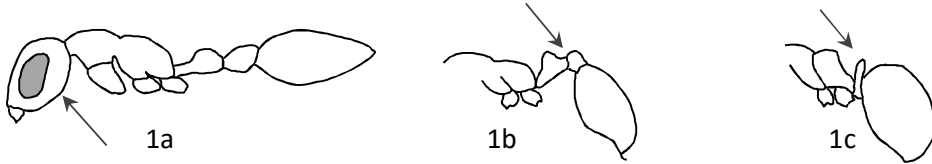


Key to sub families of ants in Hawaii

- 1 2-segmented petiole, very large bulging eyes (1a) Pseudomyrmecinae
(Pseudomyrmex gracilis)
- 2-segmented petiole (1b), eyes normal, reduced or absent 5 Myrmicinae
- 1-segmented petiole or none apparent (1c)..... 2



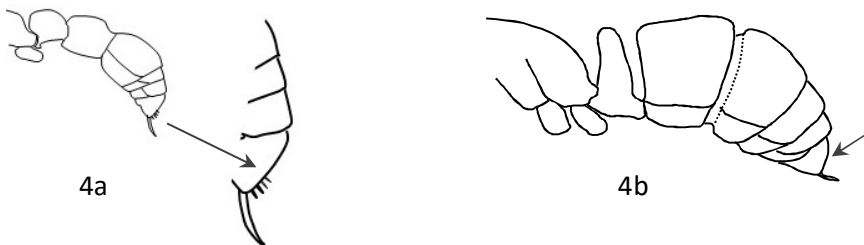
- 2 profile of gaster without constriction (2a)..... 3
- distinct weak constriction between 1st and 2nd gastral tergites,
 sting present (2b)..... 4



- 3 tip of gaster with a circular opening, often fringed with hairs (3a)..... 35 Formicinae
- tip of gaster with a slit-like opening or no obvious opening, never
 fringed with hairs (3b) 43 Dolichoderinae

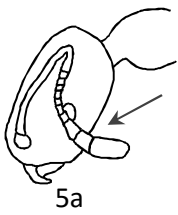


- 4 last segment of gaster with a row of small spines along outer
 and trailing edge (4a) Cerapachyinae
(Cerapachys biroii)
- last segment of gaster smooth in profile (4b)..... 50 Ponerinae

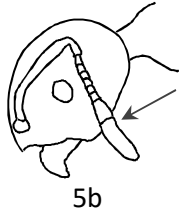


Myrmicinae

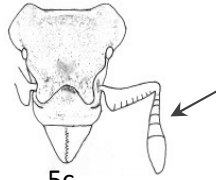
- 5 Antennal club 3-segmented (5a).....6
 Antennal club 2-segmented (5b)..... 9
 No distinct antennal club and/or with 6 antennal segments or less (5c) 10



5a

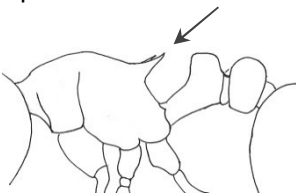


5b

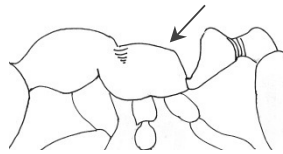


5c

- 6 Propodeum with a distinct pair of spines (6a)..... 7
 Propodeum smooth and without a spine (6b)..... 11 (*Monomorium* and allied spp)

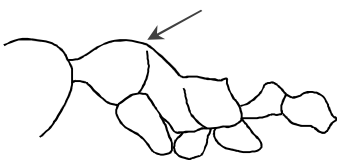


6a

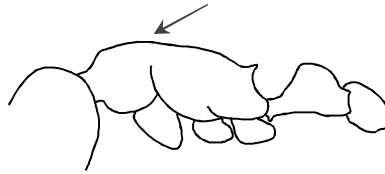


6b

- 7 Pronotum rounded and clearly higher than propodeum (7a)..... 18 (*Pheidole* spp)
 Pronotum and propodeum on the same horizontal plane (7b)..... 8

