Key to the ant genera of Micronesia

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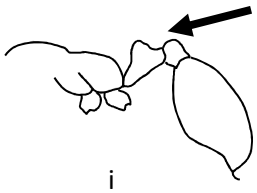
Key to sub-families

1 (i) 2-segmented petiole ..... Myrmicinae

(ii) 1-segmented petiole or none apparent 2



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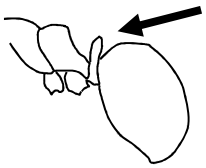

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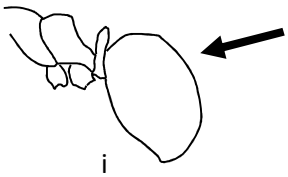
2 (i) Profile of gaster without constriction 3

(ii) Distinct weak constriction between 1st and 2nd gastral tergites, sting present 4



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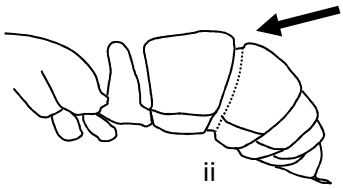


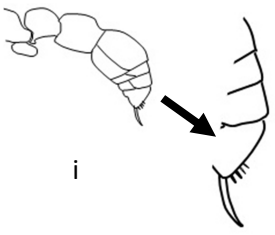
ii

3 (i) Tip of gaster with a circular opening, often fringed with hairs..... Formicinae

(ii) Tip of gaster with a slit-like opening or no obvious opening, never fringed with hairs ..... Dolichoderinae

4 (i) Last segment of gaster with a row of small spines along outer and trailing edge ..... Cerapachynae *(Cerapachys)*

(ii) Last segment of gaster smooth in profile ..... Ponerinae



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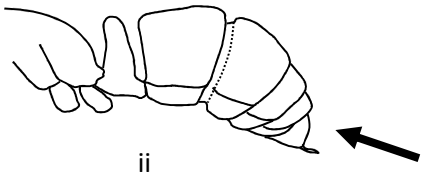


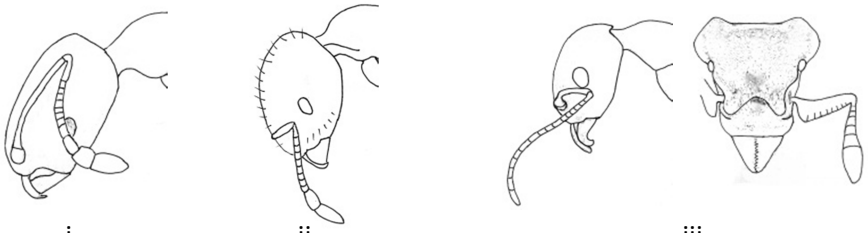
ii

Key to Myrmicinae

1 (i) Antennal club 3-segmented 2

(ii) Antennal club 2-segmented 9

(iii) No distinct antennal club and/or with 6 antennal segments or less (not counting the scape)..... 11



i ii iii

2 (i) Propodeum with a distinct pair of spines 3

(ii) Propodeum smooth and without a spine 13

i ii

3 (ii) In side profile, distinct patch of "puckered" sculpturing above the eye..... *Myrmecina* 7121952

(ii) No distinct "puckered patch of sculpturing above the eye 4

i

4 (i) First segment of gaster dull ..... *Romblonella* (2 species)

(ii) First section of gaster is shiny, may be smooth or hairy 5

5 (i) Forward facing spine on bottom of post-petiole..... 6

(ii) No forward facing spine on bottom of post-petiole..... 7

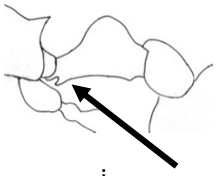
i ii

6 (i) first segment of gaster very hairy..... *Rogeria stigmatica*

(ii) first segment of gaster hairless, or at most a few sparse hairs..... *Pristomyrmex* (5 species)

7 (i) Forward facing spine on bottom of petiole 8

(ii) No forward facing spine on bottom of petiole ..... *Pheidole (8 species)*



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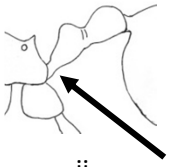
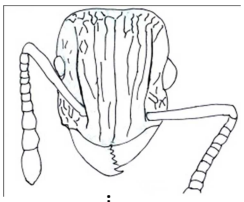


ii

8 (i) front of face sculptured, with two vertical carinae running from antenna sockets to the eyes ..... *Tetramorium* (8 species)

(ii) front of face uniformly punctate and without carinae..... *Cardiocondyla* (5 species)



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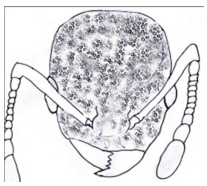

