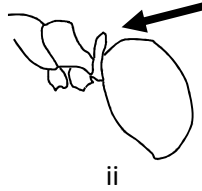
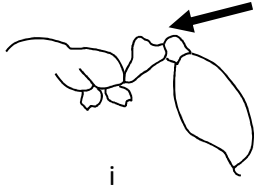


Key to the ant genera of Micronesia

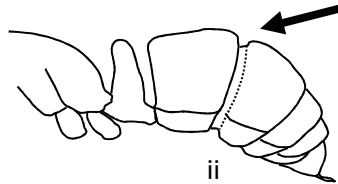
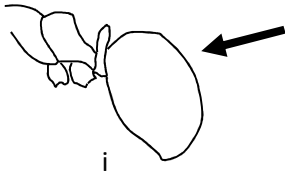
Cas Vanderwoude, Michelle Montgomery
 DRAFT 5 – April 12, 2012

Key to sub-families

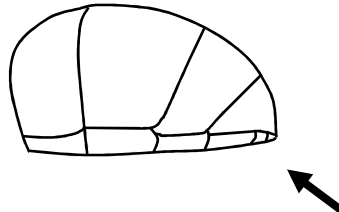
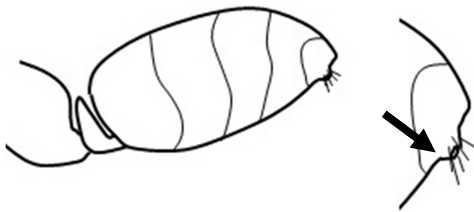
- 1 (i) 2-segmented petiole Myrmicinae
 (ii) 1-segmented petiole or none apparent 2



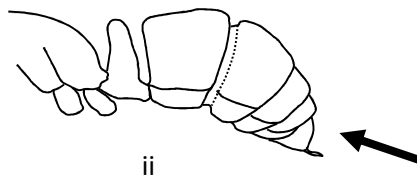
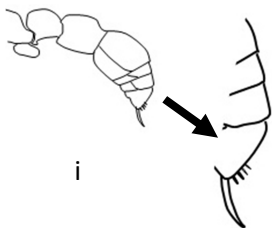
- 2 (i) Profile of gaster without constriction 3
 (ii) Distinct weak constriction between 1st and 2nd gastral tergites, sting present 4



- 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 Cerapachyinae (*Cerapachys*)
 (ii) Last segment of gaster smooth in profile Ponerinae

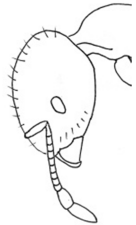


Key to Myrmicinae

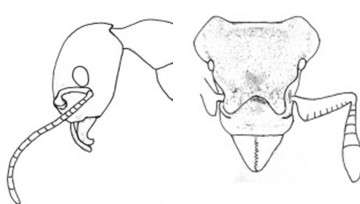
- 1 (i) Antennal club 3-segmented 2
 (ii) Antennal club 2-segmented 9
 (iii) No distinct antennal club and/or with 6 antennal segments or less
 (not counting the scape)..... 11



i

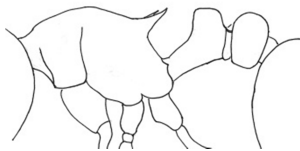


ii



iii

- 2 (i) Propodeum with a distinct pair of spines 3
 (ii) Propodeum smooth and without a spine 13



i



ii

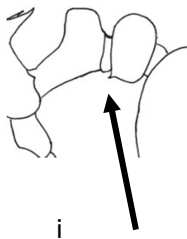
- 3 (ii) In side profile, distinct patch of "puckered" sculpturing above the eye..... *Myrmecina* 7121952
 (ii) No distinct "puckered patch of sculpturing above the eye 4



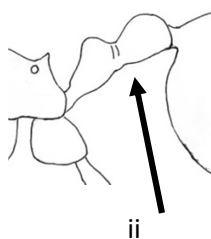
i

- 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



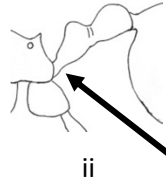
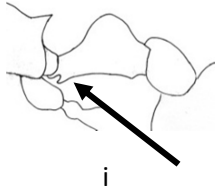
i