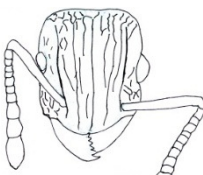


7a

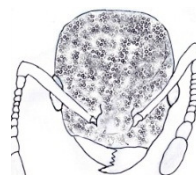


7b

- 8 Antennal scrobes present, body sculpturing striate (8a)..... 20 (*Tetramorium* spp)
 Antennal scrobes absent, body sculpturing not striate (8b)..... 24 (*Cardiocondyla* spp)

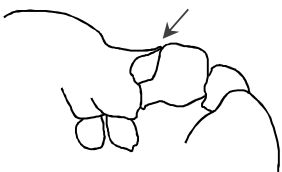


8a

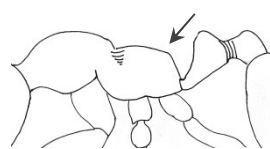


8b

- 9 Propodeum with a distinct pair of spines (9a)..... *Wasmannia auropunctata*
 Propodeum without spines (9b) 29 (*Solenopsis* spp)

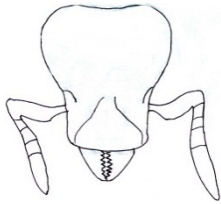


9a

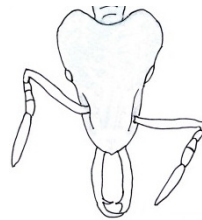


9b

- 10 Head heart-shaped, mandibles short (10a)..... *Pyramica membranifera*
 Head heart-shaped, elongated mandibles (10b)..... 32 (*Strumigenys* spp)



10a



10b

- 11 Head and thorax finely reticulate, giving a uniform dull appearance..... 12
 Head and thorax smooth and shiny..... 14

- 12 Head and thorax uniformly yellow, 13
 Head and thorax uniformly dark brown, rear visible gastral tergite with large shiny and hairless area on dorsal surface..... *Monomorium indicum*

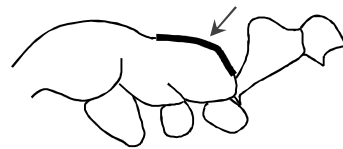
- 13 head, thorax and petiole with pairs of short stiff setae..... *Monomorium pharoanis*
 Head, thorax and petiole with fine hairs (not erect)..... *Monomorium bicolor* gp

- 14 Head and gaster uniformly colored, both distinctly darker than thorax..... *Monomorium floricola*
 Head not the same color as gaster (gaster may be bicolored)..... 15

- 15 Propodeum smoothly convex in profile (15a).....
 Propodeum with distinct dorsal and posterior planes (15b)..... 16

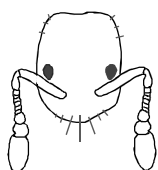


15a

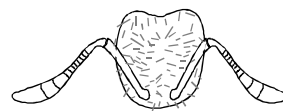


15b

- 16 Head broadly rectangular in front profile, frontal portion of head hairless or nearly so (16a) *Monomorium orientale*
 Head with pronounced occipital lobes in front profile, covered in long hairs (16b). *Monomorium liliuokalanii*

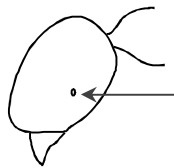


16a

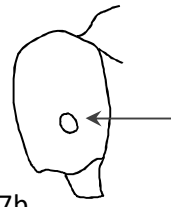


16b

- 17 Eyes very small, consisting of < 5 facets (17a)..... *Monomorium sechellense*
 Eyes larger, with > 5 facets (17b)..... *Monomorium destructor*

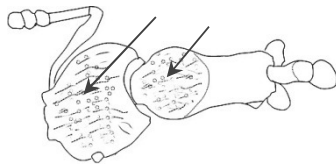


17a

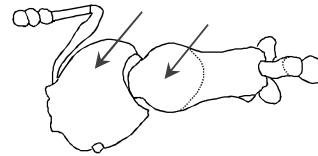


17b

- 18 Head and pronotum sculptured in dorsal view (18a)..... *Pheidole moerens*
 Head and pronotum smooth and shiny in dorsal view (18b)..... 19

