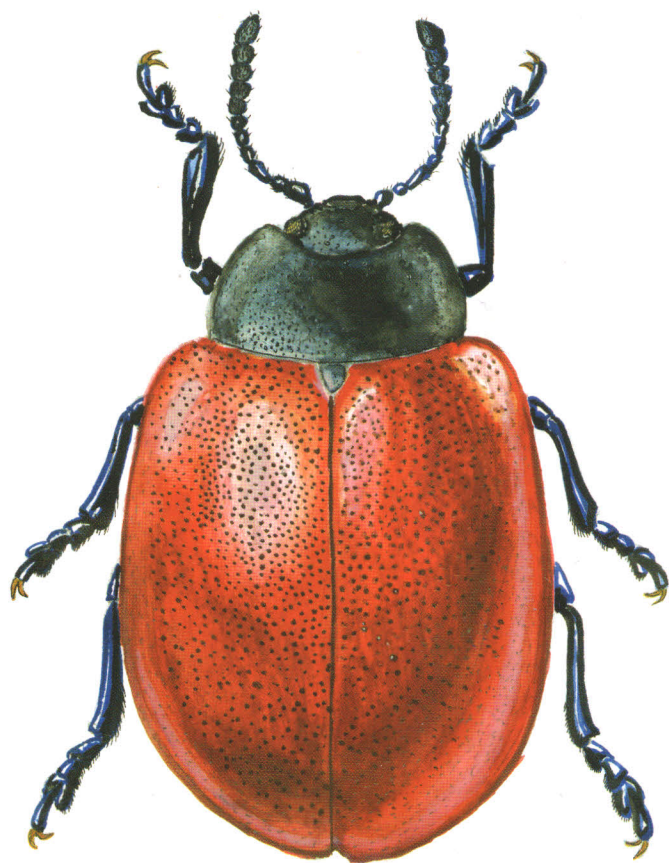


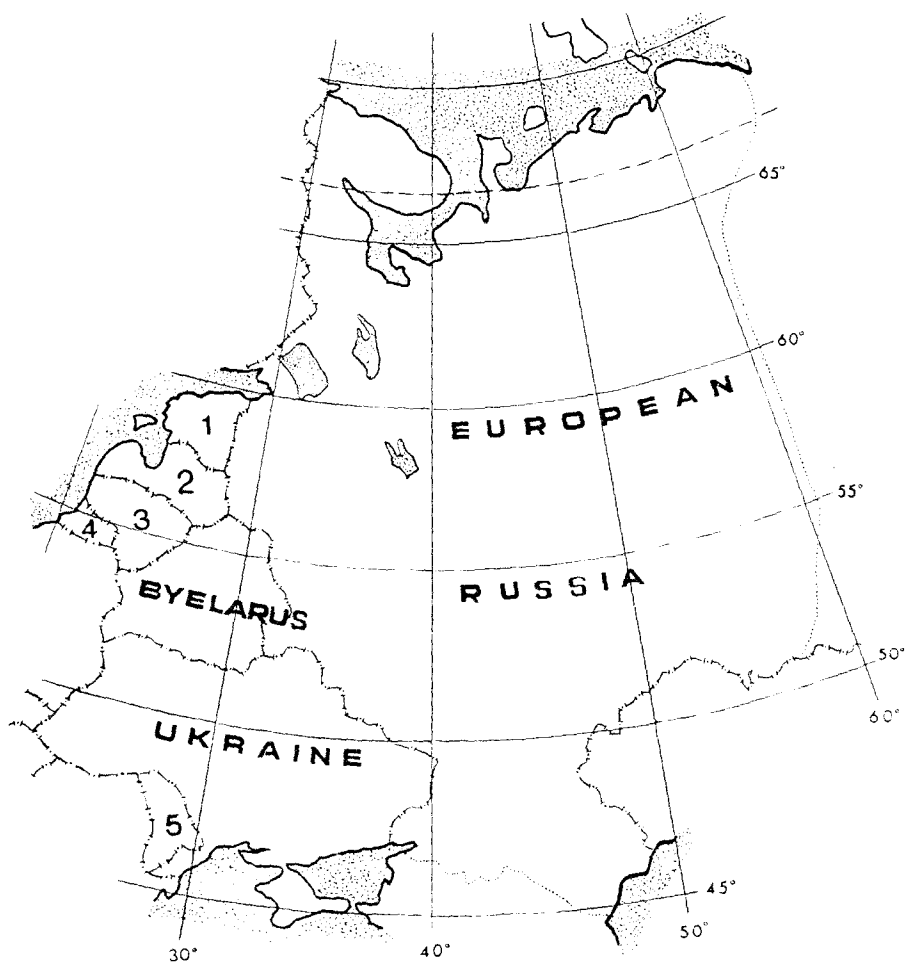
**LEAF-BEETLES
(COLEOPTERA:
CHRYSOMELIDAE)
OF THE EASTERN EUROPE**

**New key to subfamilies, genera,
and species**

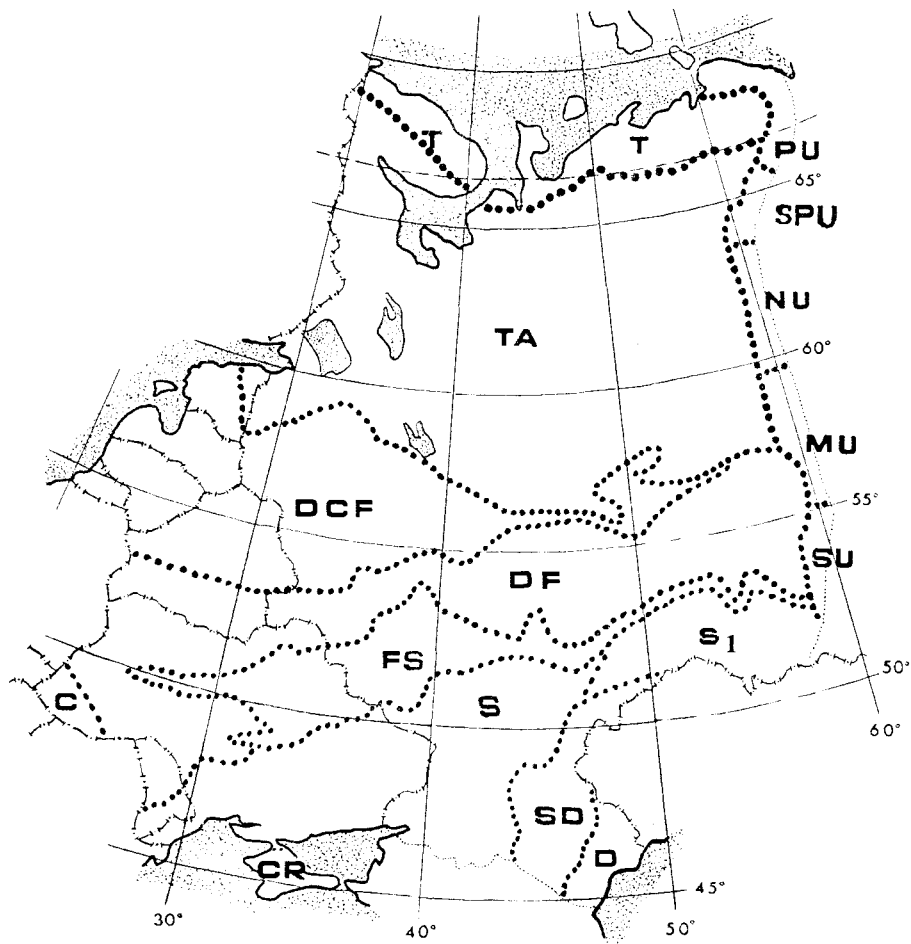


BY
ANDRZEJ O. BIENKOWSKI

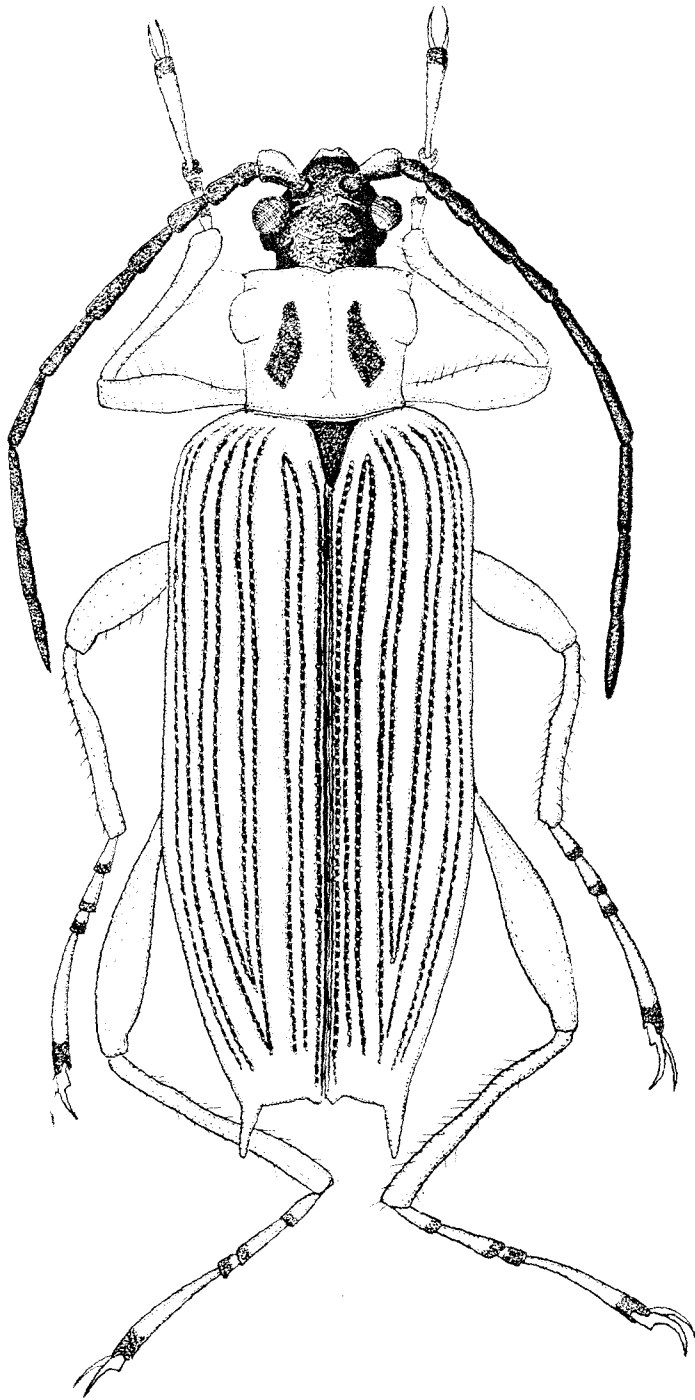
Moscow , 2004



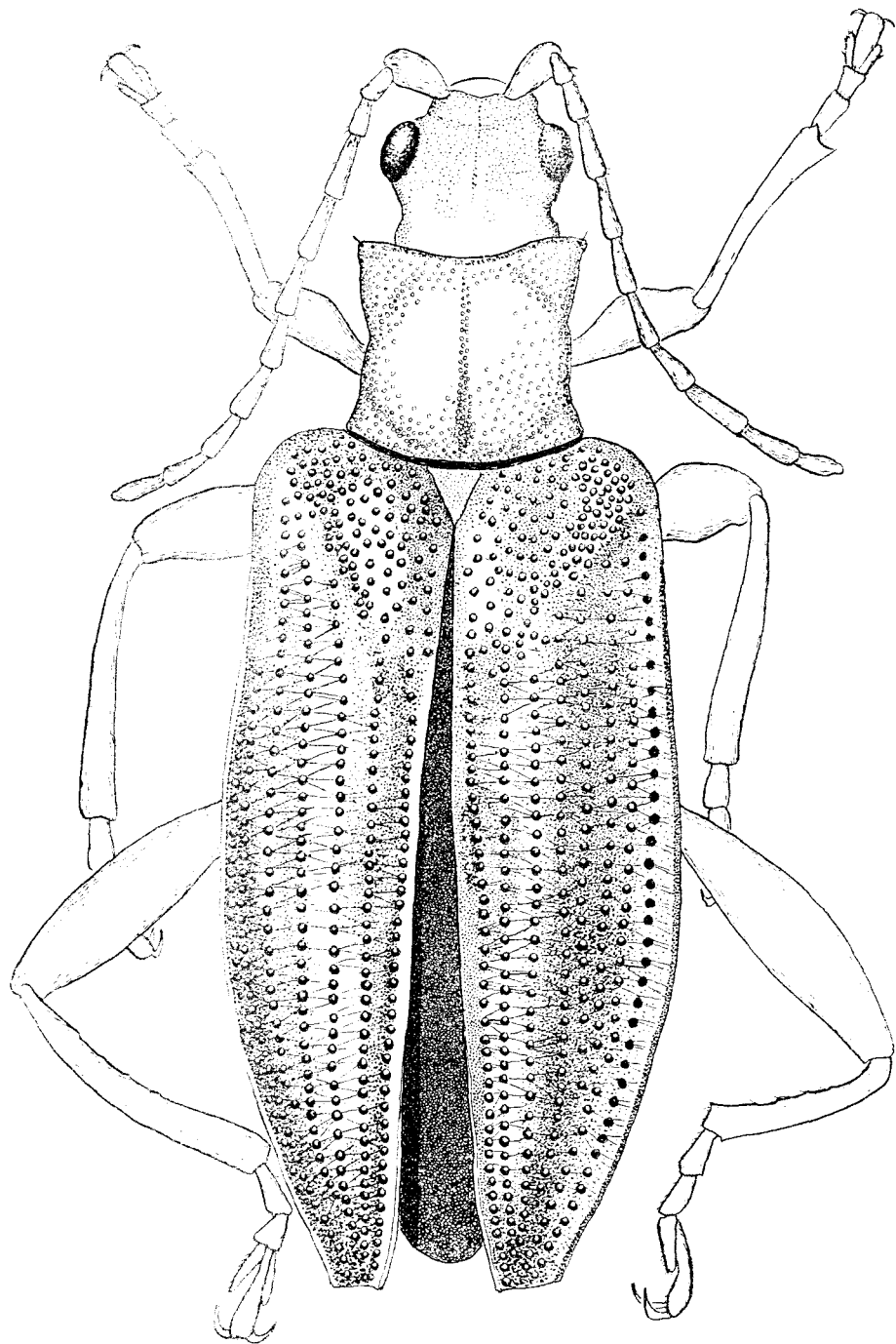
Map 1. Countries of Eastern Europe (1 — Estonia, 2 — Latvia, 3 —Lithuania, 4 — Russia: Kaliningrad reg., 5 — Moldova).