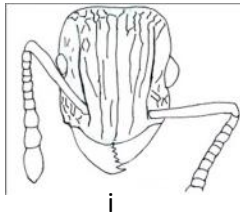
ii

- 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)

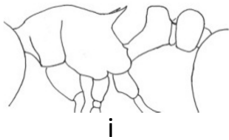
- 7 (i) Forward facing spine on bottom of petiole 8
(ii) No forward facing spine on bottom of petiole *Pheidole* (8 species)



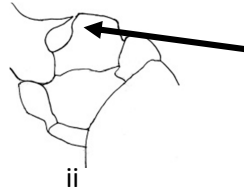
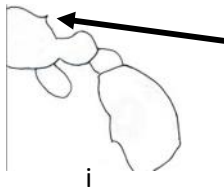
- 8 (i) front of face sculptured, with two vertical carinae running from antenna sockets to the eyes *Tetramorium* (8 species)
(ii) front of face uniformly punctate and without carinae..... *Cardiocondyla* (5 species)



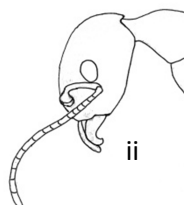
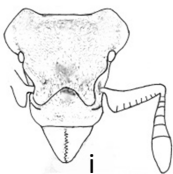
- 9 (i) Propodeum with a distinct pair of spines 10
(ii) Propodeum without spines *Solenopsis* spp



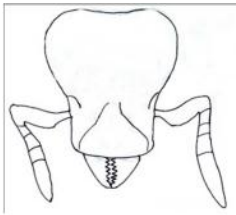
- 10 (i) Propodeal spines short and “stubby” *Carebara atoma*
(ii) Propodeal spines long, almost reaching to the tip of the petiole *Wasmannia auropunctata*



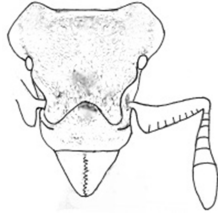
- 11 (i) Head heart-shaped, antenna with 6 segments or less (not counting the scape)..... 12
(ii) Head not heart-shaped, antenna with more than 10 segments..... *Aphaenogaster osimensis*



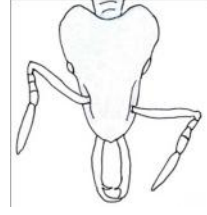
- 12 (i) Mandibles short and triangular, antenna with 4 segments
(not counting the scape) *Pyramica membranifera*
- (ii) Mandibles short and triangular, antenna with 6 segments
(not counting the scape) *Eurhopalothrix procera*
- (iii) Mandibles elongated, antenna with 4-6 segments *Strumigenys spp*



i

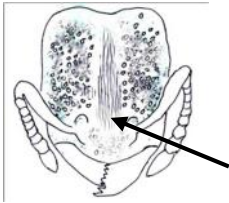


ii

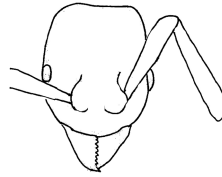


iii

- 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



i



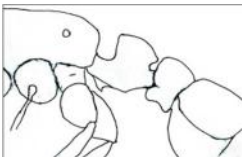
ii

- 14 (i) Upper surfaces of head and body covered with sparse stout setae
that are wider at the tip than at the base *Calyptomymex sp*
- (ii) Head and body without setae, 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*



i

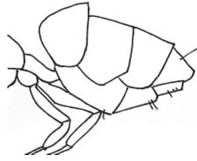


ii

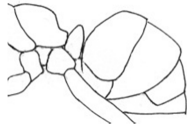
Key to Dolichoderinae

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*

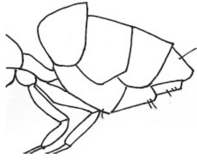


i

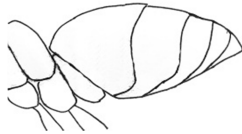


ii

- 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)



i



ii

Key to *Technomyrmex*

- 1 (i) Occipital region of head with one or two erect setae 2
 (ii) Occipital region of head without erect setae 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 difficilis*