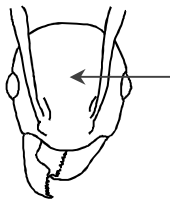


18a

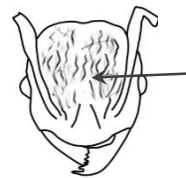


18b

- 19 Region of face between antennal insertions smooth and shiny in frontal view (19a)..... *Pheidole megacephala*
 Region of face between antennal insertions sculptured in frontal view (19b)..... *Pheidole fervens*



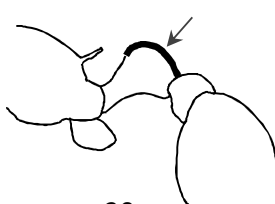
19a



19b

- 20 Petiole rounded in profile (20a)..... 21
 Petiole blocky in profile (20b)..... 22

Top surface of petiole wave-like (20c)..... *Tetramorium insolens*



20a



20b



20c

- 21 Dorsal surface of entire body thickly covered with long hairs, slight upward sweep of propodeal spines. Antennal scrobes smooth and shiny (21a) *Tetramorium lanuginosum*
 Dorsal surface of entire body with sparse long hairs, propodeal spines straight. Antennal scrobes reticulate (21b)..... *Tetramorium tonganum*



21a

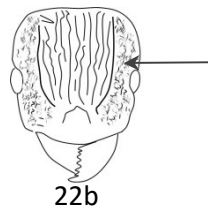
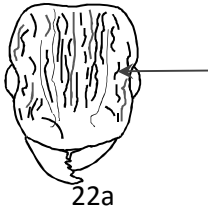


21b

- 22 Large, total length > 3 mm, *Tetramorium bicarinatum*
 Smaller, total length < 3 mm..... 23

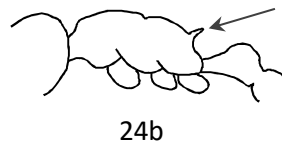
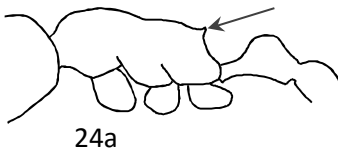
- 23 Antennal scrobes weakly defined, reticulation between the inner edge of scrobe and the eye similar in frontal view (23a)..... *Tetramorium caldarium*

- Antennal scrobes distinct, reticulation between the inner edge of scrobe and the eye different in frontal view (23b)..... *Tetramorium simillimum*



- 24 Propodeal spine short in profile (23a)..... 25

- Propodeal spine moderate-long in profile (23b)..... 26

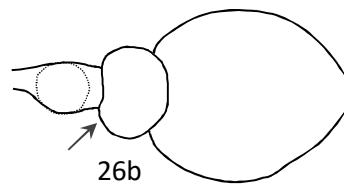
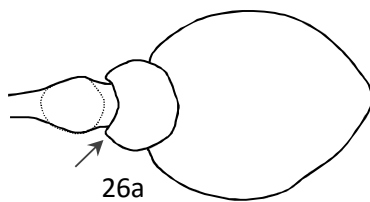


- 25 Gaster uniformly covered in fine hairs..... *Cardiocondyla kagutsuchi*

- Gaster with some hairless sections..... *Cardiocondyla venustula*

- 26 Anterolateral corners of post-petiole pointed in dorsal view (26a)..... 27

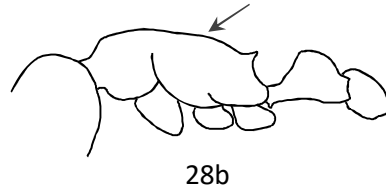
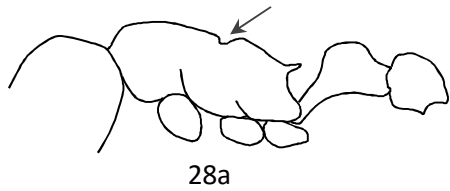
- Anterolateral corners of post-petiole rounded in dorsal view (26b)..... 28



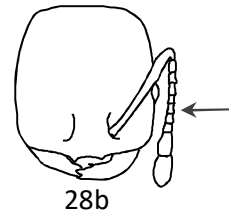
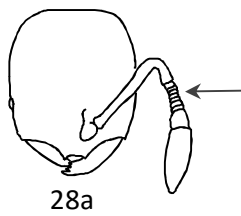
- 27 Gaster distinctly darker than thorax..... *Cardiocondyla obscurior*