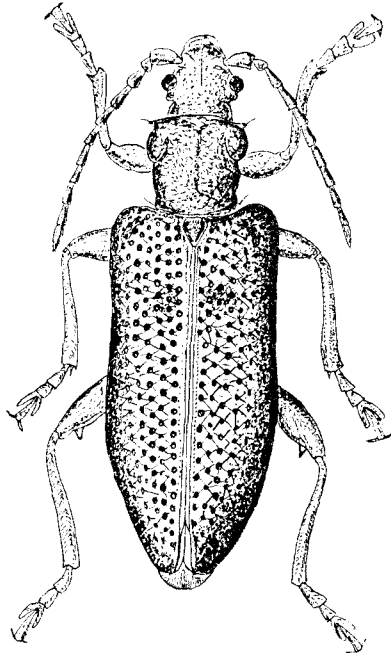
Map 2. Natural zones and mountain regions of Eastern Europe: C — Carpathians, CR — Crimean Mountains, D — desert zone, DCF — deciduous-coniferous forest zone, DF — deciduous forest zone, FS — forest steppe zone, MU — Middle Urals, NU — Northern Urals, PU — Polar Urals, S — steppe zone, S1 — east of steppe zone, SD — semidesert zone, SPU — Subpolar Urals, SU — Southern Urals, T — tundra zone, TA — taiga zone.



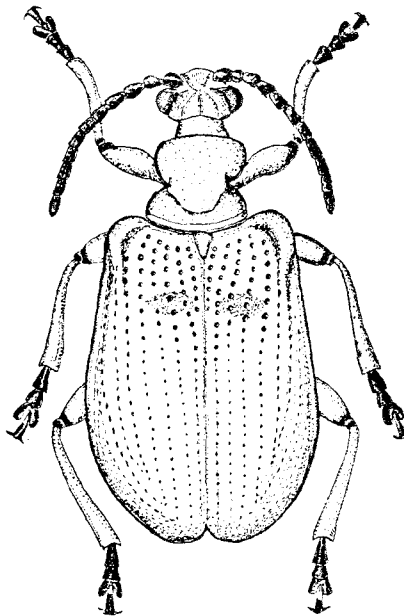
Total figure 1. *Macroplea appendiculata*. Length 5.2–8.5 mm.



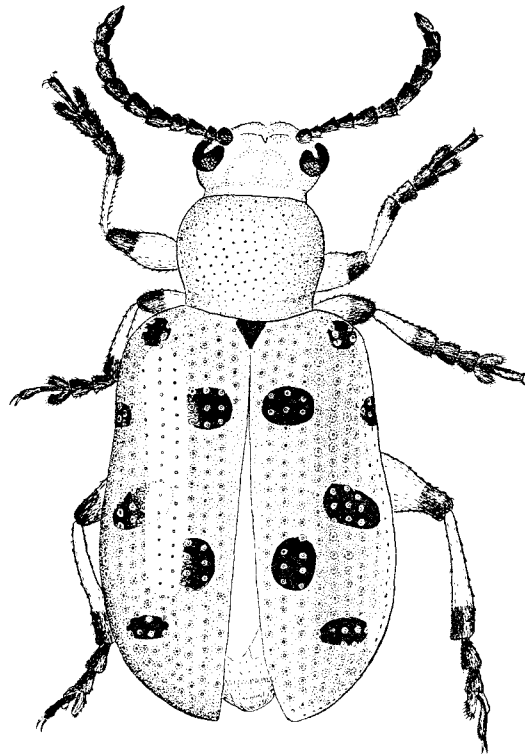
Total figure 2. *Donacia aquatica*. Length 6.7–8.8 mm.



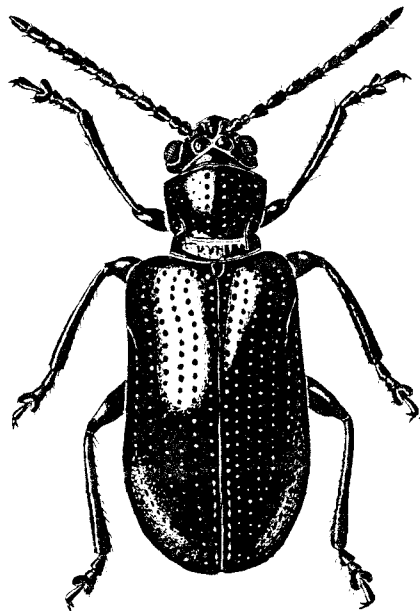
Total figure 3. *Plateumaris sericea*. Length 5.5–8.5 mm.



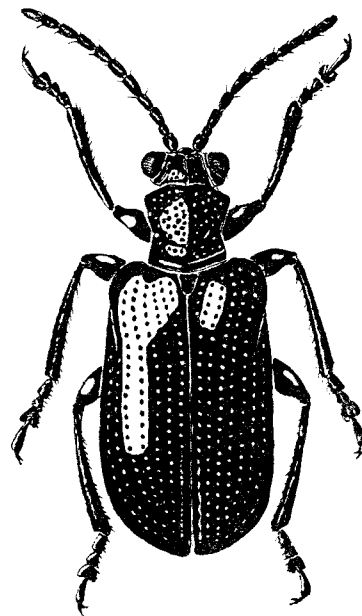
Total figure 4. *Lilioceris merdigera*. Length 6.0–7.5 mm.



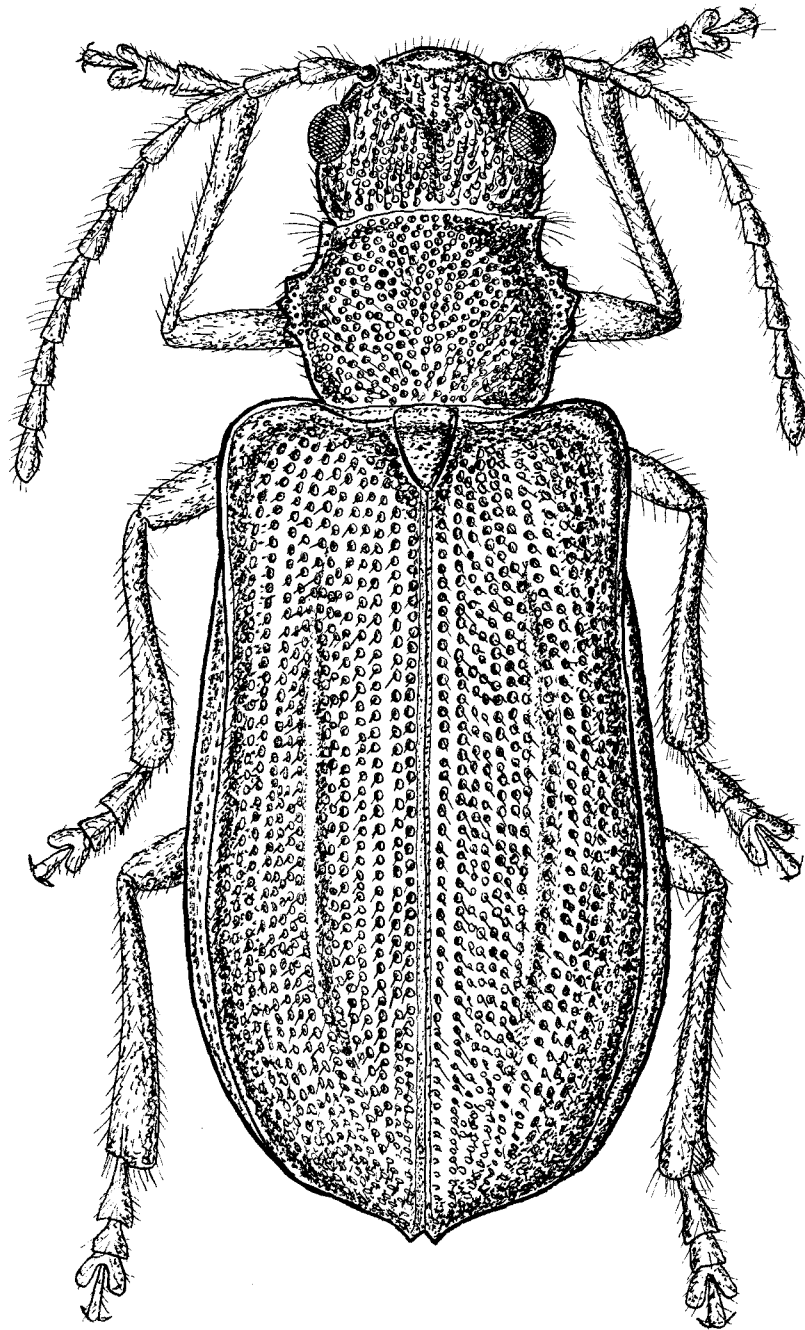
Total figure 5. *Crioceris duodecimpunctata*. Length 4.3–6.0 mm.



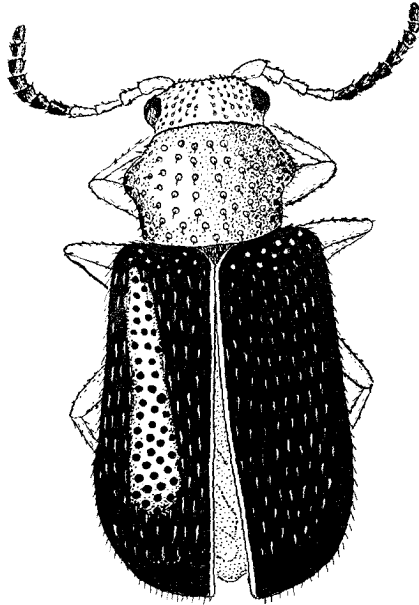
Total figure 6. *Oulema gallaeciana*.
Length 3.0–4.2 mm.



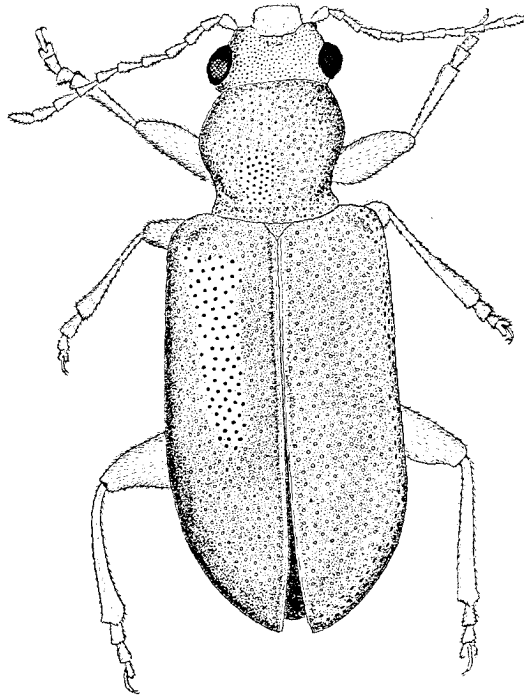
Total figure 7. *Lema cyanella*.
Length 3.5–5.0 mm.



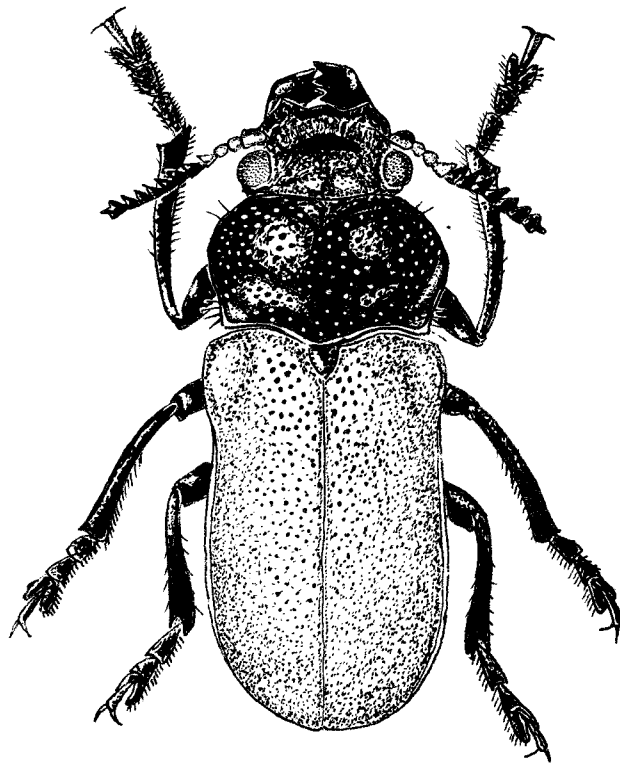
Total figure 8. *Syneta betulae*. Length 5.4–7.5 mm.



