

21. Face white-haired *melanopus* Meigen
— Face bare 22
22. Tarsi entirely black *ruthei* Loew
— Fore and mid knees and base of fore and mid basitarsi yellow 23
23. Size larger, 6-7 *picipes* Meigen
— Smaller, 4 *consimilis* Wahlberg
24. Mid femora with 2 subapical setae
. *campestris* Meigen
— Mid femora with 1 subapical seta 25
25. Mid tibia with 2 or more median ventral setae 26
— Mid tibia with only one median ventral setae 28
26. Hind tibia black *planitarsis* Fallén
— Hind tibia yellow except apex 27
27. Lower calypter with white cilia; wing brown at apex *mannerheimi* Zetterstedt
— Lower calypter with black cilia; wing evenly brown or transparent *armillatus* Wahlberg
28. Antennal stylus inserted at apex of postpedicel
. *lancearius* Hedström
— Stylus middorsal 29
29. Hind tibia usually dark brown
. *lepidus* Staeger
— Hind tibia yellow with black apex
. *cruralis* Wahlberg
30. Mid basitarsus with at least one dorsal seta 31
— Mid basitarsus without dorsal setae 39
31. Lower calypter with pale cilia 32
— Lower calypter with black cilia 33
32. Hind femur with 2-3 subapical setae
. *claviger* Stannius
— Hind femur with only one subapical seta
. *pseudomigrans* Ringdahl
33. Antenna mostly brown black; at most scape yellow beneath 34
— All antennomeres partly yellow, at least beneath 36
34. Both bends of M_{1+2} smoothly rounded and weakly formed *trivialis* Haliday
— Curvature of M_{1+2} strong, almost angular 35
35. Frons usually metallic green
. *plumitarsis* Fallén
— Frons usually metallic blue
. *migrans* Zetterstedt
36. Hind tibia distinctly black at apex
. *festivus* Haliday
— Hind tibia yellow to apex or slightly brownish at extreme apex 37
37. Size smaller, 3.1-3.5
. *propinquus* Zetterstedt; *exiguus* Zetterstedt
— Size larger, 4-5.5 38
38. Fore coxa entirely or mainly white-haired
. *arbutorum* Stannius
— Fore coxa entirely or mainly black-haired
. *cilifemoratus* Macquart
39. Hind tibia black 40
— Hind tibia yellow or having black apex 41
40. Hind basitarsus with 2 dorsal setae
. *urbanus* Meigen
— Hind basitarsus with only one dorsal seta
. *litorellus* Zetterstedt
41. Mid and hind femora with 2-3 subapical setae 42
— Mid and hind femora with only one subapical setae 43
42. Antennal scape and pedicel short, yellow
. *popularis* Wiedemann
— Antennal scape and pedicel much lengthened; antenna black *latipennis* Fallén
43. Mid tibia with at least 2 strong ventral setae 44
— Mid tibia with at most one strong ventral seta 46
44. Lower calypter with pale cilia
. *pseudomigrans* Ringdahl
— Lower calypter with black cilia 45
45. Postpedicel with middorsal stylus; fore coxa usually entirely yellow *discifer* Stannius
— Stylus inserted at apical 1/4 of postpedicel; fore coxa black at base *discimanus* Wahlberg
46. Hind basitarsus with only one dorsal seta 47
— Hind basitarsus with 2 dorsal setae 50
47. Wing with at least first bend of M_{1+2} rectangular, bearing short stub-vein (rudiment of M_2) *griseipennis* Stannius
— Both bends of M_{1+2} normal, smoothly rounded and without trace of stub-vein 48
48. Antenna black *litorellus* Zetterstedt
— Antennal scape distinctly yellow beneath 49
49. Legs usually pale yellow; hind femur without dark spot dorsally at apex *agilis* Meigen
— Legs usually dark yellow or brownish yellow; hind femur with dark spot dorsally at apex *signifer* Haliday
50. Wing with at least first bend of M_{1+2} rectangular, bearing short stub-vein (rudiment of M_2) 51
— Both bends of M_{1+2} normal, smoothly rounded and without trace of stub-vein 52
51. Antenna and hind basitarsus mostly yellow; clypeus at apex straight, adjacent to eyes *nitidus* Fallén
— Antenna black; hind basitarsus brown black; facial clypeus distinctly separated from eyes *diadema* Haliday

52. Antennal stylus inserted at apical 1/4 or 1/3 of postpedicel 53
 — Antennal stylus inserted at middle of postpedicel 54
53. Hind coxa entirely yellow . . *signatus* Meigen
 — Basal half of hind coxa black
 *discimanus* Wahlberg, *medicornis* Verrall
54. Face uniformly hairy 55
 — Face bare 57
55. Hind femur with brown black spot dorsally at apex; hind tibia black at apex
 *nubilus* Meigen
 — Hind femur at most slightly brownish dorsally at apex 56
 — Hind tibia barely darkened at apex
 *latilimbatus* Macquart
57. Antenna black 58
 — At least scape distinctly yellow beneath . . 59
58. Hind tibia yellow to apex . . . *hilaris* Loew
 — Hind tibia black in apical 1/4 . . *notatus* Staeger
59. Hind coxa entirely or mainly yellow . . 60
 — Hind coxa mainly dark, yellow only at apex [females are hardly determinable without males of the same series] 62
60. Mid coxa yellow, darkened only on outer impressed area; postpedicel not much longer than high, with rounded tip . . *linearis* Meigen
 — Mid coxa mainly black; postpedicel at least almost 1.5 times longer than high, with pointed tip 61
61. Antenna black, only scape yellow beneath; postpedicel almost 1.5 times longer than high; mid basitarsus largely darkened
 *acuticornis* Wiedemann
 — Antenna mainly yellow, black dorsally on all segments and towards tip of postpedicel; latter distinctly more than 1.5 times longer than high; mid basitarsus entirely yellow
 *longicornis* Stannius
62. Antennal scape entirely yellow, or at most dark at tip of dorsal surface (care must be exercised here, lest the dense clothing of black hairs on dorsal surface be mistaken for black coloration) 63
 — Scape at least narrowly darkened along whole length dorsally 67
63. Pedicel at least partly, and postpedicel entirely, black 64
 — Pedicel entirely, or almost entirely, and postpedicel partly, yellow 65
64. Mid basitarsus entirely dark; at least always distinctly darker than tibia; pedicel on inside face, broadly black on apical margin
 *simplex* Meigen
- Mid basitarsus almost entirely yellow; pedicel on inside face only narrowly black on apical margin . . *subpennatus* d'Assis Fonseca
65. Anal lobe of wing undeveloped, and anal angle obtuse; hind basitarsus entirely black
 *calinotus* Loew
- Anal lobe of wing well developed, and anal angle right or acute 66
66. Hind tibia distinctly blackish at apex; hind basitarsus entirely black; clypeus bare; lower postocular setae pale golden yellow
 . . *plumipes* (Scopoli), *pectinitarsis* Stenhammar
- Hind tibia entirely yellow; hind basitarsus yellow in at least basal 1/3; clypeus hairy; lower postocular setae pale whitish yellow
 . . *wahlbergi* Zetterstedt, *parvicaudatus* Zetterstedt
67. Antenna black, yellow only along whole length of scape beneath 68
 — Scape partly yellow, at least on inner face about base 69
68. Postpedicel slightly longer than high, distinctly pointed at tip; mid tibia with ventral seta beyond adjacent anterodorsal seta
 *notatus* Staeger
- Postpedicel higher than long, broadly rounded at tip; mid tibia with ventral seta about level with adjacent anterodorsal seta
 *caligatus* Wahlberg
69. Postpedicel broadly yellow on lower margin; hind basitarsus yellow on basal 1/3 or more; anal lobe of wing little developed, anal angle very obtuse *sabinus* Haliday
- Postpedicel entirely black; hind basitarsus entirely black; anal lobe of wing well developed, anal angle at greatest not much more than 90° 70
70. Scutellum with multiple fringe of numerous pale hairs on hind face; wing with bends of M_{1+2} weakly formed and very obtuse; hind tibia usually entirely yellow on anterior face, somewhat brownish at tip of posterior face *pennatus* Meigen
- Scutellum with single fringe of much fewer (about 10) pale hairs on lower margin of hind face; 2 or 3 isolated hairs sometimes present above 71
71. Hind tibia broadly black at apex on both anterior and posterior sides; face, seen from above and illuminated from in front, with distinct pale golden yellow tinge, especially on upper part; frons dusted golden yellow to brownish; wing with anal lobe more developed, anal angle less than 90°
 *argyrotarsis* Wahlberg