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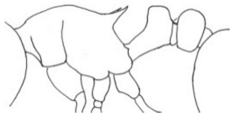
9 (i) Propodeum with a distinct pair of spines 10

(ii) Propodeum without spines ..... *Solenopsis spp*



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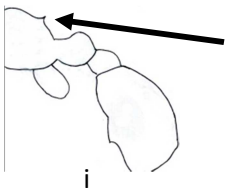
ii

10 (i) Propodeal spines short and "stubby" ..... *Carebara atoma*

(ii) Propodeal spines long, almost reaching to the tip of the petiole ..... *Wasmannia auropunctata*



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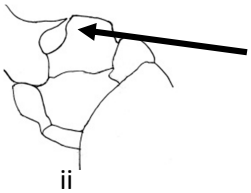
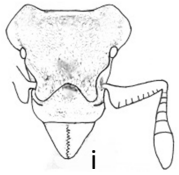


ii

11 (i) Head heart-shaped, antenna with 6 segments or less (not counting the scape)..... *12*

(ii) Head not heart-shaped, antenna with more than 10 segments..... *Aphaenogaster osimensis*



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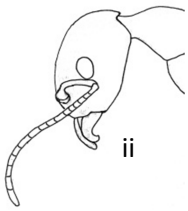
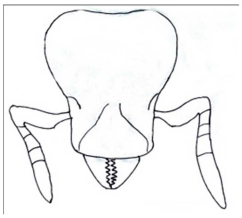


ii

12 (i) Mandibles short and triangular, antenna with 4 segments (not counting the scape) ..... *Pyramica membranifera*

*(ii) M*andibles short and triangular, antenna with 6 segments (not counting the scape) ..... *Eurhopalothrix procera*

(iii) Mandibles elongated, antenna with 4-6 segments ..... *Strumigenys spp*



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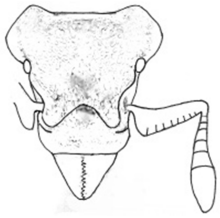

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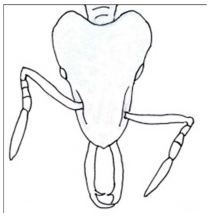
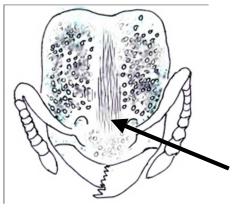


iii

13 (i) A narrow band of vertical striations dividing the left and right side of the face with remainder of face punctate..... *Vollenhovia spp*

(ii) Frontal portion of head either smooth entirely punctate or striate..... *14*



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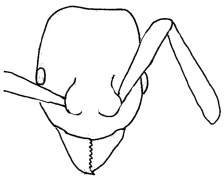
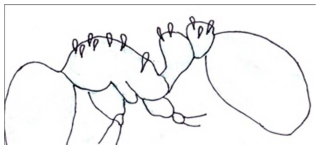


ii

14 (i) Upper surfaces of head and body covered with sparse stout setea that are wider at the tip than at the base ..... *Calyptomyrmex sp*

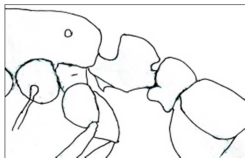
(ii) Head and body without setea, thin hairs may be present..... *15*



i

15 (i) Petiole square and blocky in side profile, femur of rear legs swollen..... *Metapone truki*

(ii) Petiole triangular in side profile, rear femur not swollen..... *Monomorium spp*



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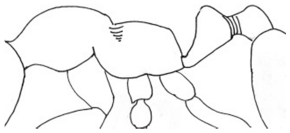


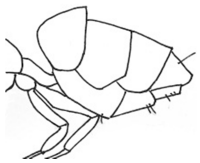
ii

Key to Dolichoderinae

There are only 3 Dolichoderine genera in Micronesia. Of these, *Technomyrmex* is the most difficult because it has recently been split into additional species, each with very small morphological differences. Don't worry if you can't tell these species apart – I have trouble with them as well!

1 (i) Petiole reduced or absent, forward face flat or indistinct 2

(ii) Petiole well defined, taller than wide ..... *Iridomyrmex anceps*



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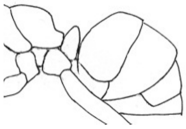
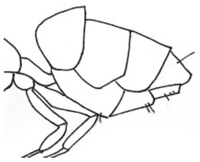


ii

2 (i) Gaster with 4 plates on the upper surface (5th tergite ventral) ..... *Tapinoma melanocephalum*

(ii) Gaster with 5 plates on the upper surface ..... *Technomyrmex* (5 species)