Key to Formicidae

- 1 (i) Small, total length <3 mm ($\frac{1}{8}$ inch)..... 2
 (ii) Larger, always >3 mm ($\frac{1}{8}$ 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



- 4 (i) Front coxa, femur and tibia both with short erect setae (usually black or dark brown)..... *Paratrechina*
 (ii) Front coxa, femur and tibia without short erect setae. Fine hairs may be Present and these are usually white or yellow.....5

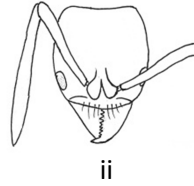
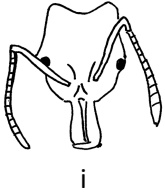


- 5 (i) Antennal scape long, about 2 times the length of head..... *Anoplolepis gracilipes*
 (ii) Antennal scape less than 1.5 times the length of head..... *Camponotus* (8 species)

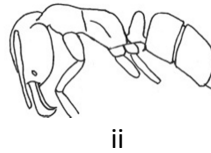
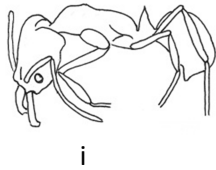


Key to Ponerinae

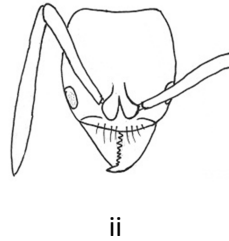
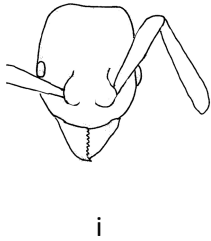
- 1 (i) Side of head bulges out at eyes..... 2
 (ii) Side of head regular shape..... 3



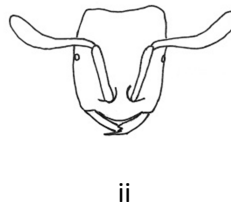
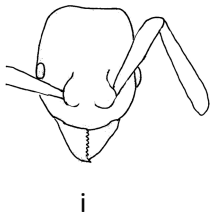
- 2 (i) Petiole extends into a distinct spine, eyes large..... *Odontomachus simillimus*
 (ii) Petiole without a distinct spine, eyes small..... *Anochetus graeffei*



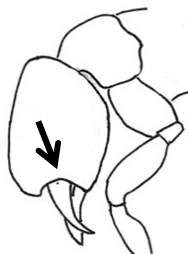
- 3 (i) Antennal insertions wide apart..... *Plathythreia parallela*
 (ii) Antennal insertions close together..... 4



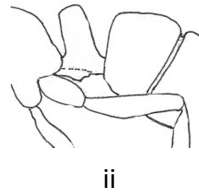
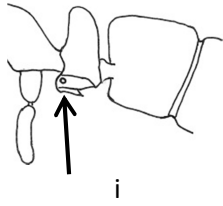
- 4 (i) Mandibles more or less triangular, wider at tip than at base..... 5
 (ii) Mandibles not triangular, either long and slender or about the same width at tip and base..... 8



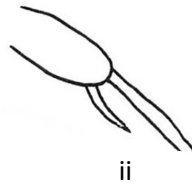
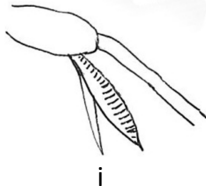
- 5 (i) Small circular pit near the top of the mandible..... *Cryptopone butteli*
 (ii) Mandible does not have a small circular pit..... 6



- 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



- 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)



- 8 (i) Very large distinct eyes > 50 facets..... *Leptogenys falcigera*
- (ii) Eyes very small or absent, <10 facets..... *Prionopelta* (2 species)