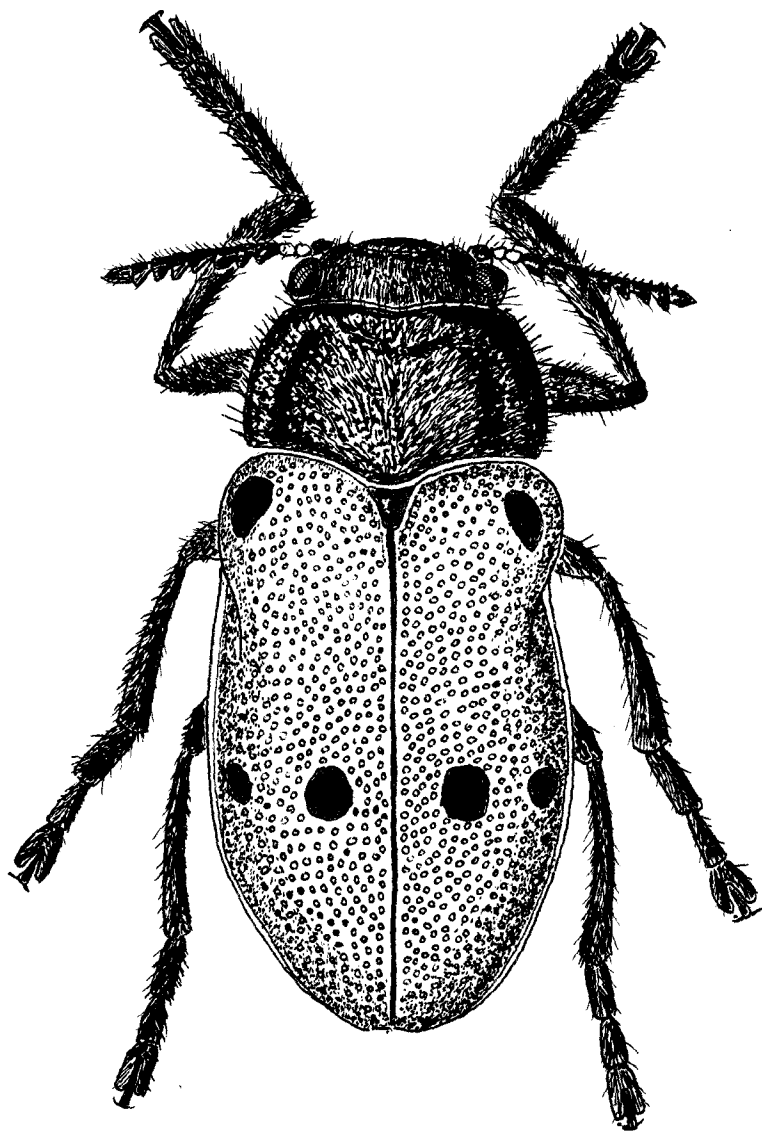
Total figure 9. *Zeugophora subspinosa*. Length 2.7-3.5 mm.



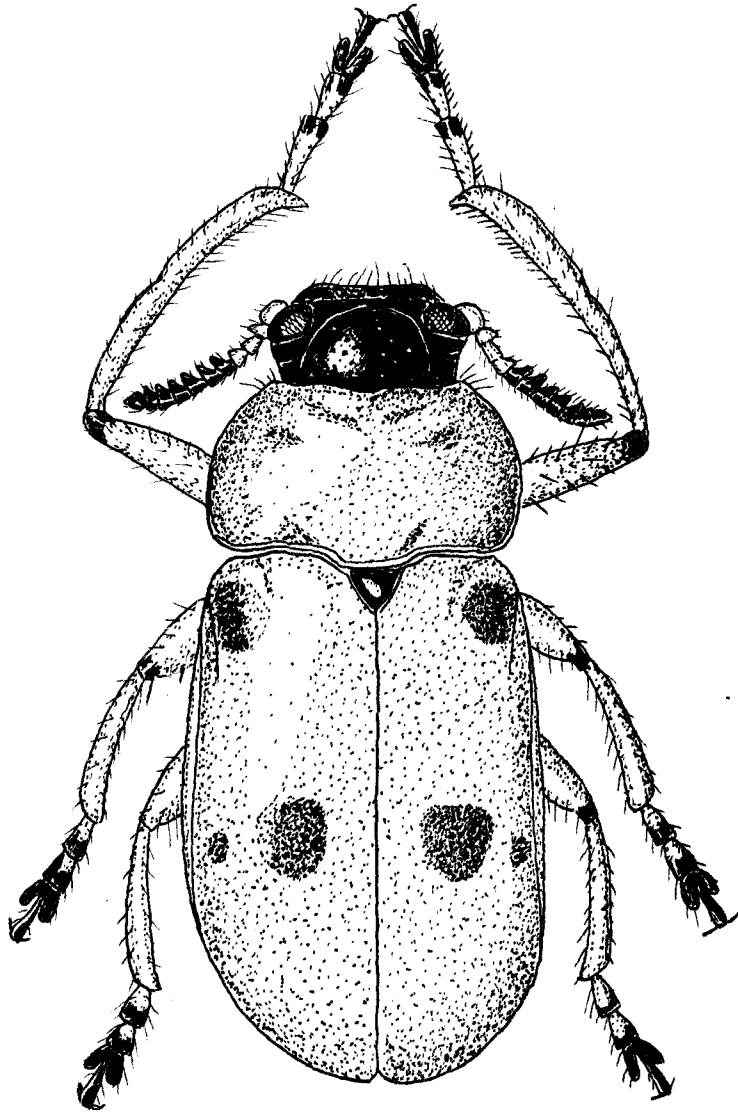
Total figure 10. *Orsodacne cerasi*. Length 4.5-6.4 mm.



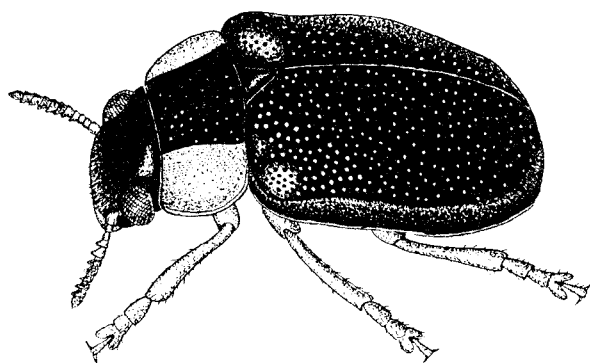
Total figure 11. *Labidostomis lucida axillaris*, male. Length 5.0–9.5 mm.



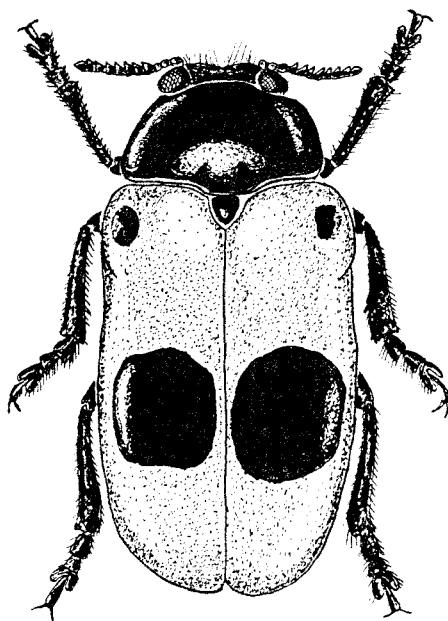
Total figure 12. *Lachnaia sexpunctata*. Length 9.0–13.0 mm.



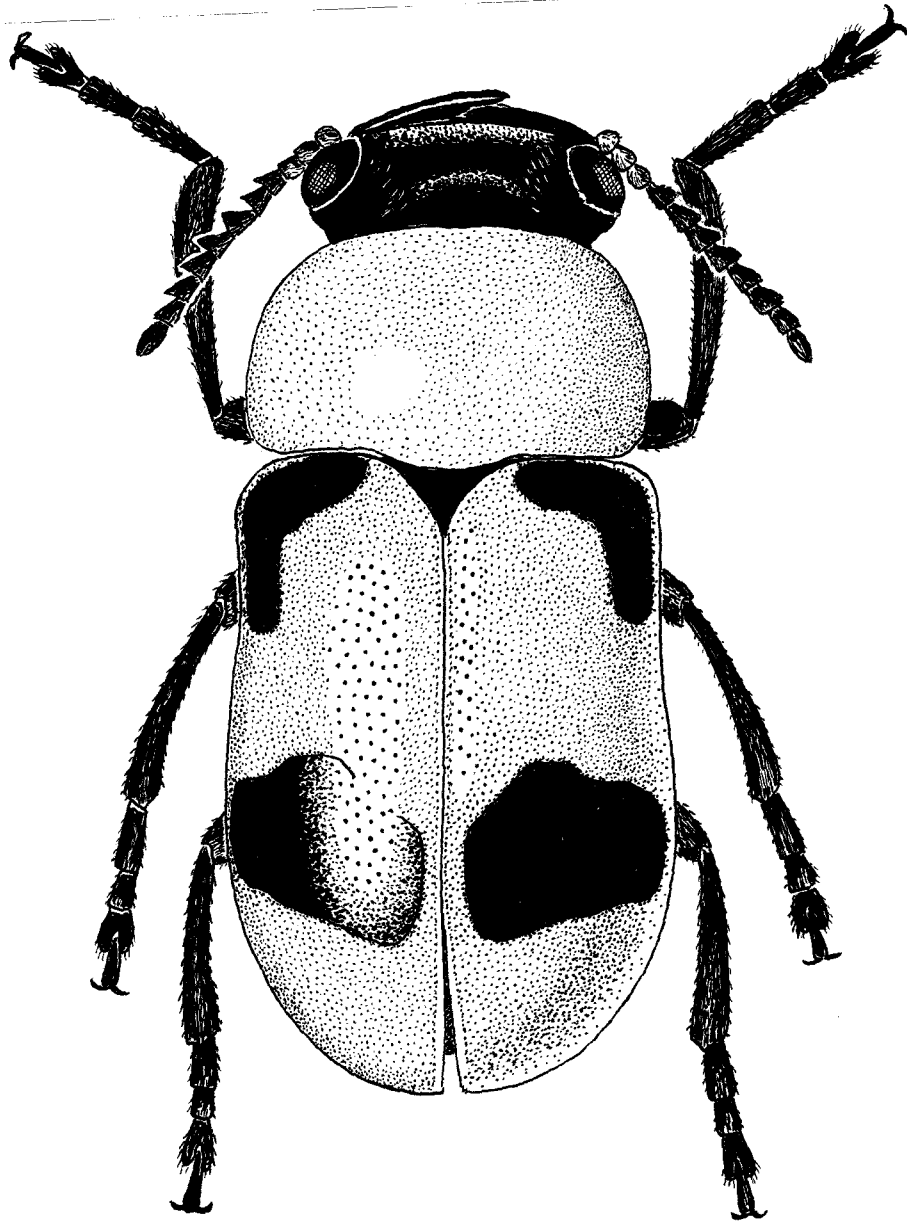
Total figure 13. *Tituboea macropus*. Length 9.0-13.0 mm.



Total figure 14. *Smaragdina affinis*, male. Length 2.5–4.0 mm.



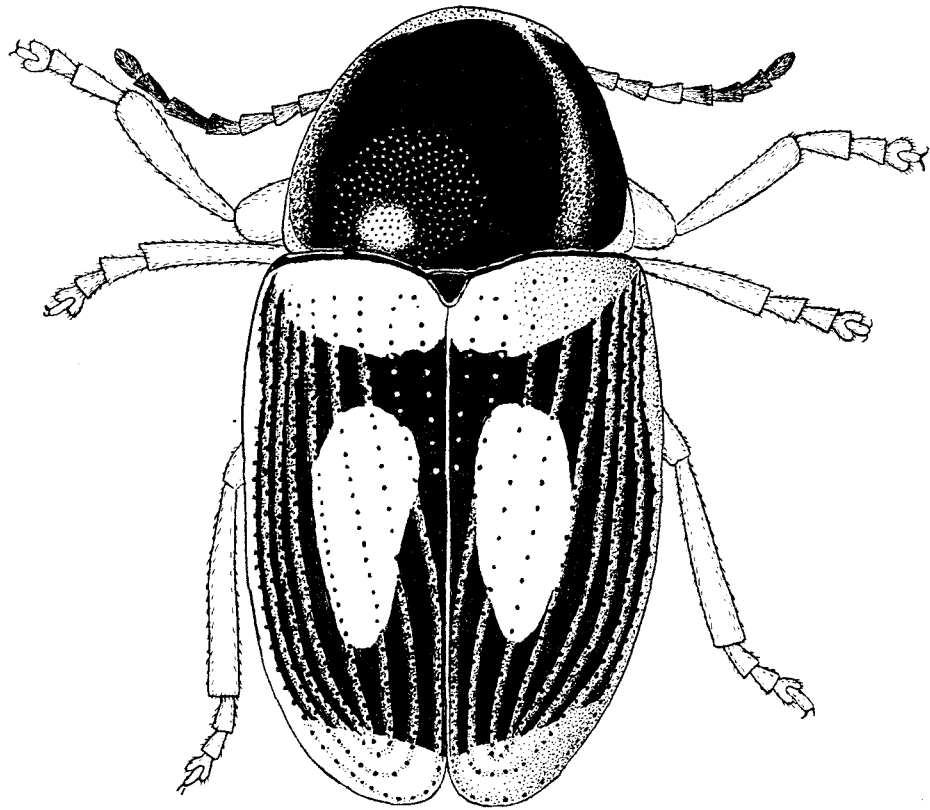
Total figure 15. *Clytra laeviuscula*. Length 8.0–12.0 mm.