- Hind tibia usually less broadly darkened at apex, on anterior side more brownish; face, seen as above, greyish white; frons dusted yellowish grey; anal lobe less developed, anal angle not less than 90° 72
- 72. Antennal stylus inserted at apical 1/3 of postpedicel; bends of M_{1+2} well marked *signatus* Meigen
- Antennal stylus inserted at middle of postpedicel; bends of M_{1+2} more as in *pennatus*, weakly marked and very obtuse 73
- 73. Postpedicel with right-angular apex *inconspicuus* Zetterstedt
- Postpedicel with acute apex *lineatocornis* Zetterstedt
- 74. Mid and hind femora each with 2–5 subapical setae 75
- Mid and hind femora each with only one subapical seta 76
- 75. Fore femur yellow . . . *ungulatus* (Linnaeus)
- Fore femur black . . . *zetterstedti* Stenhammar
- 76. Mid basitarsus with one dorsal seta; mid tibia with 2 or more median ventral setae *brevipennis* Meigen
- Mid basitarsus without dorsal seta; mid tibia with only one ventral setae 77
- 77. Face bare; anal lobe of wing well developed, anal angle about 90° . . . *rupestris* Haliday
- Face hairy, at least on lower part; anal lobe little developed, anal angle much greater than 90° ; frons metallic green . . *longitarsis* Stannius

Genus *Hercostomus* Loew

- 1. Males 2
- Females 27
- 2. Antennal stylus long pubescent, with hairs approximately 1.5 times longer than basal diameter of stylus; notopleuron having strongly pronounced purple spot; male cercus elongate-triangular, strongly incised along ventral margin 3
- Antennal stylus bare, rarely pubescent; notopleuron usually without purple spot; cercus various 4
- 3. Wing at apex with strongly pronounced milky-white spot; antenna black; 6.0–7.0 *nobilitatus* (Linnaeus)
- Wing at apex without milky-white spot; antenna partly yellow; 4.5–6.0 *infuscatus* (Stannius)
- 4. Metapleuron with group of hairs before posterior spiracle; posterior part of mesonotum and scutellum dorsally with hairs; R_{4+5} and M_{1+2} parallel 5
- Metapleuron and posterior part of mesonotum usually bare; scutellum usually without dorsal hairs; R_{4+5} and M_{1+2} usually convergent . . . 13
- 5. Femora mainly dark, at most yellow on extreme apex 6
- Femora mainly yellow, at most infuscated on posterodorsal side 7
- 6. Midtibia swollen, somewhat curved and armed ventrally with 3–4 short spine-like setae which arise from small tubercles; ventral side of midtibia without pubescence; costa conspicuously thickened beyond the end of subcosta; hind tibia completely yellow; larger species, total wing length more than 3.5 *cupreus* (Fallén)
- Midtibia simple, bearing normal pubescence and 1 anteroventral seta; costa not thickened as above; hind tibia distinctly infuscated on apex; smaller species, total wing length less than 3.5 *angustifrons* (Staeger)
- 7. Fore tibia with 1 conspicuous apicoventral seta; 3.7–4.5 *chalybeus* (Wiedemann)
- Fore tibia without apicoventral seta 8
- 8. Wing with costa strongly thickened between humeral crossvein and tip of subcosta . . . 9
- Above section of costa not thickened, distinctly thinner than next section 10
- 9. Cercus yellow; hind basitarsus yellow in proximal half; hind tibia yellow, at most slightly infuscated in apical fifth; costal thickening 2/3 as long as costal cell; 3.0 . . *celer* (Meigen)
- Cercus brownish-black; hind basitarsus mostly entirely dark; hind tibia slightly to distinctly infuscated in apical fifth; costal thickening 1/3 as long as costal cell; 2.5 *brevicornis* (Staeger)
- 10. Face velvet-black; clypeus with short black pubescence; wings clear; cercus distinctly black, well-developed; 2.5–3.0 . . *aerosus* (Fallén)
- Face silvery white; clypeus entirely bare; wings distinctly dark; cercus either brownish black or yellow 11
- 11. Proximal part of CuA_1 more than twice longer than apical part; proximal part of M_{1+2} slightly longer than apical part; cercus well-developed, somewhat round, piceous except for ochreous yellow base; larger species, total wing length on average more than 4.0 *metallicus* (Stannius)
- Proximal part of CuA_1 less than twice longer than apical part; proximal part of M_{1+2} slightly shorter than apical part; cercus rather small;

- smaller species, total wing length less than 4.0 12
12. Cercus ochreous yellow; fore coxa mostly yellow, especially on lateral side; femora and tibiae entirely yellow; tarsi only feebly infuscated; 2.5–3.0 . . . *blankaartensis* Pollet
- Cercus black; fore coxa mostly dark; femora pale yellow; hind tibia slightly to distinctly infuscated in apical 1/4 to 1/3; 2.5–3.0 *assimilis* (Staeger)
13. Femora yellow 14
- Femora black 23
14. Lower postocular setae black 15
- Lower postocular setae light (white or yellow) 17
15. 3rd and 4th segment of fore tarsus dilated; 3.0–3.5 *chetifer* (Walker)
- Fore tarsus simple 16
16. Fore tibia bearing long apicoventral seta; 3.7–4.5 *chalybeus* (Wiedemann)
- Fore tibia without long apicoventral seta; 2.0 *nanus* (Macquart)
17. Antenna partly yellow 18
- Antenna entirely black 20
18. Lower calypter with black cilia; first two segments of fore tarsus with white and black rings; cercus trapezoidal, black-brown; 4.0–4.5 *chrysosygos* (Wiedemann)
- Lower calypter with light (white or yellow) cilia 19
19. Antennal postpedicel 1.5 times longer than high; cercus triangular, without distal emargination, half as long as hypopygium, black-brown, yellow at base, with long yellow cilia; 2.5–3.5 *fulvicaudis* (Walker)
- Antennal postpedicel hardly longer than high; cercus very small, triangular, with shallow distal emargination, 1/4 as long as hypopygium, yellow, black along distal margin, with black cilia; 2.5–3.0 . . . *rothi* (Zetterstedt)
20. Lower calypter with light (white or yellow) cilia 21
- Lower calypter with black cilia 22
21. Fore tibia bearing long apicoventral seta; costa thickened at R_1 ; 4.0–4.5 . . . *gracilis* (Stannius)
- Fore tibia without long apicoventral seta; costa simple; 3.0 *ruficauda* (Zetterstedt)
22. At least 4th segment of fore tarsus dilated, black; 5th segment of same tarsus white at apex; 3.0–3.5 *chetifer* (Walker)
- Fore tarsus simple; 3.0–3.5 *germanus* (Wiedemann)
23. Lower postocular setae black; legs entirely black 24
- Lower postocular setae light (white or yellow) 25
24. Fore tibia bearing long apicoventral seta; frons whitish pollinose; cercus short but broad; 5.0–6.0 *nigrilamellatus* (Macquart)
- Fore tibia without long apicoventral seta; frons silvery-white; fore knee yellow-red; cercus higher than long; 4.0 . . . *argentifrons* Oldenberg
25. Proboscis elongated, equal approximately to 2/3 height of head; wing brown; cercus triangular; 3.0–3.5 *nigripennis* (Fallén)
- Proboscis short 26
26. Mid basitarsus with a number of ventral setae; scutellum haired dorsally; 5.0 *sahlbergi* (Zetterstedt)
- Mid basitarsus without ventral setae; scutellum bare dorsally; 5th segment of midtarsus slightly dilated; 5.0 *nigriplantis* (Fallén)
27. Antennal stylus long pubescent, with hairs approximately 1.5 times longer than basal diameter of stylus; notopleuron having strongly pronounced purple spot 28
- Antennal stylus bare, rarely pubescent; notopleuron usually without purple spot . . . 29
28. Antenna black; wing grey, with dark spot in apical part, transparent at apex behind M_{1+2} *nobilis* (Linnaeus)
- Antenna partly yellow; wing evenly grey *infuscatus* (Stannius)
29. Metapleuron with group of hairs before posterior spiracle; posterior part of mesonotum and scutellum dorsally with hairs; R_{4+5} and M_{1+2} parallel 30
- Metapleuron and posterior part of mesonotum usually bare; scutellum usually without dorsal hairs; R_{4+5} and M_{1+2} usually convergent . . 38
30. Femora mainly dark, at most yellow on extreme apex 31
- Femora mainly yellow, at most infuscated on posterodorsal side 32
31. Clypeus bare; midtibia with several anteroventral setae; face wide, approximately twice wider than postpedicel; hind tibia mostly entirely yellow; larger species, total wing length more than 3.5 . . . *cupreus* (Fallén)
- Clypeus pubescent; midtibia with only one anteroventral seta; face narrow, hardly wider than postpedicel; hind tibia distinctly infuscated on apex; smaller species, total wing length less than 3.5 . . . *angustifrons* (Staeger)
32. Costa with a distinct, even if only slight, thickening between humeral crossvein and tip of subcosta, with thickest part at least as thick as next part of costa 33