- Gaster the same color as thorax..... *Cardiocondyla wroughtoni*

- 28 Dorsal profile of thorax interrupted by a distinct notch between the mesonotum and metanotum (28a)..... *Cardiocondyla emeryi*
 Dorsal profile of thorax relatively smooth and without a notch between the mesonotum and metanotum (28b)..... *Cardiocondyla minutior*

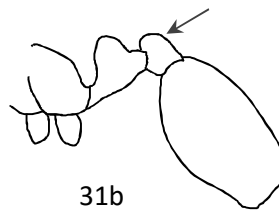
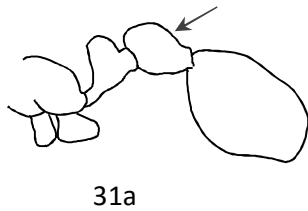


- 29 Small, less than 2 mm, antennal segments between scape and club narrow, wider than high (29a).....29
 Larger, > 2 mm, width of antennal segments between scape and club the same as, or longer than wide (29b)*Solenopsis geminata*

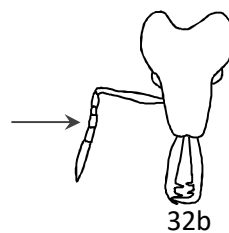
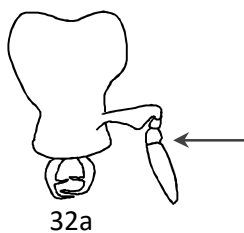


- 30 Body uniformly dark in color..... *Solenopsis papuana*
 Body uniformly light in color or bicolored..... 30

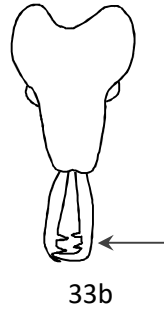
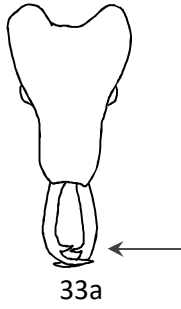
- 31 Post-petiole larger than petiole in profile view (30a)..... *Solenopsis globularia*
 Post-petiole the same size or smaller than petiole in profile view (30b)..... *Solenopsis sp HI01*



- 32 Antenna (including the scape) composed of 4 segments (32a)..... *Strumigenys emmae*
 Antenna (including the scape) composed of 6 segments (32b)..... 33



- 33 Mandibles armed with 2 teeth (33a).....34
 Mandibles armed with 3 teeth (33b).....*Strumigenys rogeri*

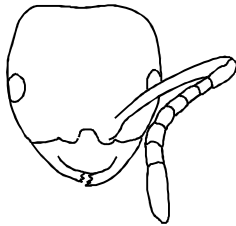


- 34 Pronotum covered with curved “woolly” non-erect hairs..... *Strumigenys godeffroyi*
 Pronotum with sparse erect hairs..... *Strumigenys lewisi*

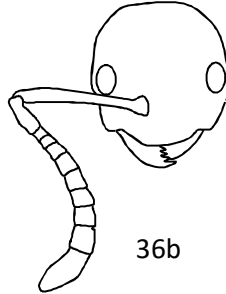
Formicinae

- 35 Small, total length <3 mm 36
 Total length 3 mm or more..... 38

- 36 Antenna consisting of 9 segments including the scape (36a)..... *Brachymyrmex sp nr obscurior*
 Antenna with 10 or more segments (36b)..... 37

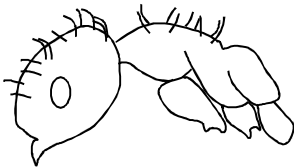


36a



36b

- 37 Dorsal surface of thorax with pairs of erect setae (37a)..... 40
 Dorsal surface of thorax without pairs of erect setae (37b)..... *Plagiolepis alluaudi*



37a



37b

- 38 Face in frontal view covered with thick hairs (38a)..... 39
 Face in frontal view not covered with thick hairs (38b, fine hairs may be present)41