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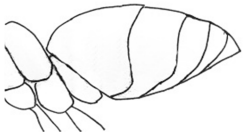


ii

Key to *Technomyrmex*

1 (i) Occipital region of head with one or two erect setea 2

(ii) Occipital region of head without erect setea 3

2 (i) Tarsus of hind leg lighter in color than tibia..... *4*

(ii) Tarsus of hind leg the same color as the tibia..... *Technomyrmex pallipes*

3 (i) Scape extends to the rear margin of head or just beyond when viewed in profile..... *Technomyrmex albipes*

(ii) Scape longer, clearly extending beyond rear margin of head when viewed in profile..... *Technomyrmex vitiensis*

4 (i) Rear face of propodeum almost twice the length of forward face, top face of the mesonotum smooth in profile..... *Technomyrmex kraepelini*

(ii) Rear face of propodeum approximately the same length as the front face, Two small nodules on the rear top portion of the mesonotum near the suture line..... *Technomyrmex difficilus*

Key to Formicidae

1 (i) Small, total length <3 mm (⅛ inch)…… 2

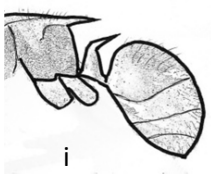
(ii) Larger, always >3 mm (⅛ inch)…… 3

2 (i) Antenna consisting of 9 segments including the scape, usually light-mid brown in color…… *Brachymyrmex obscurior*

(ii) Antenna consisting of >9 segments including the scape, usually a pale yellow color…… *Paraparatrechina minutula*

3 (i) Petiole and propodeum both with a pair of distinct spines…… *Polyrhachis* (2 species)

(ii) No spines on either the propodeum or the petiole…… 4



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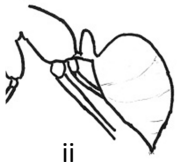


ii

4 (i) Front coxa, femur and tibia both with short erect setea (usually black or dark brown)…… *Paratrechina*

(ii) Front coxa, femur and tibia without short erect setea. Fine hairs may be Present and these are usually white or yellow……..5

i

ii

5 (i) Antennal scape long, about 2 times the length of head…… *Anoplolepis gracilipes*

(ii) Antennal scape less than 1.5 times the length of head…… *Camponotus* (8 species)

i

ii

Key to Ponerinae

1 (i) Side of head bulges out at eyes…… 2

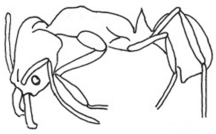
(ii) Side of head regular shape…… 3

i

ii

2 (i) Petiole extends into a distinct spine, eyes large…… *Odontomachus simillimus*

(ii) Petiole without a distinct spine, eyes small…… *Anochetus graeffei*



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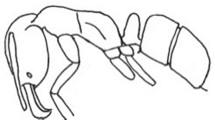

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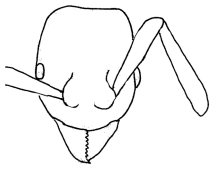
3 (i) Antennal insertions wide apart…… *Plathythyrea parallela*

(ii) Antennal insertions close together…… 4



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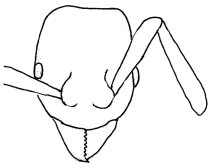
4 (i) Mandibles more or less triangular, wider at tip than at base…… 5

(ii) Mandibles not triangular, either long and slender or about the same width at tip and base…… 8



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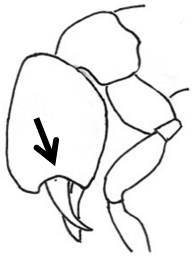
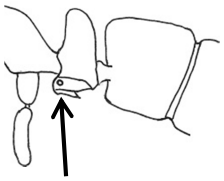
5 (i) Small circular pit near the top of the mandible…… *Cryptopone butteli*

(ii) Mandible does not have a small circular pit…… 6



6 (i) Distinct "keel" under the petiole which has a small translucent "window"..... *Ponera* (5 species)

(ii) Keel may be present but without a translucent window..... 7



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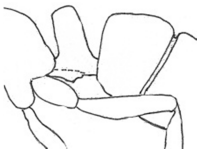
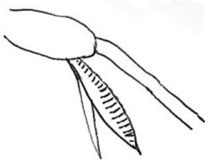


ii

7 (i) Two spurs on the hind legs - one comb-like and another smaller simple spur..... *Pachycondyla* (3 species)

(ii) Only a single, simple spur on the hind leg..... *Hypoponera* (4 species)



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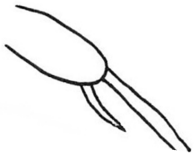
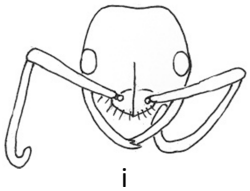


ii

8 (i) Very large distinct eyes > 50 facets..... *Leptogenys falcigera*

(ii) Eyes very small or absent, <10 facets..... *Prionopelta* (2 species)



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ii