- Costa without above thickening, this section distinctly and uniformly thinner than next section 34
33. Epistome with long pale pubescence; clypeus with short rather dark pubescence; postpedicel mostly slightly acute; fore coxa mainly dark, mostly yellow in apical 1/2 to 1/3, rarely slightly infuscated dorsally; hind basitarsus yellow at least in proximal half; hind tibia at most slightly infuscated in apical fifth; parameres pale brown with white tip *celer* (Meigen)
- Epistome with long dark pubescence; clypeus with short dark pubescence; postpedicel mostly obtuse; fore coxa mainly dark, mostly yellow on extreme apex; fore femora yellow, distinctly infuscated posterodorsally along whole length; hind basitarsus mostly entirely dark (when yellow, still darker than proximal part of tibia); hind tibia mostly slightly to distinctly infuscated in apical fifth; parameres black with white tip *brevicornis* (Staeger)
34. Clypeus with conspicuous pubescence 35
- Clypeus entirely bare 36
35. Fore and hind femora distinctly infuscated at least postero-dorsally; wings clear; proximal part of CuA_1 less than twice longer than apical part; proximal part of M_{1+2} somewhat shorter than apical part; smaller species, total wing length about 3.0 *aerosus* (Fallén)
- All femora entirely pale yellow; wings clearly dark; proximal part of CuA_1 more than twice longer than apical part; proximal part of M_{1+2} slightly longer than apical part; larger species, total wing length on average more than 4.0 *metallicus* (Stannius)
36. Mid tibia with 2 anteroventral setae; hind tibia entirely dark *chalybeus* (Wiedemann)
- Mid tibia with 1 anteroventral seta; hind tibia mostly yellow 37
37. Hind tibia distinctly infuscated in apical 1/4 to 1/3; fore and middle tarsi distinctly infuscated from apex of basitarsus onwards; hind basitarsus darker than proximal half of hind tibia; fore coxa mostly dark *assimilis* (Staeger)
- Hind tibia and basitarsus entirely yellow; fore and middle tarsi only feebly infuscated; fore coxa largely yellow, in particular on lateral side *blankaartensis* Pollet
38. Femora yellow 39
- Femora black 47
39. Lower postocular setae black 40
- Lower postocular setae light (white or yellow) 46
40. Antenna partly yellow 41
- Antenna entirely black 43
41. Lower calypter with black cilia *chrysosygos* (Wiedemann)
- Lower calypter with light (white or yellow) cilia 42
42. Postpedicel not longer than high, slightly brownish above and distally; hind tibia in distal half with comb of small posterodorsal setae *rothi* (Zetterstedt)
- Postpedicel slightly longer than high, distinctly darkened (brown or black) above and distally; comb of small posterodorsal setae on hind tibia weakly pronounced *fulvicaudis* (Walker)
43. Fore tibia without median posteroventral seta 44
- Fore tibia bearing 1 or more distinct, even though rather small, posteroventral seta 45
44. Scutellum haired *nanus* (Macquart)
- Scutellum bare . . females of the genus *Sydistroma*
45. Lower calypter with mostly light cilia *gracilis* (Stannius)
- Lower calypter with black cilia *germanus* Wiedemann
46. Proboscis and palpus yellow . . *chetifer* (Walker)
- Proboscis and palpus dark *nanus* (Macquart)
47. Lower postocular setae black *nigrilamellatus* (Macquart)
- Lower postocular setae light (white or yellow) 48
48. Proboscis elongated, at least half as long as head height *nigripennis* (Fallén)
- Proboscis short 49
49. Femora entirely black; hind tibia black at base and at apex; fore tibia with 8–10 setae *sahlbergi* (Zetterstedt)
- Apices of femora yellow; hind tibia black at apex only; fore tibia with 5–6 setae *nigriplantis* (Fallén)

Genus *Hydrophorus* Fallén

1. Males: hypopygium present 2
- Females: hypopygium absent 23
2. Scutellum with 2 setae; face white; fore femur with 5–6 strong setae in basal half and row of short anteroventral setae; 2.1–3.8 *oceanus* (Macquart)
- Scutellum with 4 setae 3

3. Wings with dark spots 4
- Wings without spots, transparent, monochromatic or regularly darkened in anterior half 13
4. Wings with numerous brownish-yellow-spots in anterior half; fore femur with 6–7 strong spines in basal part; 2.3–2.7 *nebulosus* Fallén
- Wings with 2 spots on a posterior transversal vein *m-cu* and on M_{1+2} flexure 5
5. Fore femur at apex with a small lobe, excavation and bunch of setae; IV sternite with a light spot; fore coxae with black hairs . . 6
- Fore femur at apex without an excavation and lobe 7
6. Epistome mostly silvery-white, with small spot under antennae, usually two times higher than clypeus; its maximal width usually half wider than minimal width; acrostichal setae short; fore femur with short ventral hairs; proepistemon with white hairs; 3.5–5.0 *albiceps* Frey
- Epistome mostly metallic-green, with weak dusting in inferior part, usually 1/3 higher than clypeus; its maximal width usually 1/4 wider than minimal width; the acrostichal setae are longer; fore femur with longer hairs; proepistemon mainly with black hairs; 4.2–5.4 *signifer* Coquillett
7. The fore tibia are clearly squeezed and are strongly bent; legs with long hairs; 4.1–5.2 *rogenhoferi* Mik
- Fore tibia cylindrical, straight 8
8. Epistome metallic brilliant, green; fore femur with one row of strong setae in basal part; 3.6–5.2 *bipunctatus* (Lehmann)
- Epistome without metal shine, or if shining, then clypeus white 9
9. Clypeus silvery-white 10
- Clypeus with dark-coloured dusting 12
10. Halter with a dark spot at apex, epandrial lobe at apex almost straight; 3.5–5.4 *borealis* Loew
- Halter yellow 11
11. Fore femur with long whitish anteroventral setae equal in length to diameter of femur; clypeus silvery-white, epistome with a metallic-green spot under antennae; 3.6–4.4 *norvegicus* Ringdahl
- Fore femur without long whitish anteroventral setae in apical half; face with whitish-grey tinge; 2.9–3.9 *rufibarbis* Gerstäcker
12. Leg without long hairs; halter dark; 3.8–4.4 *geminus* Frey
- Midtibia with long hairs exceeding in length diameter of tibia, halter usually light with dark knob; 3.2–4.8 *pilipes* Frey
13. Fore coxae with black hairs and setae in apical part; face metallic-green; fore tibia with triangular widening on apex; 2.8–3.1 *alpinus* Wahlberg
- Fore coxae with light hairs 14
14. Clypeus and most part of epistome monochromatic 15
- Face dichromatic: the colouring of epistome strongly differs from colouring of clypeus . . 20
15. Fore femur at apex with flat scale-like setae 16
- Fore femur without flat setae 17
16. Fore femur with one ventral row of setae; 2.5–4.2 *litoreus* Fallén
- Fore femur with two rows of setae or with irregular sparse setae; surstylus bent ventrad at apex; 3.3–4.0 *freyi* Storå
17. Fore tibia at apex with acute ventral tooth; wings with yellow veins at base; 2.2–4.7 *praecox* (Lehmann)
- Fore tibia at apex without the tooth . . . 18
18. Face silvery-white or light grey 19
- Face ochre-yellow; 3.3–4.2 *viridis* (Meigen)
19. Halter at apex dark; genae high; 5.0 *albosignatus* Ringdahl
- Halter yellow; genae small; 3.7–4.1 *pectinatus* Gerstäcker
20. Wings with weak yellow-brown darkening at vein *m-cu*; fore femur with long ventral setae; 2.6–3.2 *brunnicosus* Loew
- Vein *m-cu* without yellow-brown darkening . . 21
21. Halter dark; 4.1–5.2 *altivagus* Aldrich
- Halter yellow 22
22. The lateral lobe of surstylus widened at apex; hypandrium triangular; 2.3–3.4 *balticus* (Meigen)
- Lateral lobe of surstylus narrow; hypandrium bandlike; 2.6–3.5 *callostomus* Loew
23. Scutellum with 2 setae *oceanus* (Macquart)
- Scutellum with 4 setae 24
24. Wings with dark spots 25
- Wings without spots, transparent, monochromatic or irregularly darkened in anterior half 34
25. Wings with numerous brownish-yellow spots in anterior half; face rusty-yellow *nebulosus* Fallén
- Wings with 2 spots on posterior transversal vein *m-cu* and on M_{1+2} flexure 26
26. Fore coxae with black hairs and setae in apical part 27