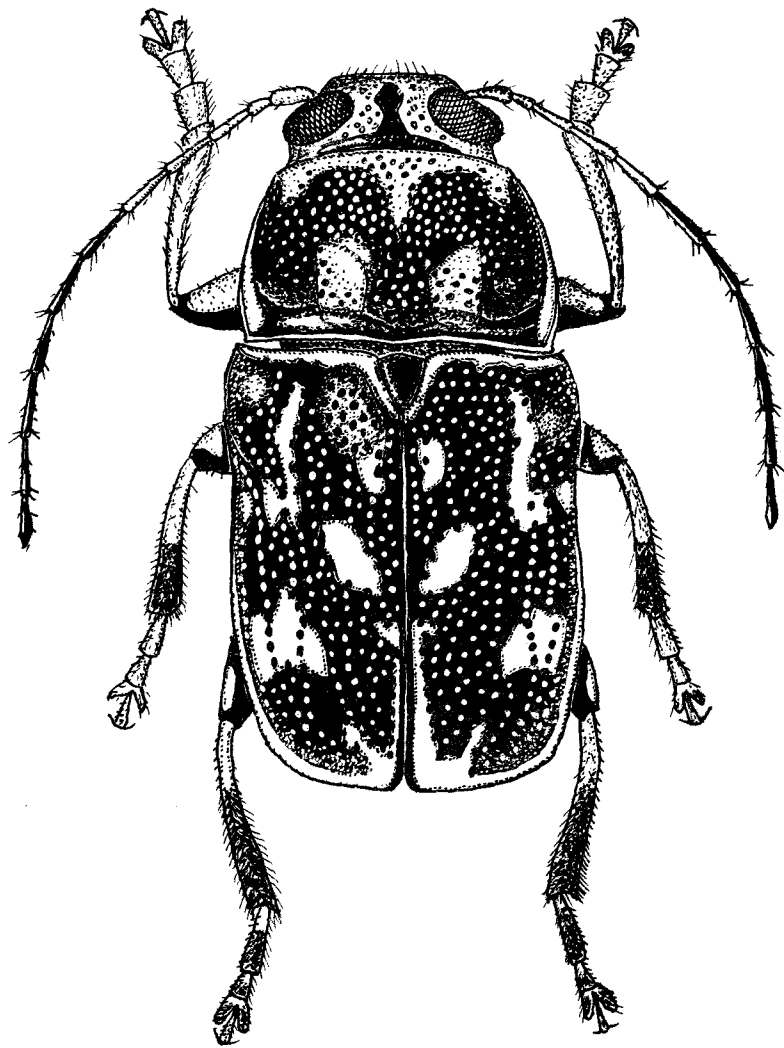
Total figure 16. *Coptocephala rubicunda rossica*, male. Length 5.0–7.0 mm.



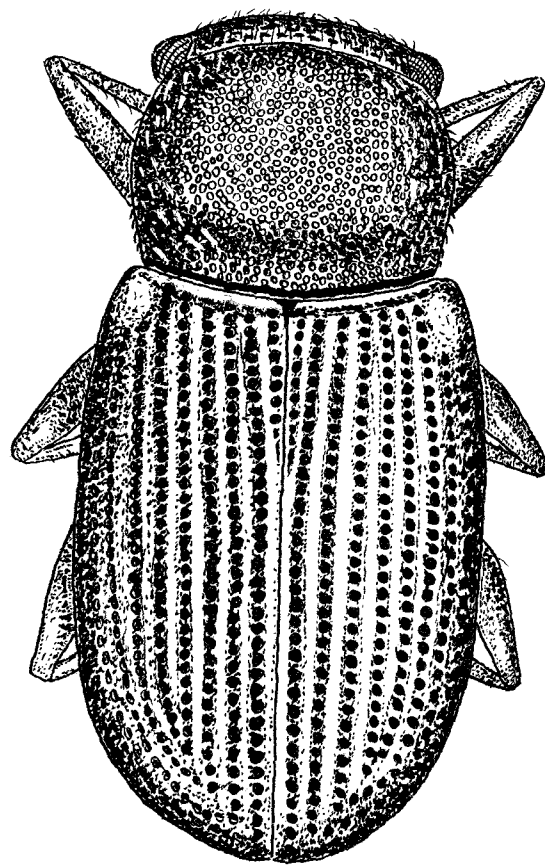
Total figure 17. *Cheilotoma erythrostroma*, male. Length 4.8–7.0 mm.



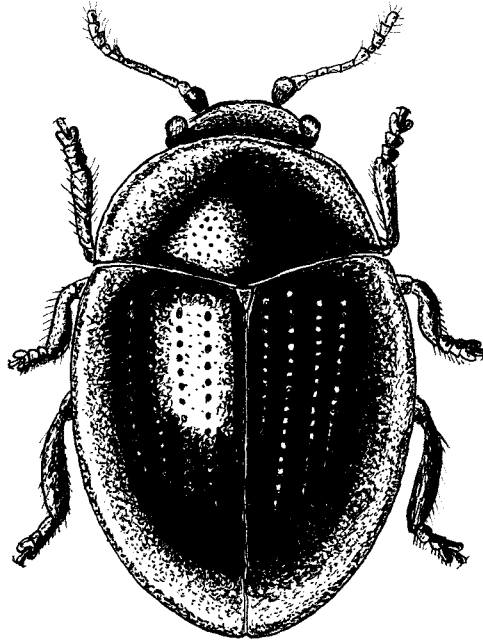
Total figure 18. *Cryptocephalus elegantulus*. Length 1.5-2.5 mm.



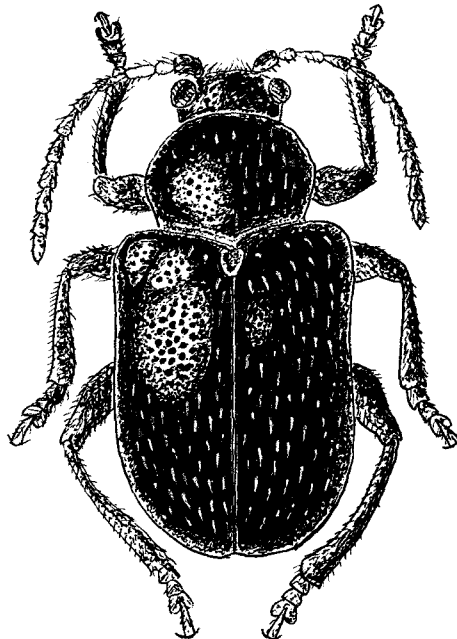
Total figure 19. *Pachybrachis tessellatus*. Length 3.0–4.5 mm.



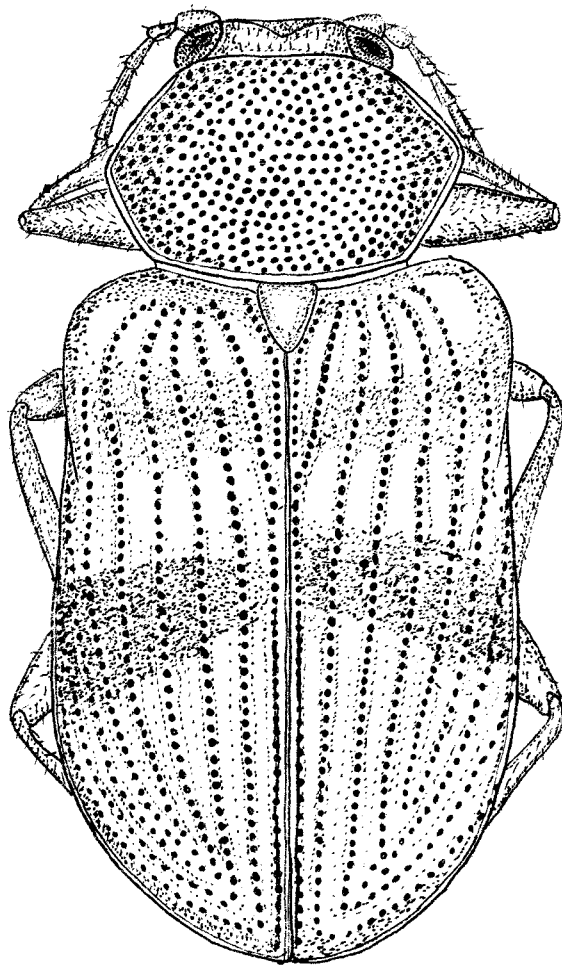
Total figure 20. *Stylosomus tamaricis*. Length 1.5–2.5 mm.



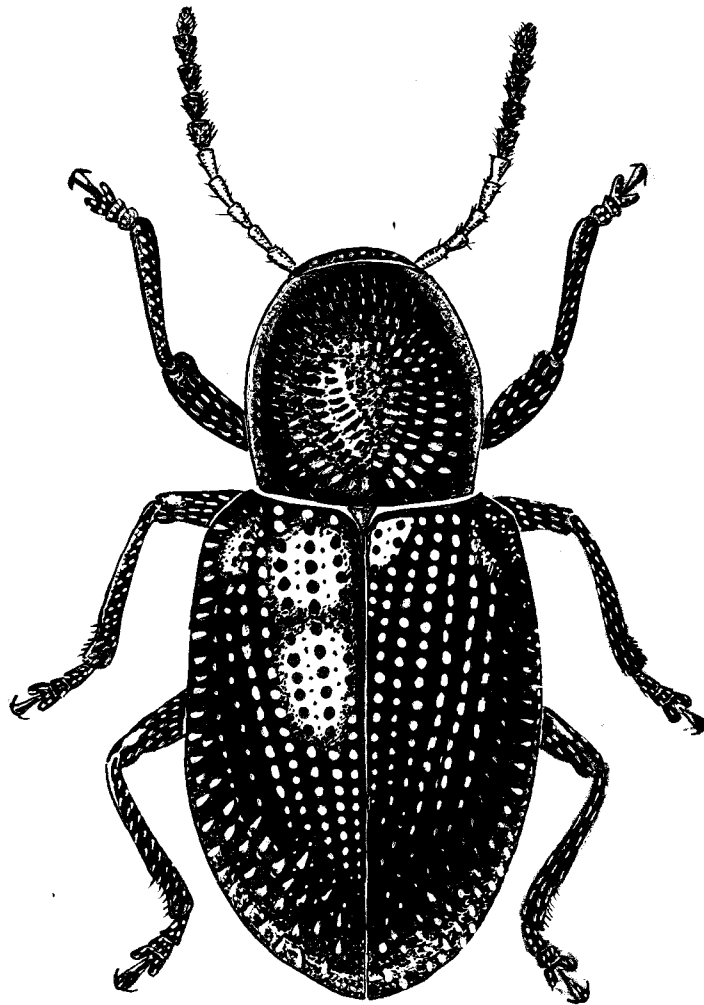
Total figure 21. *Oomorphus concolor*. Length 2.0–3.0 mm.



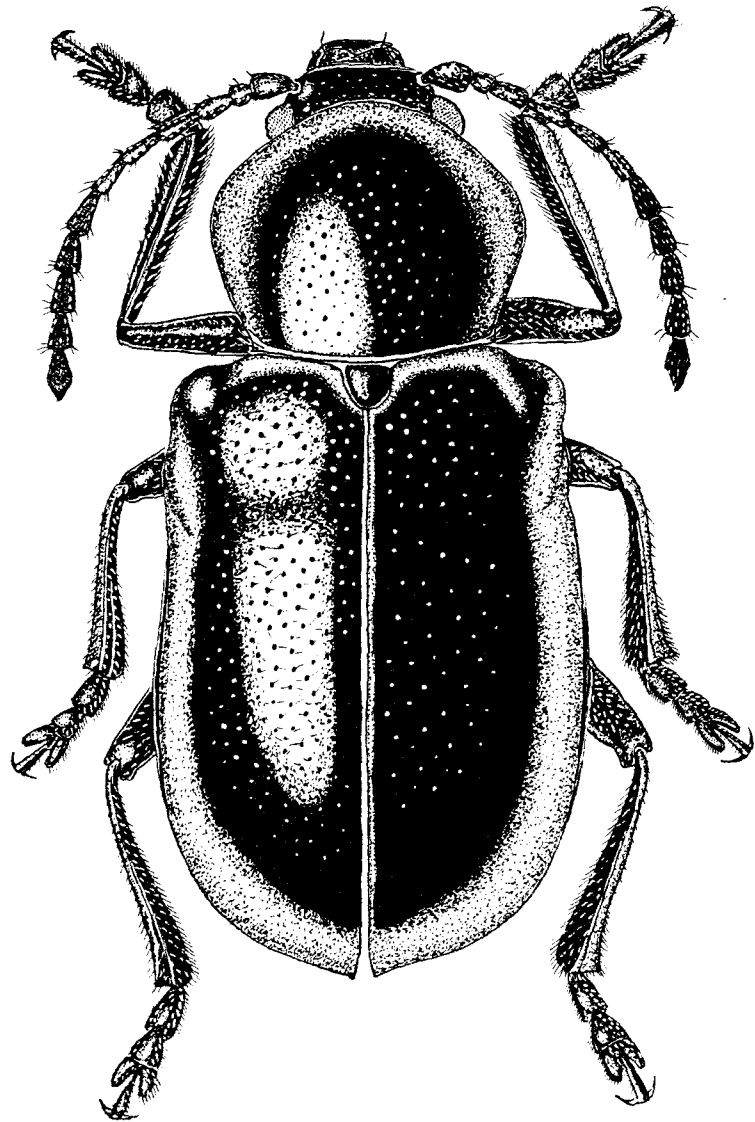
Total figure 22. *Bromius obscurus*. Length 5.0–6.0 mm.



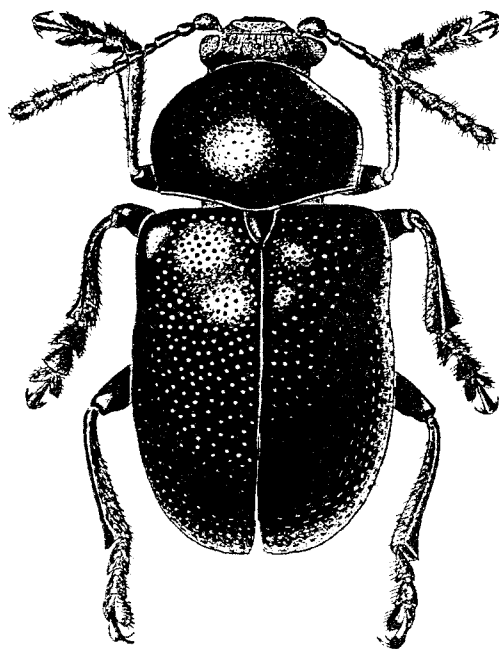
Total figure 23. *Chloropterus lefevrei*. Length 4.0–4.8 mm.



