938, Zimmerman (Moulton 5391) (BISHOP); 7♀♀, 1♂, Viti Levu, Suva, flowers of an ornamental tree, I.1955, Krauss (INHS); 1♀, Viti Levu, Lami, flowers of a shrub, I.1955, Krauss (INHS); 1♀, 3♂♂, Viti Levu, Deumba, flowers of a vine, I. 1958, Krauss (INHS); 5♀♀, Ovalau, Draiba trail, 150-300 m, 8.VII.1938, Zimmerman (Moulton 5398), (CAS, BISHOP, USNM); 4♀♀, Ono, Mbualu, 23.IV.1941, Krauss (Moulton 5626) (CAS, BISHOP).

Rhabdotus, n. sp. from Tonga and Fiji, *rapaensis* Moulton from Rapa, and *modicus* Bianchi from Samoa are closely related species. *Rhabdotus* which has deeply striated pronotum and moderately developed head setae is readily separated from *rapaensis* which has moderately developed head setae but smooth pronotum, and from *modicus* which has deeply striated pronotum but all minute head setae. These three species are also readily separated from all the other congeners by their finely striated metanotal sculpture, absence of accessory setae on sterna, and stubby B1 on ♂ tergum X. In a preliminary review of the subgenus *Isothrips* (Sakimura 1967a), an unnamed species, appearing in the key as No. 12, corresponds to *rhabdotus*.

Rhabdotus must be a very common species in Tonga and Fiji, because as many as 88

specimens were found in the USNM, INHS, BMNH, CAS, and Bishop Collections. For selecting the holotype and allotypes, consideration was given to perfectly mounted specimens in the earliest collection. All the specimens in CAS and Bishop Collections from Fiji were misidentified as *rapaensis* or *malloti* by Moulton (1944: 270), and the specimens in BMNH collection from Fiji were found with a manuscript name given by Bagnall.

Taeniothrips (Isochaetothrips) bianchii Sakimura, new species Fig. 12-16.

DIAGNOSIS: Large species, body brown with all tibiae and all tarsi pale brown, antenna brown with I and VIII lighter and III yellowish brown, wing light gray brown with vaguely defined but distinct nearly clear bands at base, middle, and tip, body setae dark brown; occiput covered with deep striae but pronotum shallowly striated, metanotum reticulated mesad and elongate-reticulated cephalad and laterad, metepimeron reticulated; well developed body setae all over, no accessory seta on sterna; very short comb on tergum VIII.

♀ (Holotype). Chestnut brown with head somewhat lighter and abdomen darker, particularly toward terminal; legs brown as body with apical tip of all femora and whole part of all tibiae and tarsi pale brown; antenna brown as head with I somewhat lighter, III yellowish brown, extreme bases of IV-V pale, VIII distinctly lighter than VI-VII; wing light grayish brown with 3 rather vaguely defined nearly clear bands, basal 1/4 distinctly nearly clear, the next 1/5 distinctly brown and darkest on entire wing, the next 1/5 nearly clear, the next 1/4 weakly brown, the last 1/8 (wing tip) nearly clear again, scale nearly clear as basal band but apical tip distinctly brown; ocellar crescent red, body setae uniformly dark brown.

Occiput (fig. 12) covered with 6 to 7 deep and little anastomosing striae, 6 to 7 very deep and sharply pointed notches on cheek, front also deeply striated; antenna, I-II deeply striated, the rest shallowly striated, profile wavy and microtrichia conspicuous; pronotum (fig. 12) covered with shallow, sparsely-spaced, moderately anastomosing striae, about 26 lines including 3 to 4 deep wrinkles on face of steep premarginal bulge; mesonotum (fig. 13) striated deeply along middle zone and again along hind and lateral margins, but rather moderately on remainder, sparsely spaced cephalad but more finely caudad; metanotum (fig. 13) deeply reticulated mesad, transversely elongate-reticulated cephalo-mesad, elongate-reticulated or nearly striated laterad; metepimeron (fig. 16) finely and deeply reticulated; abdomen rather moderately striated in depth, tergum I deeply striated, tergum IX practically smooth, terga II-VIII striated at sides only, a dentated line each on both sides of terga V-VIII conspicuous, lateroterga deeply striated, pleura practically smooth, sterna striated all over. Hind margins of terga with few minute teeth irregularly at extreme sides only, lateroterga with minute teeth sparsely on whole margin, pleura with 5 to 6 rather shallowly clefted lobes, sterna practically smooth.

Body: 1650 (natural), 1750 (fully distended) long, (all measurements in μ).