- Fore coxae with light hairs 28
- 27. Proepistemon, as a rule, with dark hairs; acrostichal setae long; fore femur with long hairs; apical sternite with oval emargination *signifer* Coquillett
- Proepistemon, as a rule, with white hairs; acrostichal seta short; fore femur with short hairs; apical sternite with cuneiform emargination *albiceps* Frey
- 28. The epistome is bright metallic shining, clypeus brownish pollinose; halter dark *bipunctatus* (Lehmann)
- Epistome without metallic shine 29
- 29. Femora with long hairs; hairs at least on midfemur are almost equal in length to diameter of femur 30
- Femora with short hairs; their length does not exceed diameter of femora 31
- 30. Legs with long hairs, their length clearly exceeds width of podomeres, for example on mid femur; wing with distinct limb in anterior half *rogenhoferi* Mik
- Legs with shorter hairs, their length does not exceed diameter of femora; wings are almost imperceptibly darkened in anterior half *pilipes* Frey
- 31. Halter yellow 32
- Halter at least partially dark 33
- 32. Fore femur with bunch of anteroventral hairs in apical third, equal in length to half or one third of diameter of fore femur *norvegicus* Ringdahl
- Fore femur with short hairs *rufibarbis* Gerstäcker
- 33. The sternite of an apical segment is cut deeply out; the emargination at apex is rounded; halter knob yellow with yellowish-brown spot *borealis* Loew
- The sternite of an apical segment is cut shallowly out; the emargination is pointed at apex; the halter knob entirely brown *geminus* Frey
- 34. Fore coxae with dark hairs *alpinus* Wahlberg
- Fore coxae mostly with light hairs 35
- 35. The epistome is bright metallic shining 36
- Epistome dim or pollinose 37
- 36. The apical sternite of an oviscapt is cut deeply out, styli of an oviscapt nearly globular *balticus* (Meigen)
- Apical sternite of an oviscapt wide, with small oval emargination *callostomus* Loew
- 37. Face light (grey or yellowish) 38
- Face dark (metallic-green) 42
- 38. Fore tibia at apex with acute ventral tooth;

- wings at base with yellow veins *praecox* (Lehmann)
- Fore tibia at apex without the tooth 39
- 39. Wings in the basal part with yellow veins *pectinatus* Gerstäcker
- Wings with dark veins 40
- 40. Abdomen with light dorsal hairs *viridis* (Meigen)
- Abdomen with dark dorsal hairs 41
- 41. Epistome under antennae with a spot *freyi* Storå
- Epistome under antennae without a spot *litoreus* Fallén
- 42. *m-cu* with yellowish-brown spot *brunnicosus* Loew
- *m-cu* without yellowish-brown spot 43
- 43. Fore femur with setae in the basal 1/2 only *albosignatus* Ringdahl
- Fore femur with setae in the basal 2/3 *altivagus* Aldrich

Genus *Medetera* Fischer von Waldheim

Males only; females are usually indeterminate without males in the same series.

- 1. No bristles near basal 1/3 of mid tibia; legs mainly black, with knees, tarsal bases and sometimes tibia light; distal part of *CuA*₁ about 1.5 times longer than *m-cu*; 1.5 *muralis* Meigen
- 1 or 2 small dorsal bristles at basal 1/3 of mid tibia 2
- 2. Lateral scutellars reduced, hairlike, less than 1/3 length of median setae, or totally lost; 3 dorso-centrals; mesonotum with black setae 3
- Lateral scutellars at least 1/3 as long as median setae 6
- 3. Face distinctly bicolorate, with epistome brown or greyish pollinose and clypeus more or less shining 4
- Face entirely dusted, monochrome 5
- 4. Femora mostly black; postocular and proepisternal bristles 2 whitish; 1.4–1.7 *micacea* Loew
- Femora mostly yellow; proepisternal bristles black, postoculars partly black; 2.0–2.5 *annulitarsa* von Roser
- 5. Legs including front coxa mainly yellow; male cercus without strong apical setae; 1.6–2.5 *plumbella* Meigen
- Legs black, with yellow knees; male cercus with a strong spiniform apical seta; 1.6–2.1 *senicula* Kowarz

6. Dorsocentral bristles not gradually decreasing anteriorly; either 5 strong setae with 1st one often reduced or lost and rest setae equally long, or 4 setae with 2nd one shorter than rest, or 3 dorsocentrals equally long . . . 7
 - Dorsocentral bristles gradually decreasing from long setae posteriorly into short setae anteriorly, having usually no long and strong presutural bristles in their rows 11
7. Only 1 supraalar bristle; distal part of *CuA*₁ at least 2 times longer than *m-cu*; legs mainly brown with tibiae and tarsal bases often yellow; 2.0–2.3 *betulae* Ringdahl
 - 2 strong supraalar bristles; legs including tibiae mainly black; distal part of *CuA*₁ only slightly longer or shorter than *m-cu* 8
8. 4 strong dorsocentrals with 2nd bristle distinctly shorter than rest; distal part of *CuA*₁ slightly longer than *m-cu*; 2.0–2.7 . . . *truncorum* Meigen
 - 4 strong dorsocentrals equally long or practically so, or when 5 bristles the front one is shorter than rest; distal part of *CuA*₁ distinctly shorter than *m-cu*; 2.5–4.0 9
9. Mesonotum uniformly dusted greyish or whitish; otherwise similar to *M. petrophila*; 3.2–3.4 *tenuicauda* Loew
 - Mesonotum longitudinally striped brownish . 10
10. Face including clypeus entirely covered with greyish dusting; arista subapical; anteroventral bristles at tip of hind femur longish; *m-cu* perpendicular to longitudinal wing axis; 2.7–4.0 *jacula* (Fallén)
 - Clypeus at least partly shining metallic; arista apical; anteroventral bristles at tip of hind femur short; *m-cu* distinctly oblique; 2.7–3.4 *petrophila* Kowarz
11. Scape (often also pedicel) yellow; usually more than 6 strong dorsocentrals gradually decreasing in size anteriorly; male cercus usually without apical bladellike setae 12
 - Antenna entirely black, or in immature specimens slightly reddish; usually no more than 5 strong dorsocentrals; anteriormost strong bristles (usually at suture or just presuturally) at least 3 times size of anterior short setulae; cercus usually with dorsoapical flattened, bladellike setae 22
12. Apical part of *M*₁₊₂ vein practically straight . 13
 - Apical part of *M*₁₊₂ vein distinctly curved . 15
13. Front femur with long anteroventral setae in apical ½ and long posteroventral setae at base; mid femur with long anteroventral setae; arista 1.5 times longer than antenna; 2.3–2.9 *fasciata* Frey
 - Front femur with short ventral cilia 14
14. Mid femur with short anteroventral setae; arista no more than 1.5 times longer than antenna; halter yellow; 2.2–3.2 *striata* Parent
 - Mid femur with anteroventral setae mostly longer than diameter of femur; arista 2–3 times longer than antenna; halter brown; 2.7–3.0 *setiventris* Thunberg
15. Halter dark; hypandrium expanded subapically, with drawn-out apex and sigmatoid subapical indentations; aedeagus sharply tridentate 16
 - Halter yellow; aedeagus usually without lateral dents; hypandrium various (males only) 17
16. Postocular cilia brown; surstylus distinctly trilobate at apex; 2.2–2.6 . . *zinovjevi* Negrobov
 - Postocular cilia whitish; surstylus bilobate; 2.9–3.5 *signaticornis* Loew
17. Lower postocular cilia brown black, sometimes with admixture of light cilia . . . 18
 - Lower postocular cilia yellow 19
18. Hind tibia with 3 to 5 strong subapical dorsal bristles (see below) . . . *obscura* (Zetterstedt)
 - Hind tibia without distinctive dorsal bristles at tip; hypandrium symmetrical, expanded subapically (ventral view); 3.0–4.0 *dichrocera* Kowarz
19. Hind tibia with a short strong curved spine anteriorly at tip; the spine consisting of 2–3 coalesced setae; hypandrium simple, symmetrical, expanded apically (ventral view); 3.2–3.6 *nitida* (Macquart)
 - Hind tibia without curved spine at tip . . 20
20. Hind tibia with 3 to 5 strong subapical dorsal bristles; hypandrium with 2 long subbasal lateral hooked lobes of unequal length; surstyli strongly swollen basoventrally; 3.5–4.9 *obscura* (Zetterstedt)
 - Hind tibia without distinctive bristles above near tip, at most a very small dorsal preapical bristle 21
21. Hypandrium with right basal expansion and left subapical internal projection (ventral view); 2.5–3.0 *pinicola* Kowarz
 - Hypandrium symmetrical, slightly swollen apically, with 2 pointed midlateral lobes; 3.2–4.0 *adjaniae* Gosseries
22. Large species; 3.7–4.6 mm; clypeus brilliant shining metallic green without lateral pruinosity; *m-cu* 1.5–2 times longer than distal part of *CuA*₁; tibiae yellow to darkish brown; acrostichals very small and extremely numerous; 3.7–4.5 *diadema* (Linnaeus)