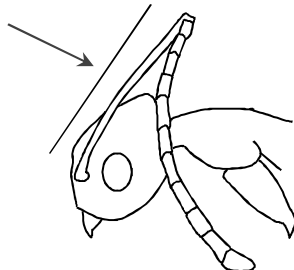


38a

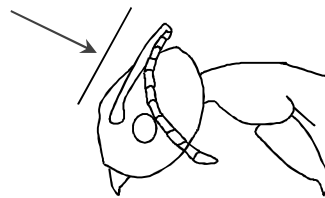


38b

- 39 Antennal scape long, more than 1.5 times the length of head. (39a) *Paratrechina longicornis*
 Antennal scape less than 1.5 times length of head (39b) 40



39a

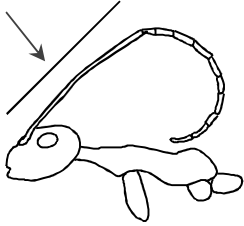


39b

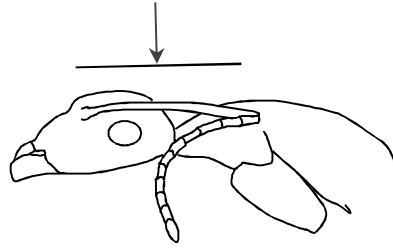
- 40 Lower section of mesonotum with appressed setae, not shiny *Nylanderia bourbonica*

Lower section of mesonotum glabrous and shiny.....*Nylanderia vaga*

- 41 Antennal scape long, more than 2 times the length of head (41a)..... *Anoplolepis gracilipes*
Antennal scape less than 1.5 times the length of head (41b)..... 42

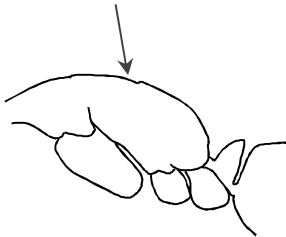


41a

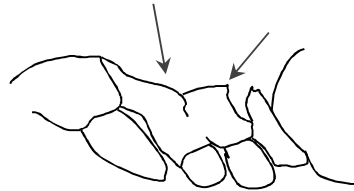


41b

- 42 Mesonotum convex in dorsal view, without teeth or spines on propodeum (42a) *Camponotus variegatus*
Mesonotum concave in dorsal view, propodeum armed with blunt tooth (42b)... *Lepisiota sp.*



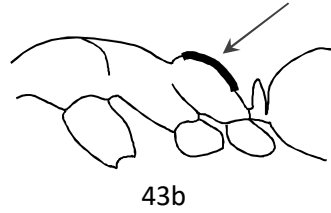
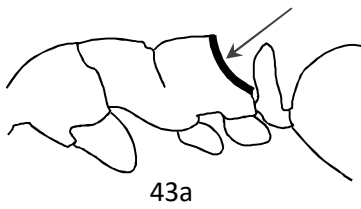
42a



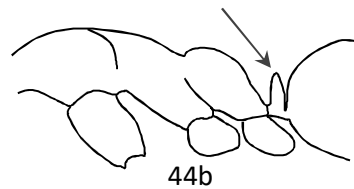
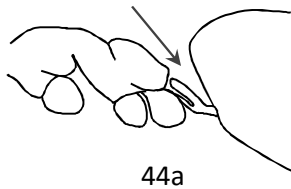
42b

Dolichoderinae

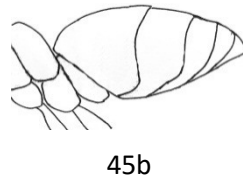
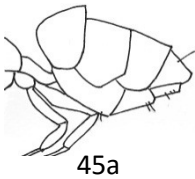
- 43 Rear face of propodeum distinctly concave (43a).....*Ochetellus glaber*
 Rear face of propodeum flat or convex (43b).....44



- 44 Petiole reduced or absent, forward face flat or indistinct (44a) 45
 Petiole well defined, taller than wide (44b) *Linepithema humile*