Head (fig. 12): 125 long, 165 wide at eyes, 155 below eyes, 170 at cheeks, 145 at bases of cheek; cheek strongly arched, strongly constricted below eye and at base, front weakly concave below anterior ocellus but a weak and short median ridge above bases of antenna, ocellar hump well elevated. Eye 80 long, 52 wide, 60 at interval; cheek 60 long laterally, occiput below eye 45 long, ocellar triangle 58 wide and 43 tall, ocelli 20 across. Setae on head well developed, 3 long setae (23 to 26 long) among dorsal phase of eye highly conspicuous; ante-ocellar wanting, latero-ocellar 15 long, interocellar 33 long, caudolaterad from and near anterior ocellus and 35 apart from each other; postocular seta series: B1 (innermost) 33 long, caudad from and near posterior ocelli and 45 apart from each other, B3 28, B5 30, B6 19 long, B2 and B4 minute. Mouth-cone 250 long, slender toward tip, maxillary palpi long and slender (20, 13, 25, together 58 long), II shortest. Antenna (fig. 14) 345 long, $2.7 \times$ as long as head, length (width) of segments: 33 (30, 25 at tip), 45 (28), 68 (23), 65 (22), 40 (17), 68 (18), 6 (7), 8 (5), very long VI with very

short style and subequal III, IV, and VI, sense cones long and slender, 33 tall on III.

Prothorax (fig. 12): 170 long, 180 wide along foremargin, 220 along hind margin, 230 at broadest; premarginal bulge and trough moderately developed; setae well developed, postero-angle both 113 long, mesal posteromarginal 55 long, other minor posteromarginal 25 to 30 long, about 25 pairs of thin but long (about 25 long) disc setae including 2 thicker pairs of subanteromarginal (33 long) and 1 thicker pair of subpostero-angle (45 long).

Pterothorax (fig. 13): 250 long dorsally, 300 long laterally, 315 wide at shoulders of mesothorax; mesonotum 93 long, metanotum I 105 long, II 50 long; apodemes on sterna well developed, mesospinula 120 long, both meso- and metafurcae 70 wide; lateral setae on mesonotum 50 long and thick, mesal setae 30 long and 25 away from hind margin, mesal setae on metanotum thick, 65 long and 17 away from fore margin, outer setae 48 long; meso- and metasterna with many long (about 20 long) but thin disc setae, a pair each on both sterna as long as 70 to 80 long. Legs, hind tibia 210 long, with a row of 9 long yellow setae, with 3 yellow terminal setae (30 longest). Wing 1030 long, 68 wide at middle, 105 wide at base; veinal setae regularly spaced on both veins, 34 setae on costa, last seta 95 long (also 80 long near base), 25 setae on fore vein, last seta 65 long, 18 setae on hind vein, last seta 95 long, 5 setae on scale vein, last seta 70, penultimate 85 long (longest), disc seta 83 long, chaetotaxy on scale is typical for the subgenus.

Abdomen: 1050 long (distended), 340 wide on IV; chaetotaxy normal, no accessory seta on sterna; comb on tergum VIII complete but inconspicuous, about 13 pairs of very thin and short (about 7 long) teeth; terga VIII-X (fig. 15): 100, 110, 80 long, X 70 wide at base, 24 wide at tip, suture 3/4 way up. Terminal setae very long and thick; on IX, B1 120, B2 145, B3 125 long, accessory marginal setae I-II about 60 long, dorsal setae 60 long, thick and curved inward; on X, B1 120, B2 110 long. Ovipositor 350 long.

♂ (Allotype). Orange yellow with brownish tinge on all femora; antenna brown with I hyaline, II-III lighter, extreme bases of IV-V pale, VIII lighter; wing clear with narrow weakly brownish band at 1/3 way from base, but 2nd brown band at 2/3 way nearly indiscernible; ocellar crescent red, body setae light brown. Sculpture as ♀ on every sclerite.

Body: 1100 (natural), 850 (strongly contracted) long. (Specimen is substantially disarranged.)

Head: ca. 100 long, ca. 130 wide; 3 long setae among dorsal phase of eye conspicuous, interocellar setae about 20 long, postocular seta series: 30, minute, 22, minute, 22, 16 long; mouthcone ca. 175 long. Antenna 315 long, length (width) of segments: 26 (28, 22 at tip), 40 (25), 57 (18), 58 (18), 38 (15), 70 (18), VII-VIII: 15 (6) (both partly fused), VI considerably longer than III-IV.

Prothorax: 125 long, ca. 160 wide; postero-angle setae 68 (outer), 70 (inner) long, mesal posteromarginal setae 35 long, other minor setae on hind margin 17 to 25 long, about 23 pairs of disc setae (15 to 20 long) including 2 thicker pairs of subanteromarginal (25 long) and 1 thicker pair of subpostero-angle (28 long).

Pterothorax: ca. 165 long dorsally, ca. 200 long laterally, ca. 195 wide at shoulders of mesothorax; mesospinula 75 long; mesal setae on metanotum 40 long and 13 away from fore margin, outer setae 28 long. Legs, hind tibia with a row of 9 setae, longest terminal seta ca. 28 long. Wing, 700 long, 48 wide at middle, 73 wide at base; 26 setae on costa, last seta 63 long, 22 setae on fore vein, last seta 50 long, 15 setae on hind vein, last seta 60 long, 5 setae on scale vein, last seta 43, penultimate 50, disc seta 48 long.