- Smaller species, less than 3.5 mm; clypeus usually dull metallic colour, usually covered with pruinosity laterally, *m-cu* only slightly longer or shorter than distal part of *CuA*, 23
- 23. At least front and mid tibiae yellow or pale brownish; distal part of *CuA*, at least 2 times longer than *m-cu* 24
- Legs including tibiae blackish or dark brown, at most knees narrowly yellow 25
- 24. *CuA*, simple at base, not obviously thicker than *R*₄₊₅; coxal and femoral hairs and bristles more pale brownish; 1.8–2.2
 *pallipes* (Zetterstedt)
- Males with a strong thickening at base of *CuA*; the thickening tapered and about 1/2 as long as discal cell; females with *CuA*, at base markedly thicker than *R*₄₊₅ at base; coxal and femoral hairs and bristles conspicuously whitish; 2.0–2.5 *excellens* Frey
- 25. Males with a strong thickening at base of *CuA*; the thickening more or less uniform in width and not more than 1/3 length of discal cell; females having *CuA*, at base of discal cell markedly thicker than *R*₄₊₅ at base (at *r-m*); male hypandrium strongly swollen in basal 1/2, with lateral denticles; 2.5–3.0
 *inspissata* Collin
- *CuA*, simple at base, not obviously thicker than *R*₄₊₅; male hypandrium simple 26
- 26. Face polished, entirely brilliant, rarely slightly dusted laterally on clypeus or finely striated under antennae, epandrial lobes fused basally 27
- At least epistome mostly dusted or dull metallic, dark coloured and weakly shining, often punctate or granular, sometimes strongly striated 29
- 27. Halter dark, blackish or brown; apical section of *M*₁₊₂ slightly but distinctly curved; face shining deep blue; 2.4–3.5
 *ambigua* (Zetterstedt)
- Halter yellow, apical section of *M*₁₊₂ strongly curved; face shining green 28
- 28. 2 strong and 2 fine whitish proepisternal setae; cercus with lobe and bladlike seta apically; hypandrium simple; 2.6–3.0 *parenti* Stackelberg
- 4 strong black proepisternal setae; male cercus simple, with simple setae; hypandrium with tooth-like lateral lobes; 3.0–3.5
 *melancholica* Lundbeck
- 29. Epandrial lobes fused, forming long process bearing 2 setae at its apex; hypandrium narrow, gradually tapering; distal part of *CuA*, approximately as long as *m-cu* 30
- Epandrial lobes greatly reduced, more or less separated; hypandrium subrectangular, usually swollen subapically (ventral view); distal part of *CuA*, usually more than 1.5 times longer than *m-cu* (except for *M. cuspidata*) 32
- 30. Halter pale yellow, lower postoculars white, 1 or 2 epandrial setae usually plumose, 2.0–2.7 *veles* Loew
- Halter dark, lower postoculars usually dark 31
- 31. 2–3 brown proepisternal setae; lower postoculars yellow to brownish; 1 or 2 epandrial setae usually plumose; 1.8–2.5 *infumata* Loew
- 3–6 strong black proepisternal setae; lower postoculars black; epandrial setae simple; 3.0–3.5 *vagans* Becker
- 32. Halter blackish-brown 33
- Halter yellow, sometimes brownish-yellow in places 34
- 33. Lower postocular and proepisternal setae black; distal part of *CuA*, 1.9 times longer than *m-cu*; 1.9–2.3 *tristis* (Zetterstedt)
- Lower postocular and proepisternal setae yellow; distal part of *CuA*, 1.3 times longer than *m-cu*; 2.1–2.3 *cuspidata* Collin
- 34. Lower postoculars black brown 35
- Lower postoculars yellow 37
- 35. Distal part of *CuA*, 1.5 times longer than *m-cu*; 2.5–2.8 *pseudoapicalis* Thunberg
- Distal part of *CuA*, at least 2 times longer than *m-cu* 36
- 36. 2 proepisternal setae; 2.4–2.8
 *abstrusa* Thunberg
- 3–4 proepisternal setae; 2.2–2.6
 *acanthura* Negrobov & Thunberg
- 37. Epistome matt, densely grey pollinose; hypandrium widest in middle (ventral view); 2.4–2.5 *glauca* Loew
- Epistome shining at least below middle 38
- 38. Tibiae and basitarsi yellow-brown; epandrium elongated, 3 times longer than high, with elongated appendages; dorsal lobe of surstylus higher than ventral lobe (lateral view); cercus with 2 long and thin apical and subapical flattened setae; 2.6 *gracilicauda* Parent
- Legs black with yellow knees, at most tibiae brown; epandrium not more than 2.5 times longer than high; dorsal lobe of surstylus thin; cercus with only apical flattened seta long 39
- 39. Mid femur with short anteroventral bristles, sometimes longer ones at tip; hypandrium parallel-sided to apex (ventral view); 2.1–2.5 *apicalis* (Zetterstedt)
- Mid femur with rather long anteroventral bristles, the longest more than half as long as

- femur deep; hypandrium widened in distal 1/3 or 1/2 40
40. Abdomen pale-haired; hypandrium with rhomboid widening in distal 1/3; 2.1–2.7 *jugal* Collin
- Abdomen dark-haired; hypandrium with ovoid widening in distal 1/3 or 1/2 41
41. Hind femur with short and inconspicuous anteroventral bristles; hypandrium widened in distal 1/2; 2.2–2.7 *impigra* Collin
- Hind femur with long anteroventral bristles at least at tip; hypandrium widened in distal 1/3; 2.0–2.2 *borealis* Thuneberg

Genus *Micromorphus* Mik

1. Male cercus hidden; with basoventral epandrial lobe broad, 2 times longer than wide at base; postgonite with long and narrow lobes; about 1.5 *albipes* (Zetterstedt)
- Male cercus projected; with basoventral epandrial lobe narrow, at least 3 times longer than wide at base; postgonite with short and broad lobes; 1.5 *mesasiaticus* Negrobov

Genus *Neurigona* Rondani

1. Males: hypopygium present 2
- Females: hypopygium absent 6
2. Mesonotum yellow, usually slightly shining, without pollen 3
- Mesonotum matt, covered with yellowish-grey or brownish-grey pollen 4
3. Abdominal tergite V moderately long, without lateral lobe; fore tarsus short, 1/4 shorter than fore tibia; abdominal tergites with dark transverse bands along anterior margin; hypopygium sessile, shining black; 4.0–4.5 *erichsoni* (Zetterstedt)
- Abdominal 5th tergite short, with distinct lateral lobe directed downward; hypopygium distinctly pedunculate; III and IV tergites with lobelike lateral widenings; V tergite having lobes black at apex; 6.0 *pallida* (Fallén)
4. 3rd and 4th segments of fore tarsus black, black plumose; 5th segment of the same tarsus white; abdominal tergites along anterior margin with strongly pronounced dark transverse bands having deep emargination posteriorly; hypopygium pedunculate; 3.5–5.0 *quadrfasciata* (Fabricius)
- Fore tarsus simple 5

5. M_{1+2} straight or nearly straight; R_{4+5} and M_{1+2} almost parallel; wing darkened, darker along anterior margin; 5th segment of fore tarsus weakly modified; 4.0–5.0 *suturalis* (Fallén)
- M_{1+2} strongly curved at middle of distal part; R_{4+5} and M_{1+2} converging; fore tarsus with very long anterior and short posterior claws; 5th segment of the same tarsus with strong curved ventral setae; 4.0–5.0 *abdominalis* (Fallén)
6. Mesonotum yellow 7
- Mesonotum dark, grey pollinose, matt 9
7. Mesonotum brilliant; black transversal bands on abdomen are narrow and distinct; 5th segment yellow; 3.5 *erichsoni* (Zetterstedt)
- Mesonotum matt 8
8. 6 dorsocentrals; abdominal tergites along anterior margin with black transverse bands having deep median emargination posteriorly; segment V black with yellow apex; smaller species, 3.5–4 *quadrfasciata* (Fabricius)
- 7 dorsocentrals; abdomen including segment V entirely yellow; larger species, 6.0 *pallida* (Fallén)
9. M_{1+2} straight or nearly straight; R_{4+5} and M_{1+2} almost parallel; hind tibia more or less darkened *suturalis* (Fallén)
- M_{1+2} strongly curved at middle of distal part; R_{4+5} and M_{1+2} converging; hind tibia-yellow *abdominalis* (Fallén)

Genus *Rhaphium* Meigen

Males only; females are usually indeterminate without males in the same series.