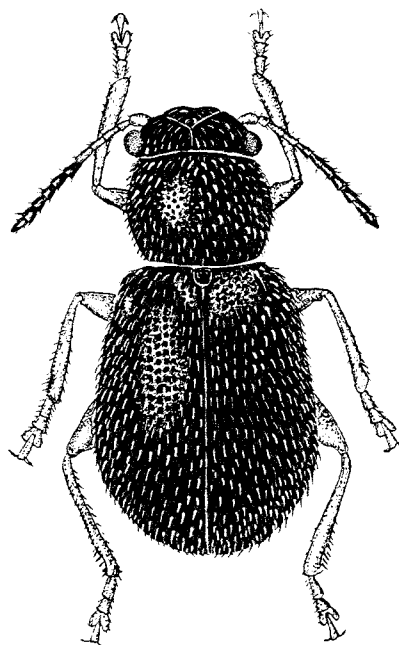
Total figure 24. *Pachnephorus villosus*. Length 2.7-4.0 mm.



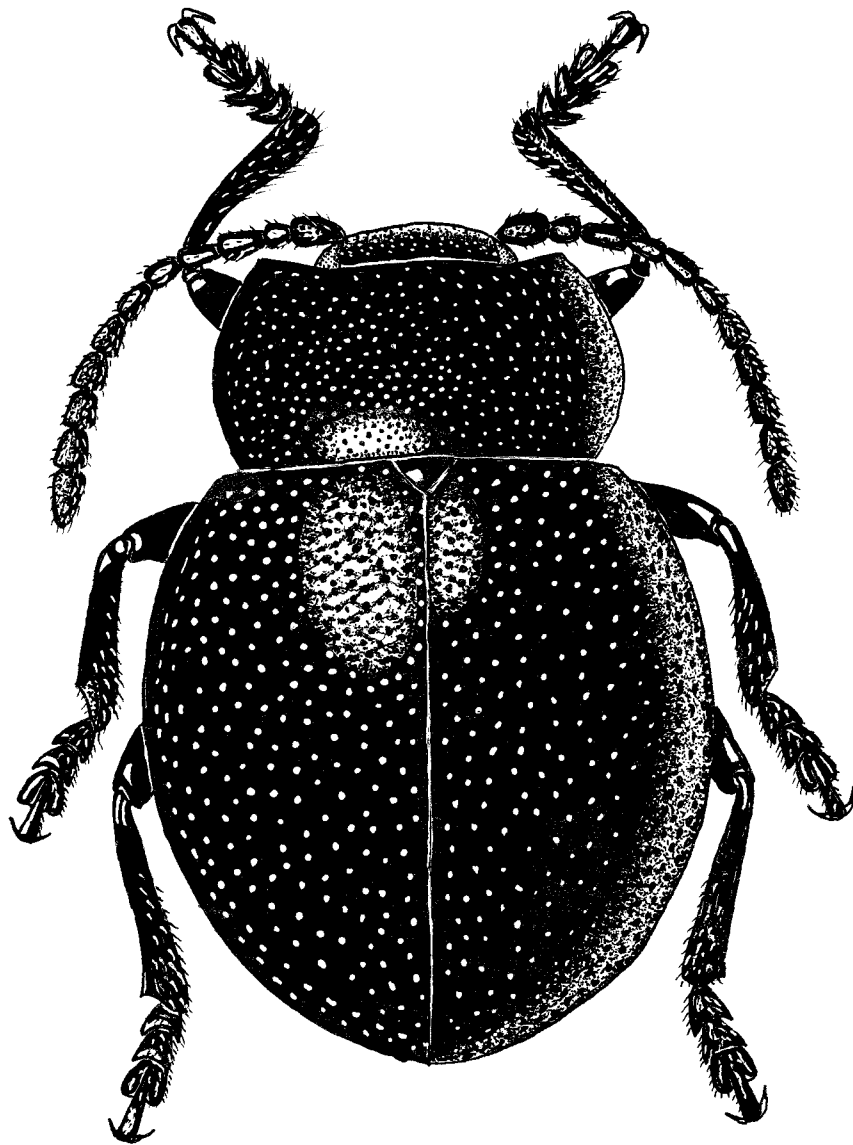
Total figure 25. *Chrysochares asiatica*. Length 13.0–17.0 mm.



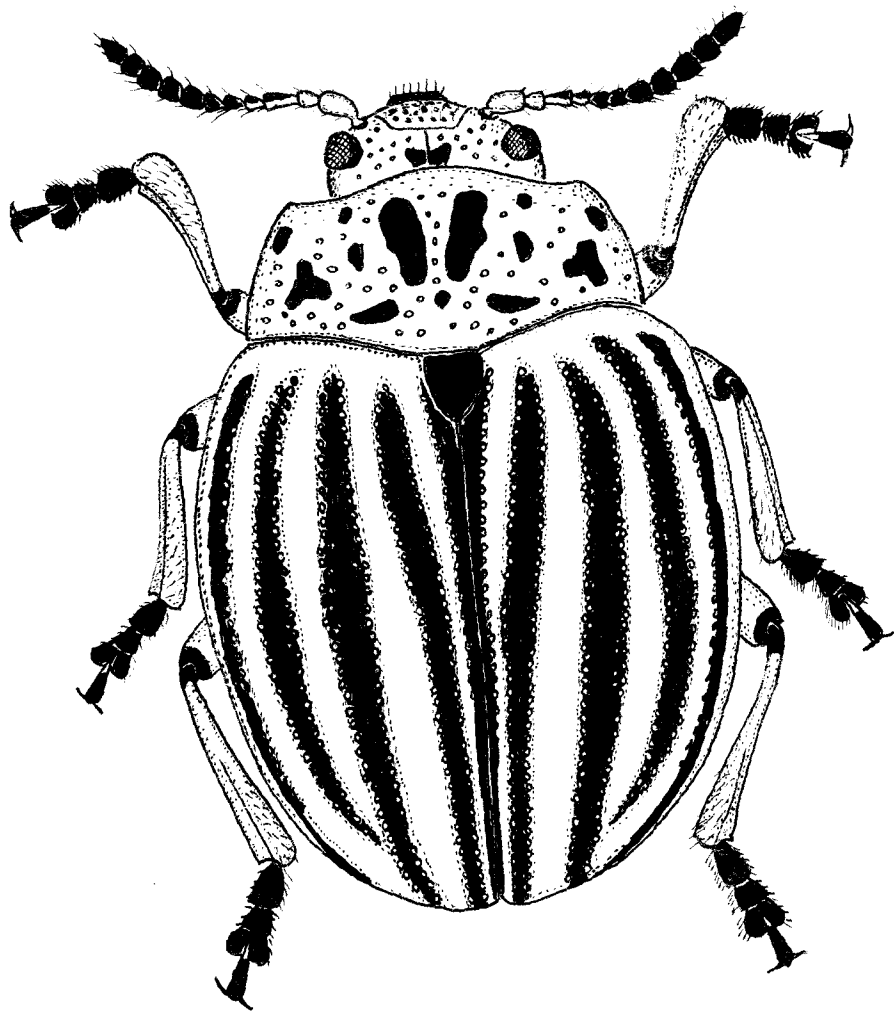
Total figure 26. *Eumolpus asclepiadeus*. Length 7.4–10.0 mm.



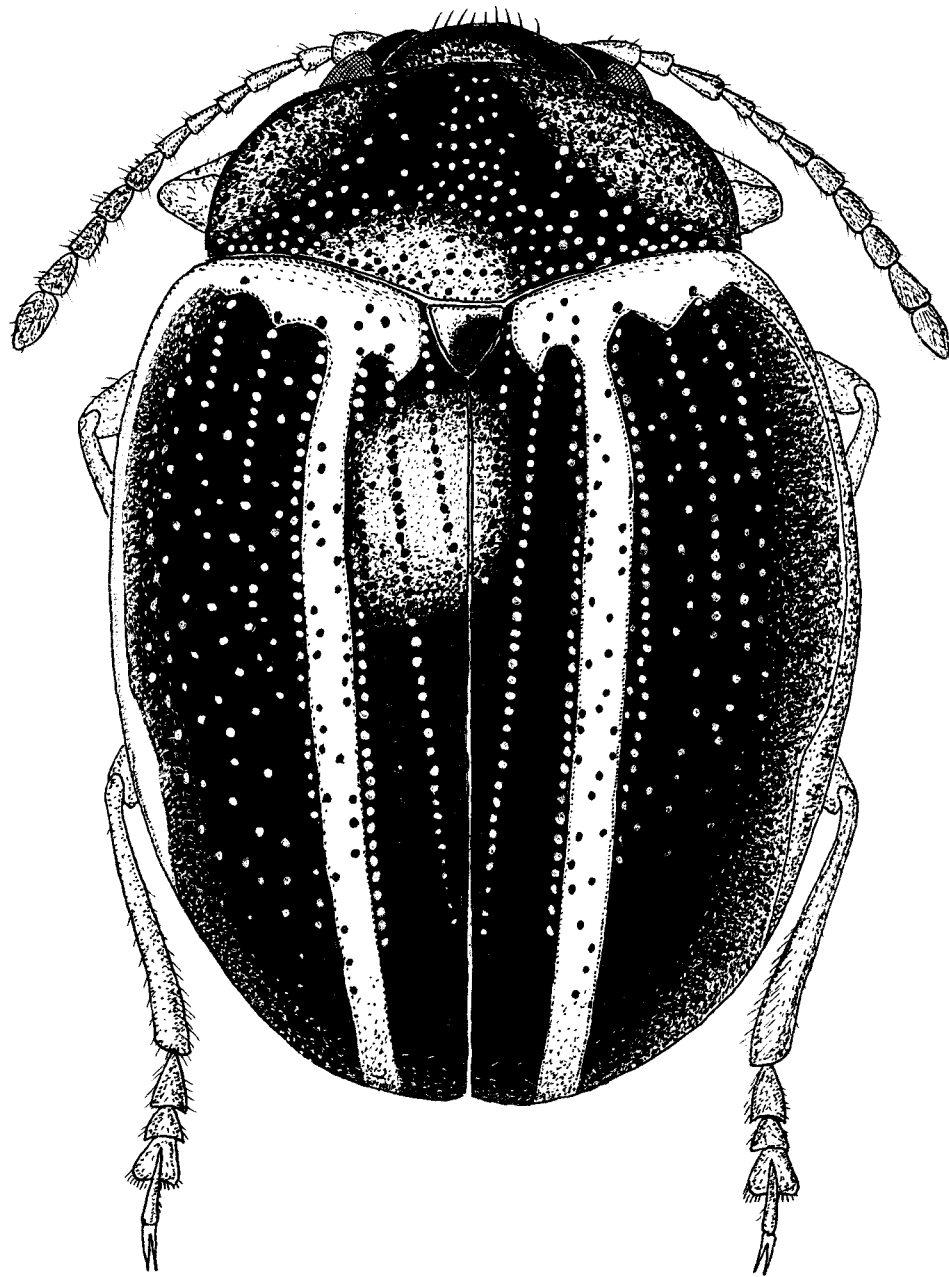
Total figure 27. *Malegia turkestanica*. Length 2.3–4.0 mm.



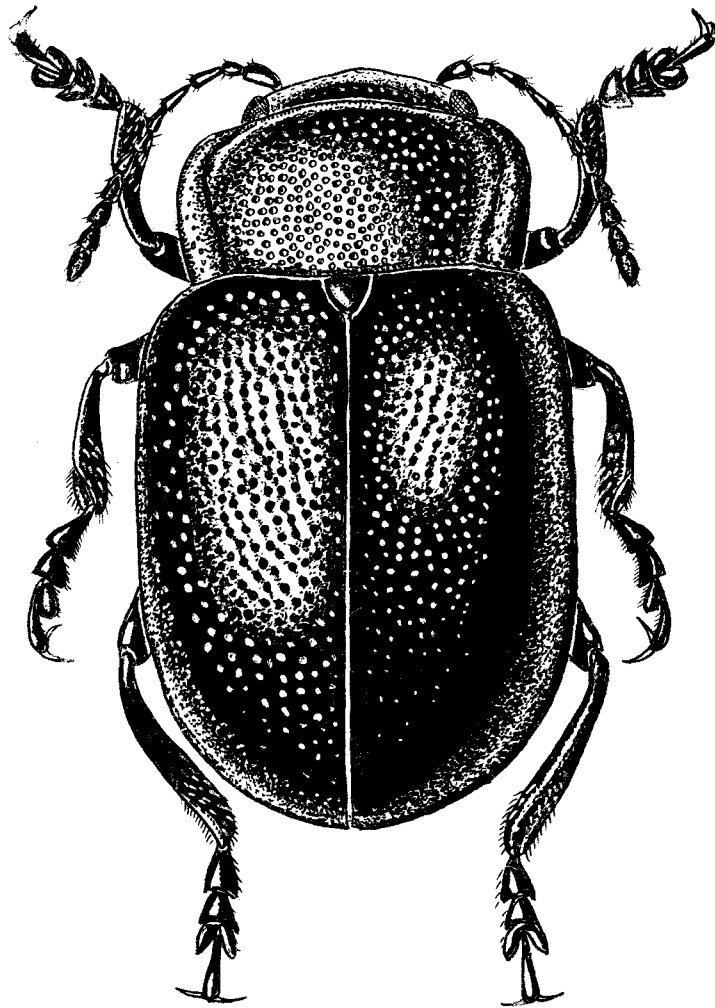
Total figure 28. *Timarcha goettingensis*. Length 8.0–13.0 mm.