Abdomen: ca. 620 (natural), 460 (strongly contracted) long; comb on tergum VIII practically wanting; tympana on sterna III-VII in small narrow rod-shape, about 30 wide and 6 long at middle. Chaetotaxy on tergum IX typical for the subgenus with 3 pairs of long setae on dorsum (disarranged and unsuitable for drawing); on IX, B1 38 long and 20 away from hind margin, accessory marginal setae I 33 long, caudolaterad from and near B1, dorsal setae 25 long, thick and curved inward, cephalolaterad from and near B1; B2 near postero-angle, 73 long and

thicker than B1, accessory marginal setae II minute, cephalolaterad from and near B2, B3 60 long; clasper on sternum IX 90 long and thick, another slightly thinner seta nearby also 90 long; on X, 2 pairs of long setae (B1 and accessory marginal I), about 25 long; phallus 110 long.

Holotype ♀, New Caledonia, Noumea, hills back of, flowering *Jasminum*, VIII.1940, F. X. Williams. Allotype ♂, New Caledonia, Dothio near Thio, Myrtaceae, 8.X.1940, Williams (both in HSPA-Bianchi collection). Paratypes: New Caledonia: 4♀♀, same data as holotype (HSPA, Sakimura); 1♀, Noumea, croton, 15.VIII.1940, Williams (HSPA); 1♀, Noumea, *Acacia laurifolia* (maritime), 6.IX.1940, Williams (HSPA); 2♀♀, Oua-Tom, flowers of *Melaleuca*, 20.IX.1940, Williams (HSPA, Priesner); 1♀, Noumea, hills back of, flowering tree, 24.IX.1940, Williams (HSPA); 1♀, Hienghene, *Cerbera* flowers, 5.X.1940, Williams (HSPA); 2♀♀, same data as allotype (HSPA). Some other specimens mentioned by Bianchi (1945: 274) were not available for examination.

Bianchii, n. sp. is most closely related to *insignis* Bianchi which was also collected in New Caledonia, and both are similarly separated from all other congeners by their reticulated and elongate-reticulated metanotum and by the absence of accessory setae on sterna. *Bianchii* is, however, readily separated from *insignis* by its brown body with brown femora and yellow antennal III, banded wing, finely reticulated metepimeron, long antenna, and very short comb (inconspicuous) on tergum VIII. *Insignis* is characterized by its yellow body with yellow femora and gray brown antennal segment III, uniformly pale brown wing, elongate-reticulated metepimeron, short antenna, and long comb on tergum VIII. In a preliminary review of the subgenus *Isochaetothrips* (Sakimura 1967b), the unnamed species, appearing in the key as No. 7, corresponds to *bianchii*.

Male of *insignis* is not yet known, but that of *bianchii* described here need not be confused with the former, because of its distinct metepimeron sculpture, banded wing, and no comb on tergum VIII.

Bianchii was previously recorded under a name of *Isochaetothrips seticollis* (Bianchi 1945: 273), but was found to be a different species from the latter which has a finely striated metanotum. This species has been named after Fred Bianchi in honor of his contributions to the study of Pacific Thysanoptera.

Thrips (Isothrips) compressicornis Sakimura, new name

(for *Thrips* (*I.*) *brevicornis* Mlt. & Stein., nec *Thrips brevicornis* Priesner)

Isoneurothrips brevicornis Moulton & Steinweden, 1932: 165, fig.

Thrips (*Isothrips*) *brevicornis*: Priesner, 1940: 54.—Sakimura, 1967a: 433.

Thrips flavus f. *brevicornis* Priesner, 1920: 59.

Thrips brevicornis: Titschack, 1957: 278

The new combination made by Priesner (1940) and Sakimura (1967a) for *brevicornis* Moulton & Steinweden created its secondary homonymy with *brevicornis* Priesner. A new name is herewith designated for the former. A customary designation honoring the author is not feasible in this case, because such a name is already preoccupied. John B. Steinweden, junior author of this species, who still survives, was informed of this change of name prior to this publication. The new name denotes a peculiarly compressed antenna such as that of this species. Validity in seniority on the elevated specific rank of *brevicornis* Priesner is in accordance with the international code, articles 10b, 45, and 46.

Taeniothrips varicornis Moulton, replacement name

(for *Taeniothrips setipennis* Karny, nec *Taeniothrips (I.) setipennis* Bagnall)

Megalurothrips setipennis Karny, 1925: 32, fig.

Taeniothrips setipennis: Priesner, 1938: 510.

Taeniothrips varicornis Moulton, 1928b: 292, fig.—Priesner, 1938: 510.

Physothrips setipennis Bagnall, 1916: 399.

Isochaetothrips setipennis: Moulton, 1928a: 227.

Taeniothrips (Isochaetothrips) setipennis: Sakimura, 1967b: 724.

The new combination made by Sakimura (1967b) for *setipennis* Bagnall created a secondary homonymy of *setipennis* Karny. An existing synonymous name, *varicornis* Moulton, for the latter is herewith reinstated for a replacement name. The type and the type locality of the taxon remain, however, with those of *setipennis* Karny, but the seniority of the taxon takes that of *varicornis* Moulton. This is in accordance with the international code, articles 60a and 72d.

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