1. Hind coxa without strong external seta, with hairs only; postpedicel usually short; fore femur often with long posteroventral hairs 2
- Hind coxa with strong external seta; postpedicel usually long and narrow; fore femur usually without long posterior hairs 21
2. Antennal stylus with apical flag; postpedicel 4.5–5 times longer than high at base; stylus half as long as postpedicel; femora mostly black; cercus short, foliaceous; surstylus short and thick, biapiculate; 3.2–4.1 *discigerum* Stenhammar
- Stylus simple 3
3. Face black, sometimes seems to be whitish or greyish from lateral view 4
- Face silvery white 9
4. Cercus bifurcated 5
- Cercus simple, long and narrow 8

5. Mid coxa without ventral spine, with several black setae only; femora black; surstylus acicular; 3.5–4.5 *nasutum* (Fallén)
 - Mid coxa with ventral setae forming spine . . . 6
6. Fore basitarsus longer than rest tarsomeres combined, with several long setae at apex; legs mostly black; surstylus narrow, pointed at apex; 4.5–6.0 *commune* (Meigen)
 - Fore basitarsus shorter than rest tarsomeres combined 7
7. Fore and mid tibia dark; fore basitarsus straight, without strong setae; fore femur with black hairs; surstylus long and narrow, with short basodorsal projection; 4.5–5.6 *glaciale* (Ringdahl)
 - Fore and mid tibia yellow; fore basitarsus curved, with row of strong setae; fore femur with row of very strong black setae; cercus short and broad; surstylus narrow, pointed at apex; 4.5–4.9 *pectinatum* (Loew)
8. Hind tibia strongly thickened at apex, whitish-yellow in basal half, black in distal half; fore tarsus simple; surstylus broad, triangular; 3.7–4.3 *fascipes* (Meigen)
 - Hind tibia not thickened or slightly thickened; 2nd segment of fore tarsus flattened at base, slightly thickened at apex; surstylus blade-like, long, with strong seta at apex; 4.7–5.3 *nigribarbatum* (Becker)
9. 5th segment of mid tarsus strongly widened . . . 10
 - 5th segment of mid tarsus weakly widened or simple 11
10. 4th segment of mid tarsus not widened; 5th segment of same tarsus widened and flattened; cercus triangular, moderately long; surstylus baculiform, curved; 4.4–5.1 *confine* Zetterstedt
 - 4th and 5th segments of mid tarsus widened; cercus bifurcated at middle; surstylus narrow; 4.4–5.2 *crassipes* (Meigen)
11. Mid coxa with ventral setae forming spine . . . 12
 - Mid coxa without spine 17
12. Mid coxa with ventral spine of light setae; fore basitarsus widened; mid femur yellow; cercus foliaceous, with long hairs; surstylus baculiform; 4.8–5.7 *basale* Loew
 - Mid coxa with ventral spine of dark setae . . . 13
13. Fore basitarsus simple, usually slightly longer than 2nd tarsomere 14
 - Fore basitarsus thickened, usually 1.5 times longer than 2nd tarsomere 15
14. Postpedicel 3.5 times longer than high at base and longer than stylus; cercus elongate-triangular, reddish-yellow; surstylus spoon-like at apex, with apical setae; 3.1–4.4 *laticorne* (Fallén)
 - Postpedicel no more than 3 times longer than high at base, distinctly shorter than stylus; cercus bifurcated; surstylus narrow, slightly widened in distal half; 3–3.4 *rivale* (Loew)
15. Cercus bifurcated; surstylus acicular; femora yellow; 4.3–4.7 *holmgreni* (Mik)
 - Cercus simple 16
16. Femora mostly black; stylus slightly thickened at apex; cercus long and narrow, bandlike, with apical seta; surstylus pointed at apex; 4.6–5.4 *patulum* (Raddatz)
 - Femora reddish-yellow; cercus long, gradually narrowing apicad; surstylus moderately long, baculiform; 5.6–6.9 *elegantulum* (Meigen)
17. Fore femur with ventral row of strong setae, half as long as diameter of femur; fore basitarsus with short erect hairs; cercus short, triangular, with broad straight distal margin; surstylus lanceolate; 3.5–4.8 *discolor* Zetterstedt
 - Fore femur with ventral hairs only, without strong setae 18
18. Cercus trilobate; surstylus narrowing at middle, with basodorsal projection; femora mostly dark; 4.4–5.0 *tridactylum* (Frey)
 - Cercus simple 19
19. Cercus longer than epandrium; femora mostly dark; fore basitarsus thickened at apex; hind basitarsus with short dorsal spine; 4.5–5.5 *gravipes* Haliday
 - Cercus shorter than epandrium 20
20. Cercus broad, spearlike; surstylus baculiform; femora mostly yellow; 4.3–5.5 *riparium* (Meigen)
 - Cercus narrower than surstylus, with bunch of long setae at apex; surstylus curved, with setae at apex; femora mostly black; 4.1–5.4 *penicillatum* Loew
21. Scape higher than postpedicel; postpedicel long, thin, triquetrous; cercus long and broad; surstylus long and narrow, simple; 4.8–5.3 *longicorne* (Fallén)
 - Postpedicel higher than scape, flattened laterally 22
22. Fore basitarsus with ventral comb of strong setae, half as long as diameter of tarsomere; cercus long and narrow, broad at base; surstylus short; 3.8–4.8 *micans* (Meigen)
 - Fore basitarsus without comb of strong setae 23
23. Frons densely white or grey pollinose . . . 24
 - Frons metallic, without pollen 27
24. Postpedicel 2 times longer than high at base; cercus simple; surstylus widening distad, with distal emargination; 2.8 *viklundi* Grichanov

- Postpedicel 5–7 times longer than high; cercus bilobate; surstylus without distal emargination 25
- 25. Four pairs of dorsocentral setae; femora partly dark; postpedicel 6 times longer than high; cercus with short and broad outer branch; surstylus securiform; 2.3–2.4 *albomaculatum* Becker
- Five pairs of dorsocentral setae; femora yellow 26
- 26. Postpedicel 5 times longer than high; cercus with narrow branches; surstylus widened at middle; 2.4–2.7 *fissum* Loew
- Postpedicel 6–7 times longer than high; cercus with broad branches; surstylus with small inner projection; 2.0–2.3 *albifrons* Zetterstedt
- 27. Abdomen yellow laterally at base; cercus short, triangular; 2.0–2.5 *fasciatum* (Meigen)
- Abdomen entirely dark, usually metallic green 28
- 28. Hind coxa with light external seta *fissum* Loew
- Hind coxa with dark external seta 29
- 29. Cercus elongate-triangular, with 1 long seta at apex; 2.5–3.3 *monotrichum* Loew
- Cercus without long seta at apex 30
- 30. Surstylus with dense bunch of long setae at apex 31
- Surstylus without bunch of long setae at apex 32
- 31. Cercus long, bandlike; 2.4–3.1 *appendiculatum* Zetterstedt
- Cercus short, irregularly triangular, widened at middle; 2.8–3.3 *caliginosum* Meigen
- 32. Postpedicel nearly 5 times longer than high; cercus narrow; surstylus broad, with distal comb of setae; 2.6 *umbripennis* (Frey)
- Postpedicel approximately 4 times longer than high 33
- 33. Stylus 1/3 length of postpedicel; cercus elongate-triangular, longer than surstylus, with long sparse hairs; 3.3–3.5 *auctum* Loew
- Stylus 2/3 length of postpedicel; cercus short, nearly equal in length to surstylus, with short dense hairs; 2.8–3.3 *lanceolatum* Loew

Genus *Scellus* Loew

- 1. Males: hypopygium present 2
- Females: hypopygium absent 4
- 2. Fore tibia with strongly developed long biapicate anteroventral tooth at basal third; 3.9–6.0 *notatus* (Fabricius)
- Fore tibia with simple pointed tooth at basal third 3

- 3. Postpedicel elongate-triangular, 2 times longer than high at base, pointed at apex; fore tibia at apex without lobe-like process; mesonotum mostly shining black; 3.8 *dolichocerus* Gerstaecker
- Postpedicel suboval or irregularly triangular, not more than 1.5 times longer than high, with rounded apex; fore tibia at apex with large lobe-like process; mesonotum mostly densely pollinose, without metallic shining; 3.7–6.0 *spinimanus* (Zetterstedt)
- 4. Mesonotum mostly metallic shining *dolichocerus* Gerstaecker
- Mesonotum mostly grey or brownish densely pollinose 5
- 5. Wing long, with *m-cu* positioned distinctly behind apex of abdomen; wing slightly darkened in distal half; M_{1+2} with strongly pronounced brown round spot at curvature *notatus* (Fabricius)
- Wing moderately long, with *m-cu* positioned at level of apex of abdomen; wing mostly dark brown; M_{1+2} without strongly pronounced brown round spot at curvature *spinimanus* (Zetterstedt)

Genus *Sciapus* Zeller

- 1. Third segment of fore tarsus at least as long as or rather longer than 2nd segment; ventral bristles on antennal pedicel not longer or even shorter than dorsal bristles; face narrow (even in female at most 3/20 of width of head); hind basitarsus nearly twice or even more than twice as long as 2nd segment; male with broad wing; hypopygium black, subquadrate, without organ X 2
- Third segment of fore tarsus always shorter than 2nd segment; some ventral bristles on antennal pedicel longer than dorsal bristles; face broader (even in male at least 1/5 of width of head); hind basitarsus not much longer than 2nd segment, often even shorter; male with wing of normal width; hypopygium usually with organ X 3
- 2. Male midtarsus unmodified; fore femur ventrally with a row of 7–9 long, spinelike yellow bristles; female clypeus 2 times wider than height of postpedicel; wing length less than 5 mm; 4.0–5.0 *spiniger* (Zetterstedt)
- Third and fourth segments of male midtarsus laterally compressed and slightly broadened, milky white; front femur of male ventrally