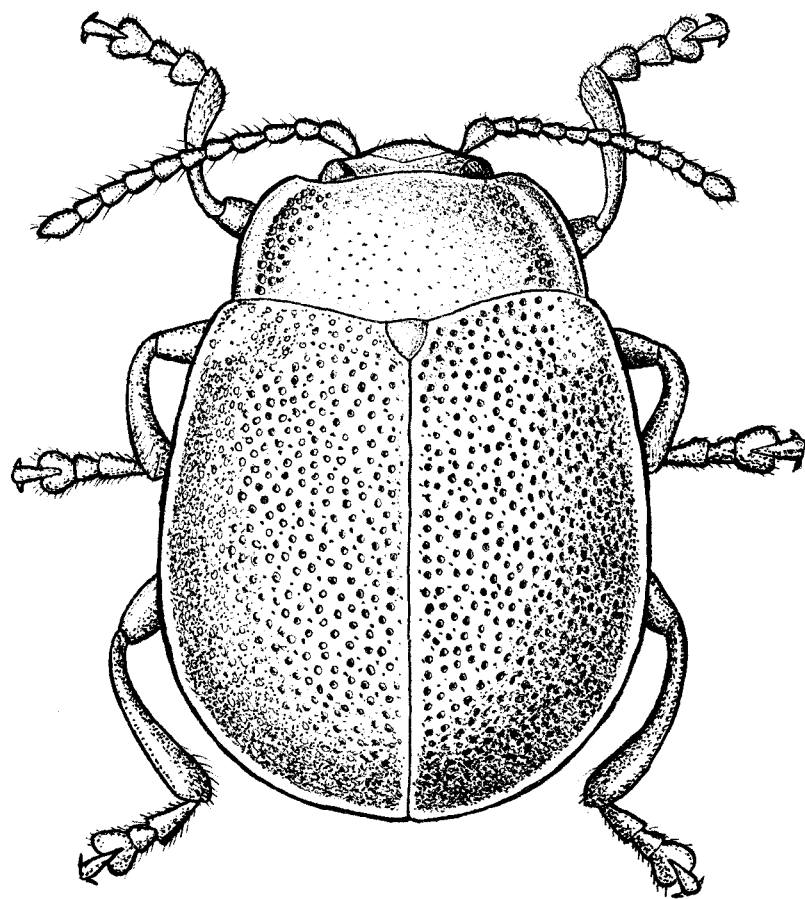
Total figure 29. *Leptinotarsa decemlineata*. Length 9.0–12.0 mm.



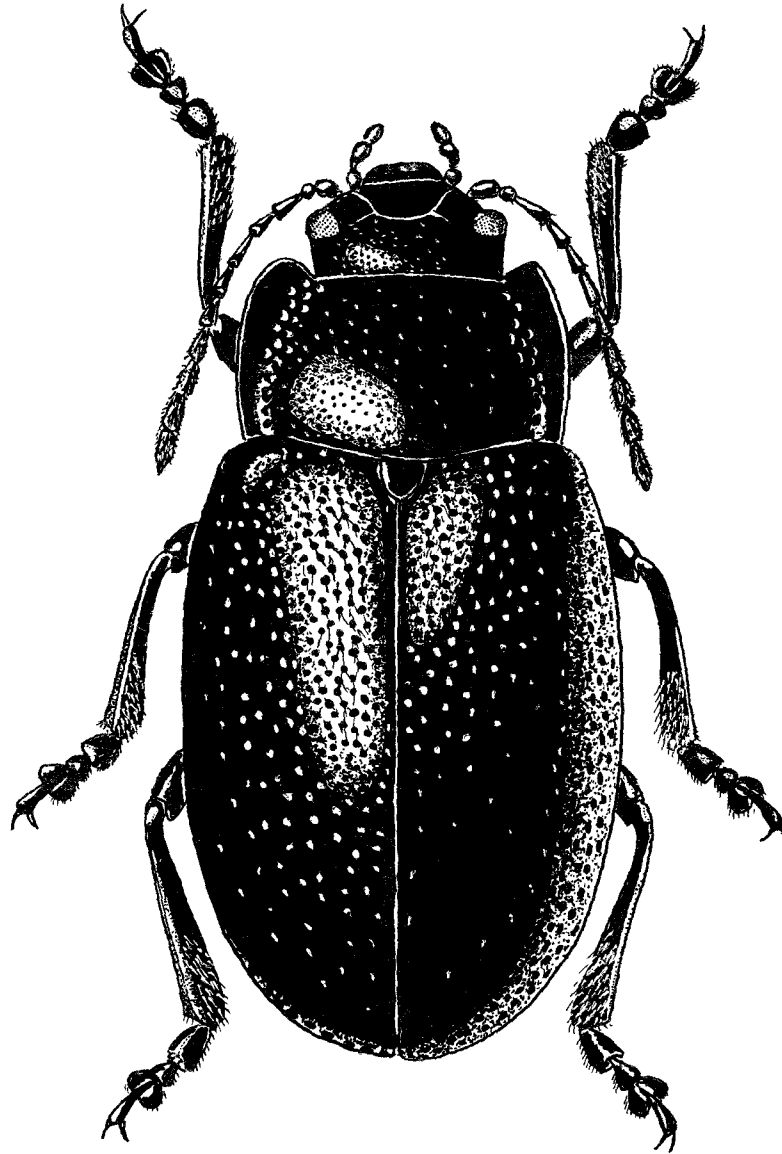
Total figure 30. *Zygogramma suturalis*. Length 5.0–6.8 mm.



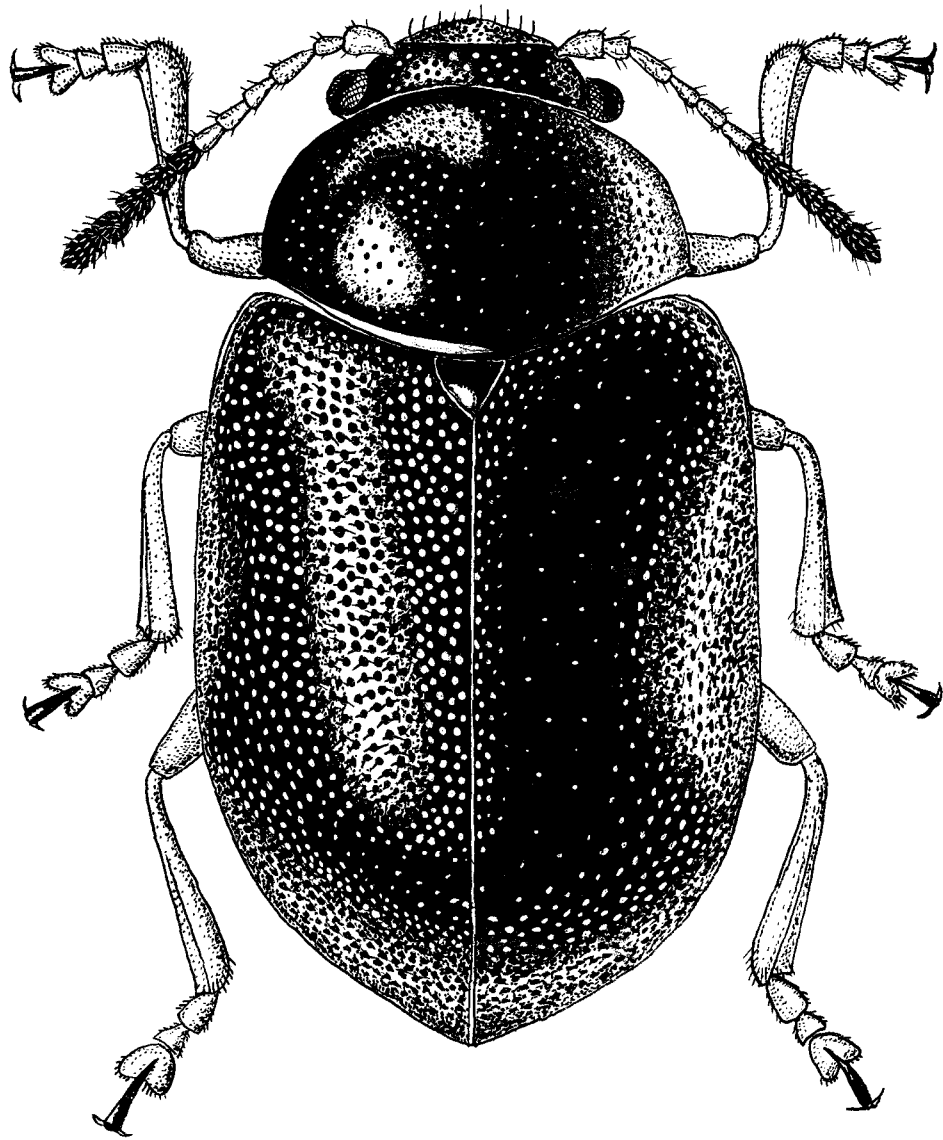
Total figure 31. *Crosita altaica*. Length 7.0–13.0 mm.



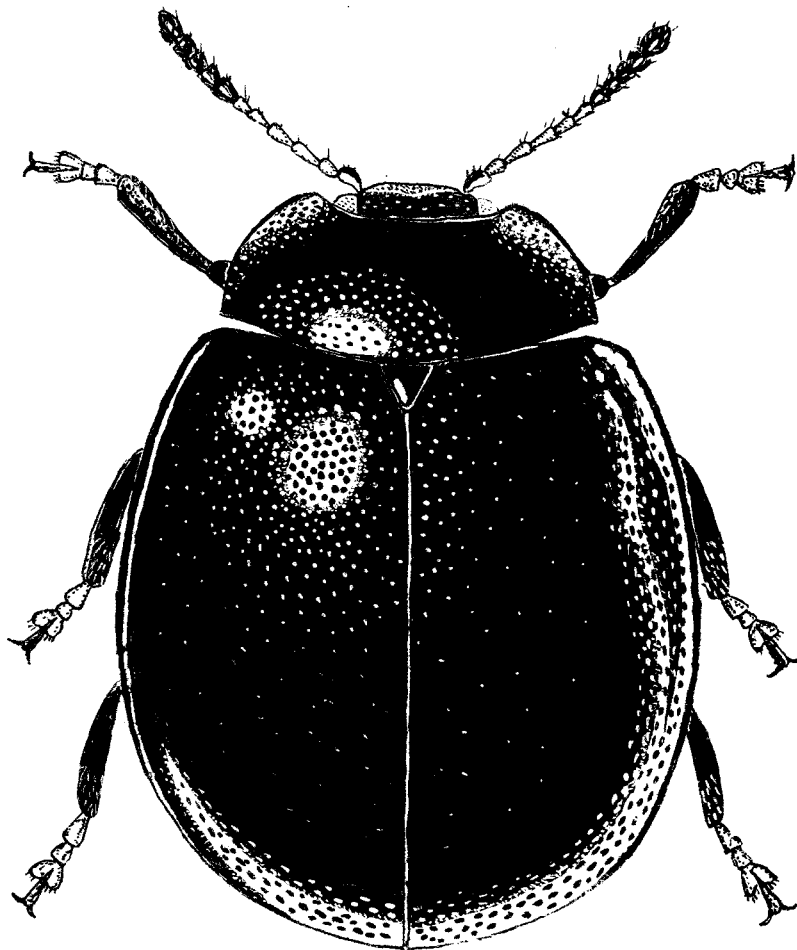
Total figure 32. *Chrysolina staphylaea*. Length 5.9–8.1 mm.



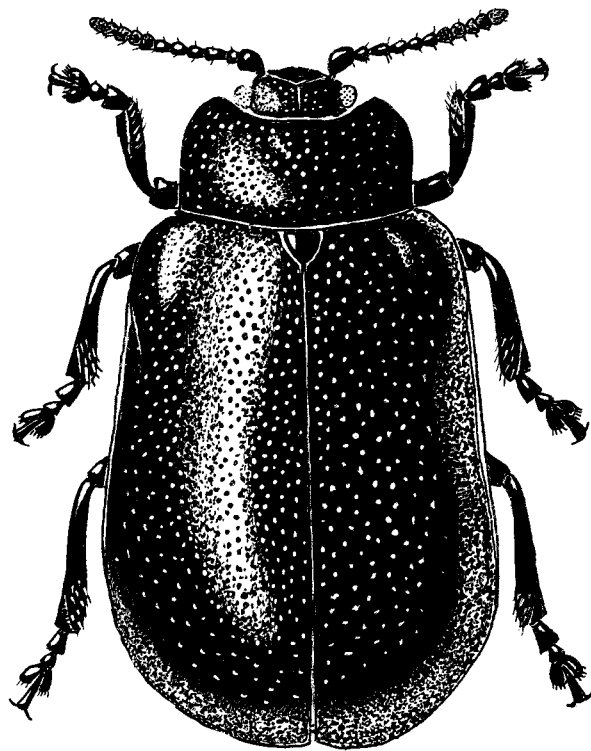
Total figure 33. *Oreina coerulea*. Length 8.5–12.0 mm.