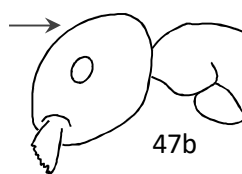
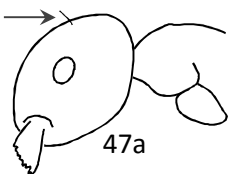


- 45 Gaster with 4 plates on the upper surface (5th tergite ventral) (45a)..... 46 (*Tapinoma spp*)
 Gaster with 5 plates on the upper surface (45b)..... 47 (*Technomyrmex spp*)



- 46 Head and thorax distinctly darker than gaster..... *Tapinoma melanocephalum*
 Head, thorax and gaster uniformly colored..... *Tapinoma sessile*

- 47 Occipital region of head above the eye with one or two erect setae (47a)
 this feature is best seen in profile view.....48
 Occipital region of head without erect setae (47b) 49

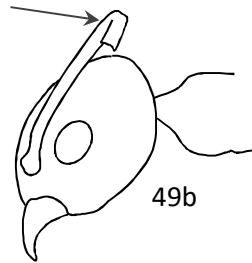
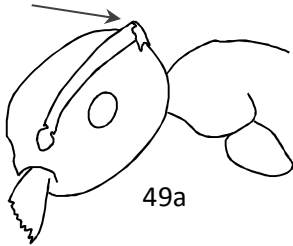


48 Tarsus of hind leg lighter in color than tibia..... *Technomyrmex difficilis*

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

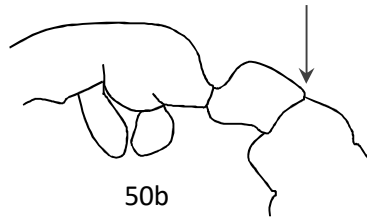
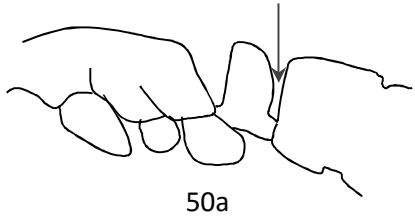
49 Scape short, extending to the rear margin of head when viewed in profile (49a).. *Technomyrmex albipes*

Scape longer, clearly extending beyond rear margin of head when viewed in profile (49b)..... *Technomyrmex vitiensis*

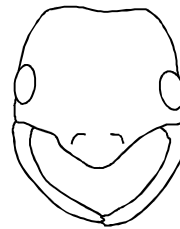
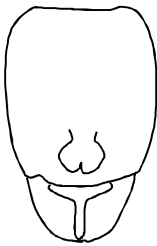


Ponerinae

- 50 Rear and front face of petiole distinct and well-defined (50a) 51
 Rear face of petiole broadly attached to gaster (50b) *Amblyopone zwaluwenburgi*



- 51 mandibles broadly triangular in frontal view (51a)..... 52
 Mandibles long and slender in frontal view (51b) *Leptogenys falcigera*



51a

51b

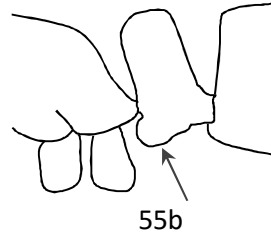
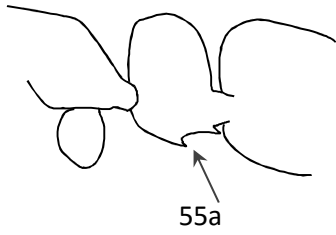
- 52 Legs and antennae distinctly lighter in color than head and thorax53
 Body, legs and antennae all the same color.....54

- 53 Petiole roughly square when viewed in profile *Plathythera sp nr parallela*
 Petiole much higher than wide when viewed in profile *Hypoponera opaciceps*

- 54 Eyes completely absent..... *Hypoconera zwaluwenburgi*
 Eyes small, consisting of a few facets..... 54

- 55 Ventral process of petiole with an acute angle (55a)..... *Ponera swezeyi*

Ventral process of petiole a simple lobe (55b) 56



56 Mesonotum bisected by a distinct suture in profile view, delineating the anepisternum from the rest of the mesonotum (556) *Hypoponera sp. H01*

Mesonotum without a distinct suture (56b) *Hypoponera punctatissima*