- with a row of pale hairs, becoming gradually longer and bristlelike on apical fourth; female clypeus about as wide as height of postpedicel; wing length of male more than 5 mm; 4.75–6.0 (male), 3.5–5.0 (female) *platypterus* (Fabricius)
3. Males 4
— Females 8
4. No organ X; cerci with a long apicoventral projection (suggesting an organ X, but not separated from cerci); frons, thorax and abdomen shining green, only very feebly dusted; fore femur ventrally on ventral half with four yellow spines, longest towards base, much longer than diameter of femur; tibia and tarsus of middle legs with a prickly appearance as a result of short erect hairs; 3.0–4.5 *longulus* (Fallén)
- Organ X present, distinctly separated from cerci; frons, thorax and abdomen with a thick dusting, hardly shining 5
5. Fourth segment of fore tarsus entirely or largely black, broadened into a lobe; fore tarsus yellow, black on apical half of fourth segment and on fifth segment; uppermost 5–6 postocular cilia black; hypopygium with ventral margin of organ X only slightly concave, with long hairs along whole length; 4.5–6.0 *wiedemanni* (Fallén)
- Fourth segment of fore tarsus not broadened into a lobe, either white, or concolorous with other tarsal segments 6
6. Uppermost postocular cilia white; midtibia with 3 antero- and 3 posterodorsal setae (less often with only 2 antero- and/or 2 posterodorsals); hind tibia likewise rather strongly bristled; metaepimeron yellow; midcoxa basally usually not darkened; 3.75–4.9 *maritimus* Becker
- Uppermost 6–10 postocular cilia dark. Middle tibia with only one ad near base, seldom with some more very small bristles. Hind tibia poorly bristled (generally only one ad developed). Metaepimera dark. Middle coxae darkened at base 7
7. Hind margin of wing irregularly curved, with a bulge at tip of discal vein; fore basitarsus bearing, besides a small basal seta, 1–3 other small posteroventrals; surstylus of hypopygium not very broad, as high as process of organ X (lateral view); 3.9–4.5 *zonatulus* (Zetterstedt)
- Hind margin of wing regularly curved; fore basitarsus bearing only one small basal posteroventral seta; surstylus of hypopygium very broad, about 2 times higher than process of organ X; 4.2–4.8 *basilicus* Meuffels & Grootaert
8. Thorax, abdomen and frons only feebly dusted, distinctly shining; oviscapit with four slender dornen; cercus with very long bristle at tip; similar long bristles on lobes of tenth tergite; 2.75–3.0 *longulus* (Fallén)
- Thorax, abdomen and frons with thick dusting, only feebly shining 9
9. Metaepimeron yellow 10
— Metaepimeron dark (as dark as pleura) 11
10. Uppermost postocular cilia white; hind basitarsus about as long as second segment; 3.0–3.6 *maritimus* Becker
- Uppermost 5–8 postocular cilia dark; 4.0–5.0 *wiedemanni* (Fallén)
11. Fore basitarsus ventrally with some of the short hairs a little longer, giving the impression of minute spinules; mid and hind tibiae bearing several short bristles; 3.0–4.4 *zonatulus* (Zetterstedt)
- Fore basitarsus ventrally with all hairs equally long; mid and hind tibiae very poorly bristled, generally with only one anterodorsal near base; wing 4.0 *basilicus* Meuffels & Grootaert

Genus *Sybstroma* Meigen

1. Males: hypopygium present 2
— Females: hypopygium absent 4
2. Antennal postpedicel not longer than high; stylus of uniform thickness throughout, with apical segment 5 to 6 times as long as basal; apical segment of fore tarsus enlarged, laterally compressed; 3.75–4.75 *crinipes* Staeger
- Postpedicel at least 1.5 times longer than high; stylus normal, tapering, with apical segment at most 2.5 times as long as basal one 3
3. Fore tarsus simple; 3.5–4.0 *obscura* (Fallén)
- Fore tarsus with 4th segment short and broad, 5th greatly enlarged, flattened and black; 3.5–5.5 *discipes* (Germar)
4. Metaepimeron black; 4.0–4.5 *crinipes* Staeger
- Metaepimeron yellow 5
5. Midtarsus distinctly less than 1.5 times as long as tibia; greatest distance between M_{1+2} and R_{4+5} less than 3 times as that at their tips; proboscis dark; 3.5–4.0 *obscura* (Fallén)
- Midtarsus quite 1.5 times as long as tibia; greatest distance between M_{1+2} and R_{4+5} more than 3 times as that at their tips; proboscis brownish yellow; 4.0–4.75 *discipes* (Germar)

13. Hind basitarsus with basoventral tubercle bearing bunch of modified setae, at most slightly shorter than 2nd segment; 3.0–3.25 *fuscipes* (von Roser)
- Hind basitarsus with only two bare ventral hooks in basal half, without long setae or process 14
14. Postpedicel 3–3.5 times longer than high, nearly 2 times longer than stylus; mid femur without strong ventral setae; hind basitarsus with strong ventral hooks; 3.0–3.75 *pallipes* (Fabricius)
- Postpedicel 1.5–2 times longer than high, shorter than stylus; mid femur with row of ventral setae; hind basitarsus with weak spiniform ventral setae; 3.25–4.0 *denticulatus* (Zetterstedt)
15. Face having 2 setae; coxae yellow; mid coxa darkened; abdomen partly yellow; fore tibia with 1 anteroventral seta *miki* Strobl
- Face without setae 16
16. Coxae yellow; sometimes mid coxa barely darkened 17
- At least mid and hind coxae dark 19
17. Abdomen yellow; metaepimeron yellow; acrostichal setae uniseriate *punctatus* (Zetterstedt)
- Abdomen dark; rarely segments II and III with yellow spots 18
18. Acrostichal setae biseriate; mid tarsus darkened; abdomen with yellow spots *fuscipes* (von Roser)
- Acrostichals uniseriate; mid tarsus yellow *arsatus* (Fallén)
19. Fore coxa dark at least laterally; frons green or bronze-green 20
- Fore coxa yellow at least in apical half; frons usually with blue tinge (except for *denticulatus* Zett.) 21
20. Fore coxa with mostly black hairs and setae at apex; frons mat; fore tibia without serration; mid coxa with 1 black seta; lower calypter with black cilia . . . *fliger* Verrall
- Fore coxa with white hairs, sometimes with 1–2 black setae at apex; frons brownish pollinose; fore tibia with anterodorsal serration; mid coxa without strong setae *denticulatus* (Zetterstedt)
21. Abdomen partly yellow laterally; acrostichals uniseriate; hind basitarsus light at base *pallipes* (Fabricius)
- Abdomen usually dark 22
22. Fore femur dark at base; fore coxa yellow at apex only; hind trochanter dark 23
- Fore femur yellow; fore coxa dark at base; hind trochanter yellow 24
23. Frons mat, bronze-green *denticulatus* (Zetterstedt)
- Frons shining blue *pumilus* (Meigen)
24. 1st–3rd segments of tarsi yellow, at most dark at apex; fore tibia without posterodorsal seta *monilis* (Haliday)
- Tarsi dark from tip of basitarsi 25
25. Antennal scape haired above; fore coxa with black apical setae *metathesis* (Loew)
- Scape bare above; fore coxa with white hairs only 26
26. Postpedicel longer than high at base, drawn-out at apex *pallipes* (Fabricius)
- Postpedicel not longer than high, trapezoid, with almost straight dorsal margin *subinermis* (Loew)

Genus *Systemus* Loew

1. M_{1+2} and R_{4+5} veins strongly convergent, their tips separated by not more than 1/3 length of $m-cu$ 2
- M_{1+2} and R_{4+5} veins gently convergent or parallel, their tips separated by more than half length of $m-cu$ 3
2. Antennal scape and pedicel reddish yellow; hind margin of male wing rather strongly concave near apex, where there is an apical black spot; 4.0 *scholtzi* (Loew)
- Antennal scape and pedicel brown-black; male wing not noticeably concave on hind margin, without apical black spot; 3.5–4.0 *pallipes* (von Roser)
3. Antennal scape and pedicel clear yellow; hind femur broadly black at apex; CuA_1 2 times longer than $m-cu$; 2.5 *tener* Loew
- Antenna entirely black 4
4. Male postpedicel 2.5 times as long as high; hypopygium black, yellow at apex; female stylus only slightly longer than postpedicel; mid tibia dorsally with only two bristles at base; hind femur broadly black at apex; 3.0–3.25 *bipartitus* (Loew)
- Male postpedicel 3–3.5 times as long as high; hypopygium entirely pale; female stylus almost twice as long as postpedicel; mid tibia dorsally with four bristles, two at base and two at middle; hind femur with only a dark dorsal streak at apex; 2.75–3.0 *leucurus* Loew