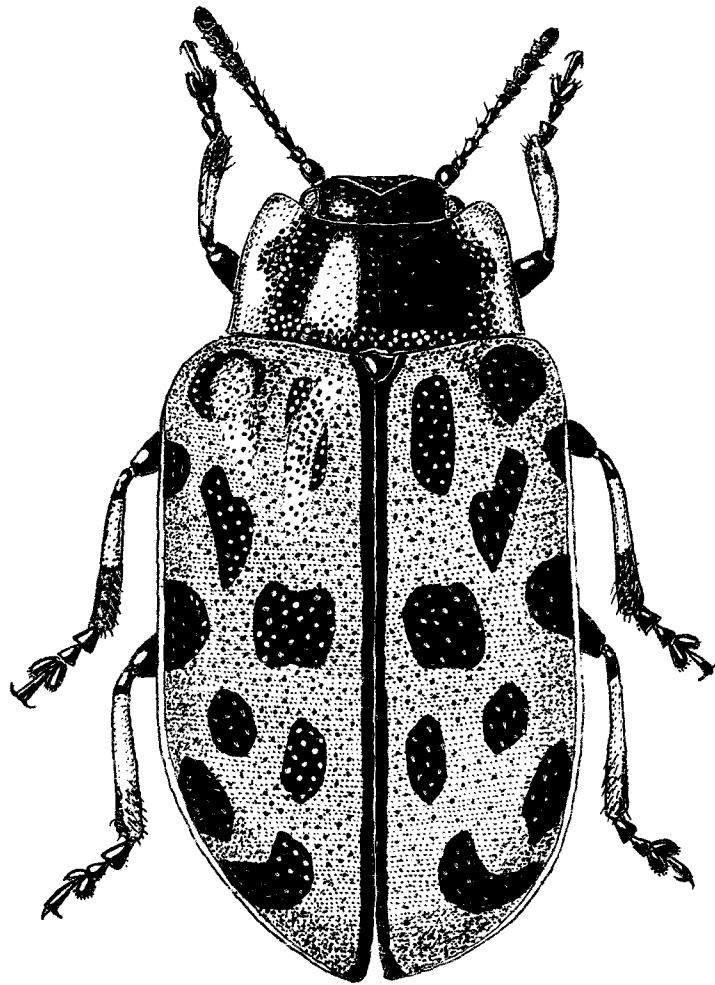
Total figure 34. *Colaphus hoeftii*. Length 4.0-6.0 mm.



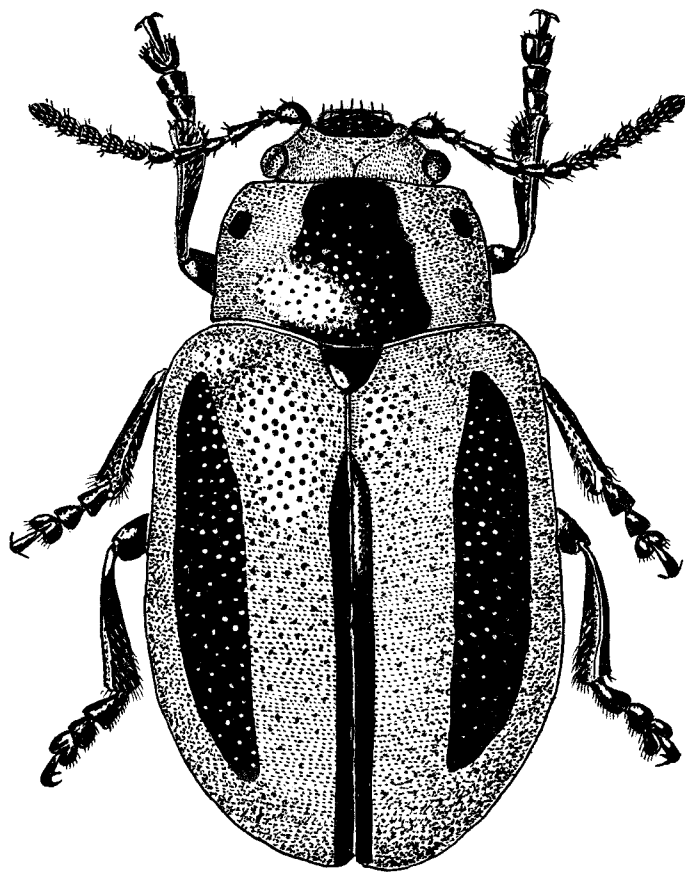
Total figure 35. *Plagioderia versicolora*. Length 2.5–4.8 mm.



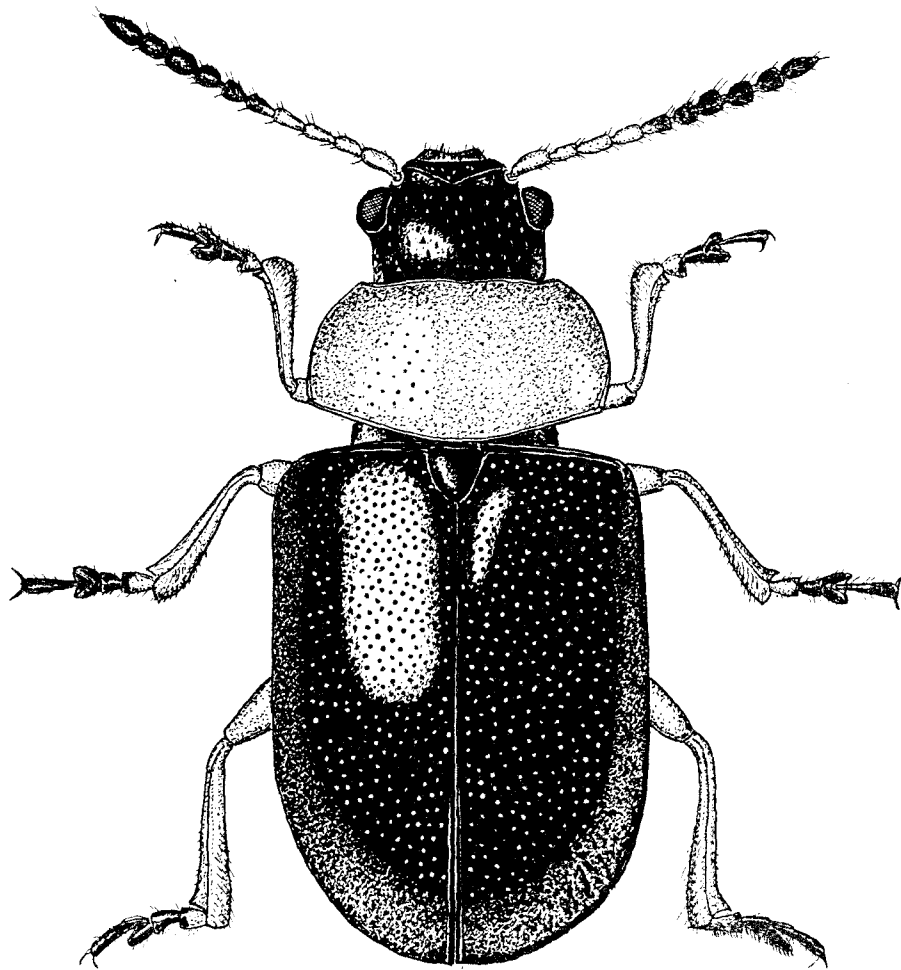
Total figure 36. *Plagiosterna aenea*. Length 6.3–8.5 mm.



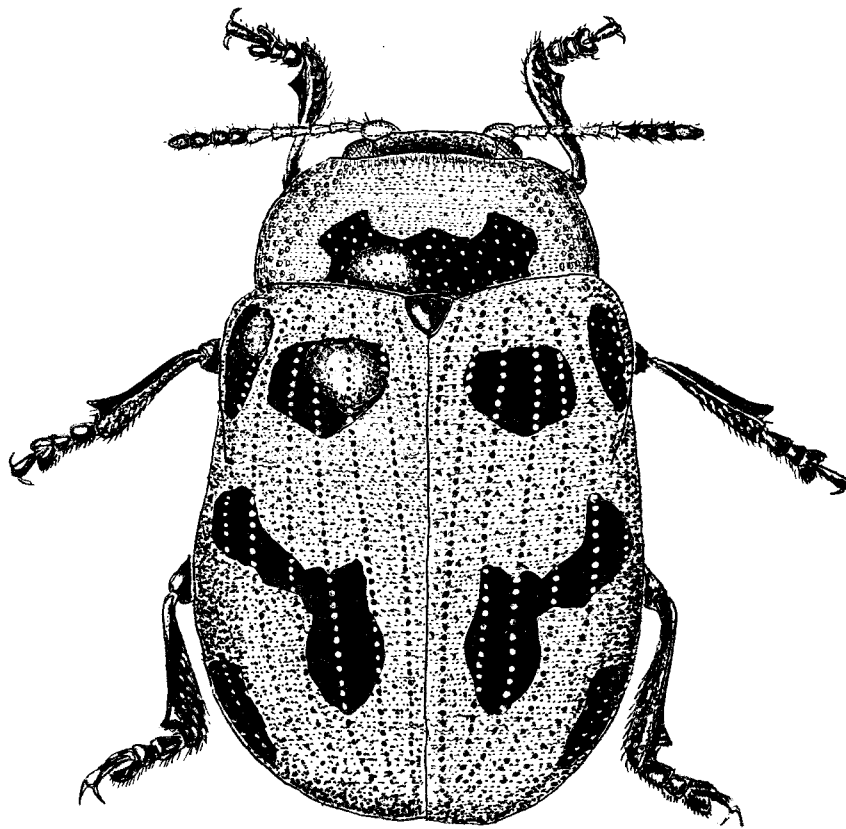
Total figure 37. *Chrysomela vigintipunctata*. Length 6.5–8.5 mm.



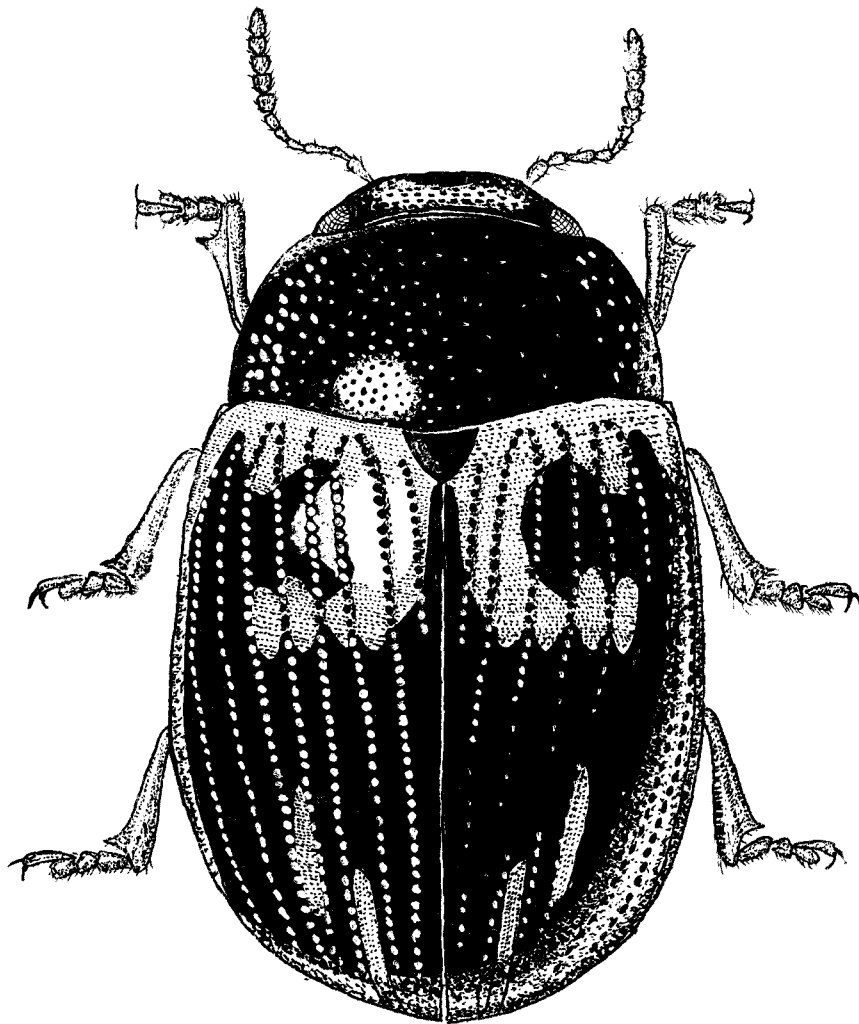
Total figure 38. *Entomoscelis adonidis*. Length 6.6–10.0 mm.



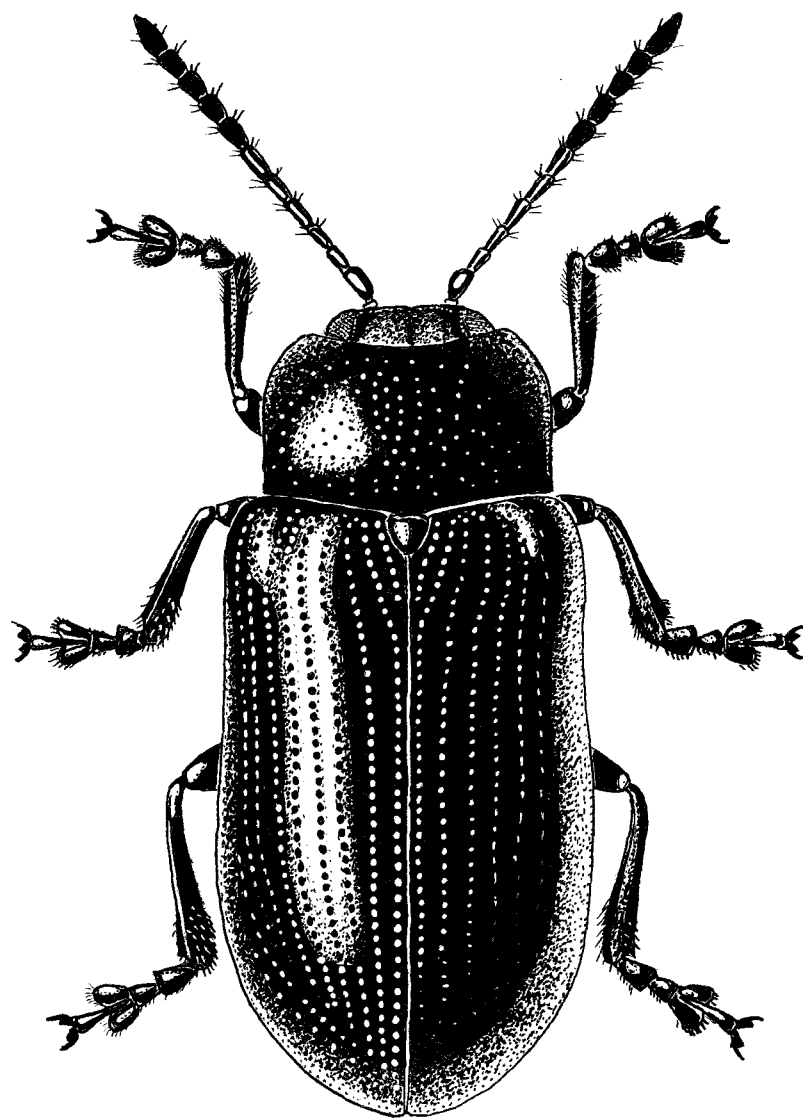
Total figure 39. *Gastrophysa polygoni*. Length 3.9–5.0 mm.