Genus *Tachytrechus* Haliday

1. Males: hypopygium present 2
- Females: hypopygium absent 7
2. Fore basitarsus normal, not especially slender, apical segment appearing whitish in dorsal view; midfemur yellow on apical fourth only; tibiae usually brownish-yellow in basal half; cercus approximately as long as wide; 4–5.5 *notatus* (Stannius)
- Fore basitarsus conspicuously slender; midfemur yellow on apical half 3
3. Fore basitarsus almost twice as long as last four segments combined; face golden yellow; cercus covered with relatively short hairs; the hairs approximately as long as width of cercus; 5–5.5 *insignis* (Stannius)
- Fore basitarsus about equal in length to last four segments combined; face pale yellow or white 4
4. Face pale yellow, low edge about level with lower eye-margin; cercus large and triangular, with long strong bristles on outer face of disc; 5.0–6.0 *ripicola* Loew
- Face glistening white or silvery white . . . 5
5. Epandrial lobe in form of semicircular plate locating on long handle; cercus 1.5–2 times longer than wide; antennal pedicel black; midfemur yellow, black at base; 5.0 *ammobates* (Haliday)
- Epandrial lobe usually hidden; cercus not longer than wide; pedicel yellow; mid femur black in basal half 6
6. Four distal segments of fore tarsus strongly dilated, with 4th tarsomere nearly twice wider than long; cercus semicircular, with short external hairs; hypandrium bearing small ventral hook; 4.5–5.5 *consobrinus* Haliday
- Four distal segments of fore tarsus weakly dilated, with 4th tarsomere being approximately as long as wide; cercus with long external hairs being longer than width of cercus; cercus hardly 1.5 times wider than long; hypandrium with moderately long toothlike lobe; 5.0 *ocior* Loew
7. Antennal scape and pedicel reddish yellow at least beneath 8
- Pedicel entirely black 10
8. Lower edge of clypeus not angular, about level with lower eye-margin; all femora black except at apex *notatus* (Stannius)
- Face extending well below lower eye-margin; clypeus triangular 9
9. Fore and mid femora reddish yellow on apical fifth only *ocior* Loew
- Fore femur reddish yellow on apical fourth, and mid femur on apical third *consobrinus* Haliday
10. Proximal part of distal section of M_{1+2} (from *m-cu* to curvation) longer than apical part; scape usually darkened dorsally *ammobates* (Haliday)
- Proximal part of distal section of M_{1+2} (from *m-cu* to curvation) shorter than apical part; scape entirely yellow 11
11. Wing vein *m-cu* infumated; mid femur with long ventral hairs developed from base to apex; two humeral bristles about equal in length; fore tibia slightly shorter than tarsus *insignis* (Stannius)
- Wing vein *m-cu* without dark limb; mid femur with long ventral hairs developed in basal 2/3 only; lower humeral bristle about 0.75 the length of upper; fore tibia slightly longer than tarsus *ripicola* (Loew)

Genus *Teuchophorus* Loew

Males only; females are indeterminable.

1. Hind tibia at middle with strong and long black ventral spine; 1.5–2.0 *monacanthus* Loew
- Hind tibia at middle without ventral spine . . 2
2. Hind tibia at apex with thickening covered with bunch of bristly hairs; 1.25–1.5 *spinigerellus* (Zetterstedt)
- Hind tibia just before middle with ventral brush of short black setae and 1 longer adjacent branched seta; 1.75–2.0 *nigricosta* (von Roser)

Genus *Thinophilus* Wahlberg

1. 4 dorsocentrals; small species; 2.0–2.5 *versutus* Walker
- 5 or 6 dorsocentrals present, front one usually short; size larger than 3 mm 2
2. All femora partly black; male anterior tibia with 2 or 3 strong curved apical posteroventral setae; 2nd–4th segments of fore tarsus with a group of black setae, longer than article diameter; 5.5–6.0 *flavipalpis* (Zetterstedt)
- Anterior four femora yellow, sometimes infuscated from above; anterior tibia without apical setae; fore tarsus simple; 3.0–3.5 *ruficornis* (Haliday)

Genus *Thrypticus* Gerstacker

1. Scutellum with 6–8 marginal setae; epistome at least 4 times higher than clypeus; femora yellow; M_{1+2} and R_{4+5} slightly but distinctly convergent; 2.5–3.5 . . . *smaragdinus* Gerstacker
- Scutellum with 2 strong marginal setae; epistome not more than 2.5 times higher than clypeus; M_{1+2} and R_{4+5} usually parallel; body size usually less than 2.5 mm 2
2. Femora mainly yellow, at most slightly darkened at middle; antenna black; distal part of CuA_1 3.5–4 times longer than $m-cu$; 1.2–2.0 *atomus* Frey
- Femora mostly dark 3
3. Males 4
- Females 11
4. Wing with anal lobe quite undeveloped, narrow at base and widening out to a broadly rounded tip; apical section of M_{1+2} longer than basal section measured from $r-m$; R_{4+5} and M_{1+2} slightly divergent in apical half, then converging at apex; 1.9–2.25 *cuneatus* (Becker)
- Wing of normal shape, with distinct anal lobe; apical section of M_{1+2} vein longer than basal section measured as above; R_{4+5} and M_{1+2} either parallel or slightly converging in at least the greater part of apical half, though sometimes diverging at apex 5
5. Scutellum with 4 bristles, 2 strong and 2 much weaker. Front and mid tibiae clear yellow; 1.75–2.5 5a
- Only 2 scutellar setae, strong; tibiae darkened, at least brownish 6
- 5a. Distal thin part of hypandrium as long as or longer than proximal broad part *intercedens* Negrobov
- Distal thin part of hypandrium 1/3 shorter than proximal broad part. . . *pollinosus* Verrall
6. Mid tibia without an anterior bristle at basal third; stylus long and slender; apical section of CuA_1 2.5 times as long as $m-cu$; 1.6–2.8 *nigricauda* Wood
- Mid tibia with an anterior bristle at basal third; apical section of CuA_1 either twice or three times as long as outer $m-cu$ 7
7. Antennal stylus distinctly pubescent, strongly thickened and almost uniformly thick throughout; palpi short and broad; R_{4+5} and M_{1+2} practically parallel in apical half, curving rearwards in apical third; hind basitarsus about 0.75 times length of 2nd segment; 2.0–2.5 *divisus* Strobl
- Antennal stylus practically bare and more slender 8
8. Palpi short, hardly longer than postpedicel; stylus very slender and tapering to a fine tip; mid tibia entirely brownish; 1.75–2.0 *tarsalis* Parent
- Palpi decidedly longer than postpedicel; stylus distinctly thicker and less tapering; mid tibia paler (more yellowish) posteriorly . . . 9
9. R_{4+5} and M_{1+2} distinctly divergent at apex; stylus uniformly somewhat thickened throughout; about 2.0 *laetus* Verrall
- R_{4+5} and M_{1+2} not divergent at apex; stylus rather more slender and somewhat tapering 10
10. R_{4+5} and M_{1+2} distinctly convergent at apex; mesonotum densely pollinose; clypeus mat; distal process of cercus 4 times longer than high at base (lateral view); 1.25 *pruinosis* Parent
- R_{4+5} and M_{1+2} almost parallel; mesonotum weakly pollinose; face shining; distal process of cercus not more than 2.5 times longer than high; 1.5–1.9 *bellus* Loew
11. Mid tibia without an anterior bristle at basal third; stylus long, slender and tapering . . . 12
- Mid tibia with an anterior bristle at basal third 14
12. Legs entirely black, or partly metallic blackish green, at most knees and hind tibia sometimes rusty yellow; 2.75–3.0 *cuneatus* (Becker)
- All tibiae brownish yellow 13
13. Apical abdominal tergite with a small raised hump on hind margin; fore basitarsus decidedly more than half as long as tibia; apical section of CuA_1 more than 2.5 times as long as $m-cu$; 1.6–2.8 *nigricauda* Wood
- Apical abdominal tergite not as above; fore basitarsus hardly half as long as tibia; apical section of CuA_1 not more than twice as long as $m-cu$; about 2 *tarsalis* Parent
14. R_{4+5} and M_{1+2} divergent at apex; stylus almost uniformly somewhat thickened throughout; 2.0–2.25 *laetus* Verrall
- R_{4+5} and M_{1+2} not divergent at apex . . . 15
15. Fore and mid tibiae yellow; apical section of M_{1+2} hardly 1.5 times as long as basal section measured from $r-m$; 2.0–2.5 *pollinosus* Verrall
- Tibiae darkened, at least brownish; apical section of M_{1+2} quite twice as long as basal section measured as above 16

16. Strong thoracic bristles pale yellow; R_{4+5} and M_{1+2} distinctly, even though only slightly, convergent in apical half; mid basitarsus often mainly yellow; 1.75–2.0 *bellus* Loew
 — Strong thoracic bristles brownish black to black; R_{4+5} and M_{1+2} practically parallel in apical half; mid tarsus dark; 2.5–2.75
 *divisus* Strobl

Genus *Xanthochlorus* Loew

1. Thorax almost entirely yellow, more or less darkened only on prescutellar depression; scutellum usually entirely yellow; 2.5–3.5 *tenellus* Wiedemann
 — Disc of thorax and scutellum darkened, entirely greenish or bronze, dusted grayish; 2.75–3.0 *ornatus* Haliday

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