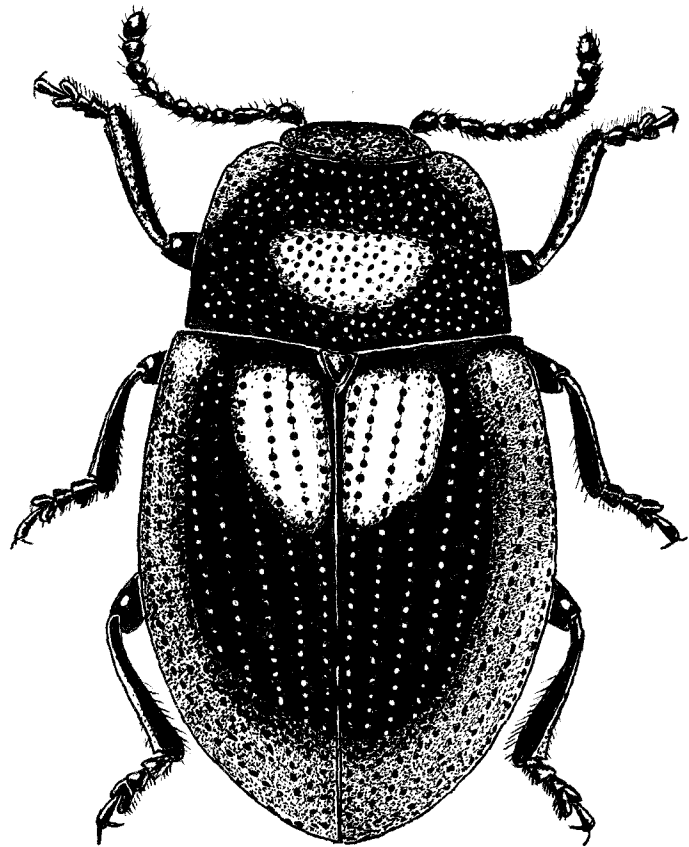
Total figure 40. *Gonioctena viminalis*. Length 5.5-7.0 mm.



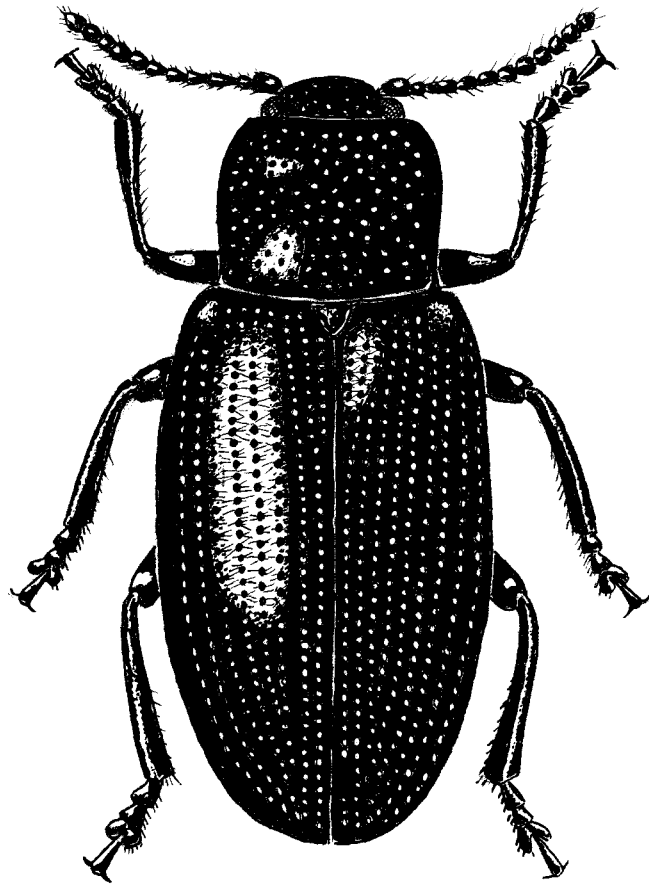
Total figure 41. *Cercyonops caraganae*. Length 3.5–4.5 mm.



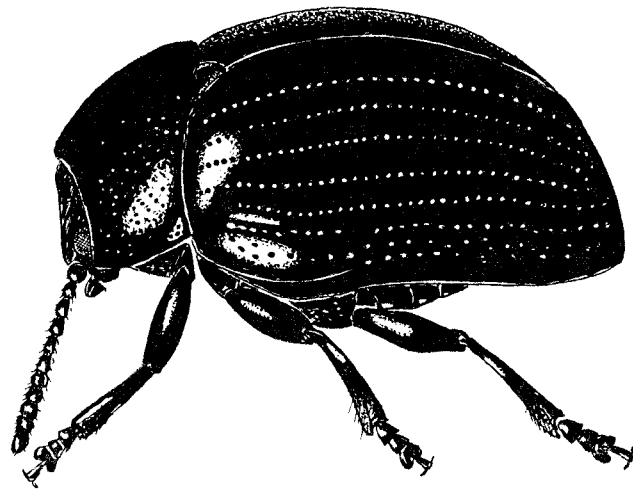
Total figure 42. *Phratora laticollis*. Length 3.7–5.0 mm.



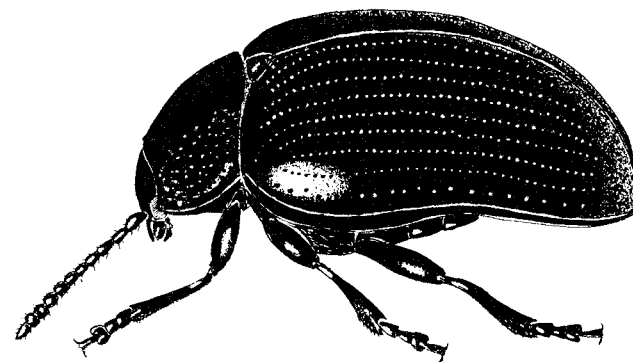
Total figure 43. *Hydrothassa glabra*. Length 3.0–4.0 mm.



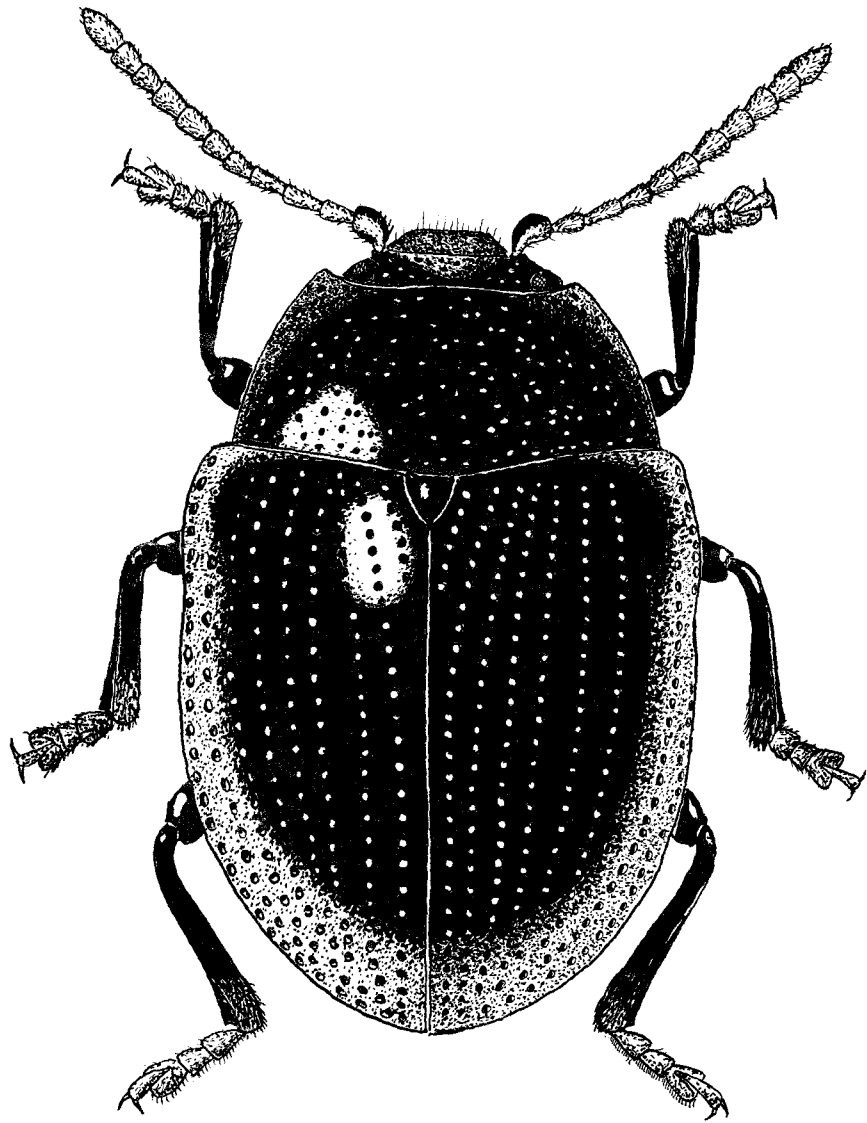
Total figure 44. *Prasocuris junci*. Length 3.9–5.0 mm.



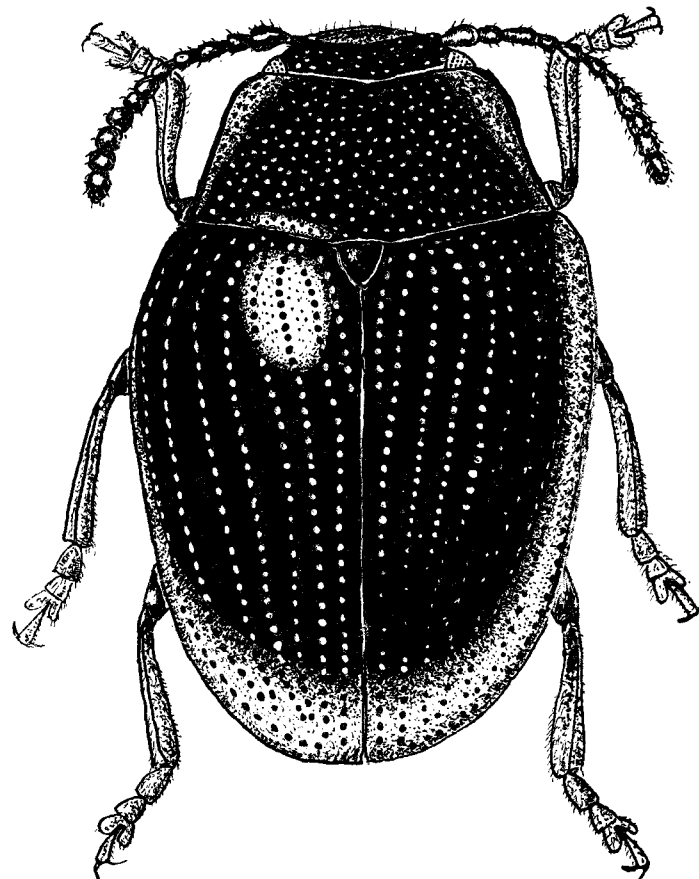
Total figure 45. *Neophaedon pyritosus*. Length 2.8–4.0 mm.



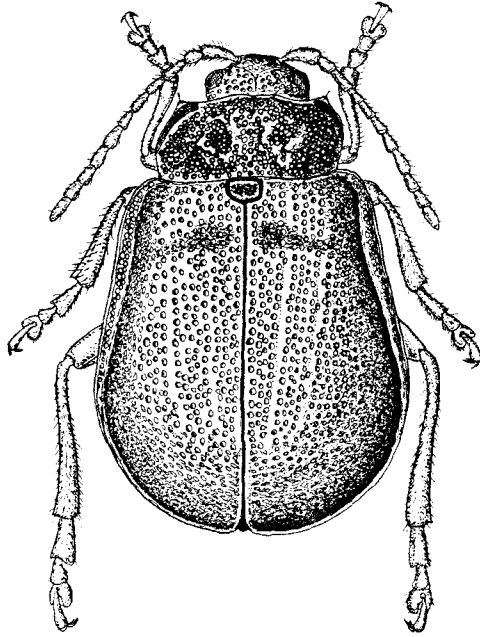
Total figure 46. *Phaedon armoraciae*. Length 3.7–4.7 mm.



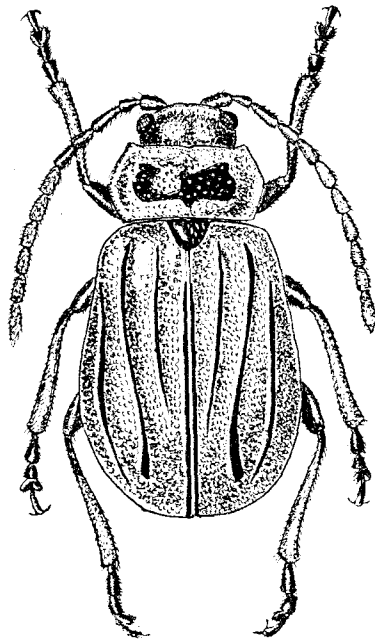
Total figure 47. *Sclerophaedon carpathicus*. Length 3.7–5.0 mm.



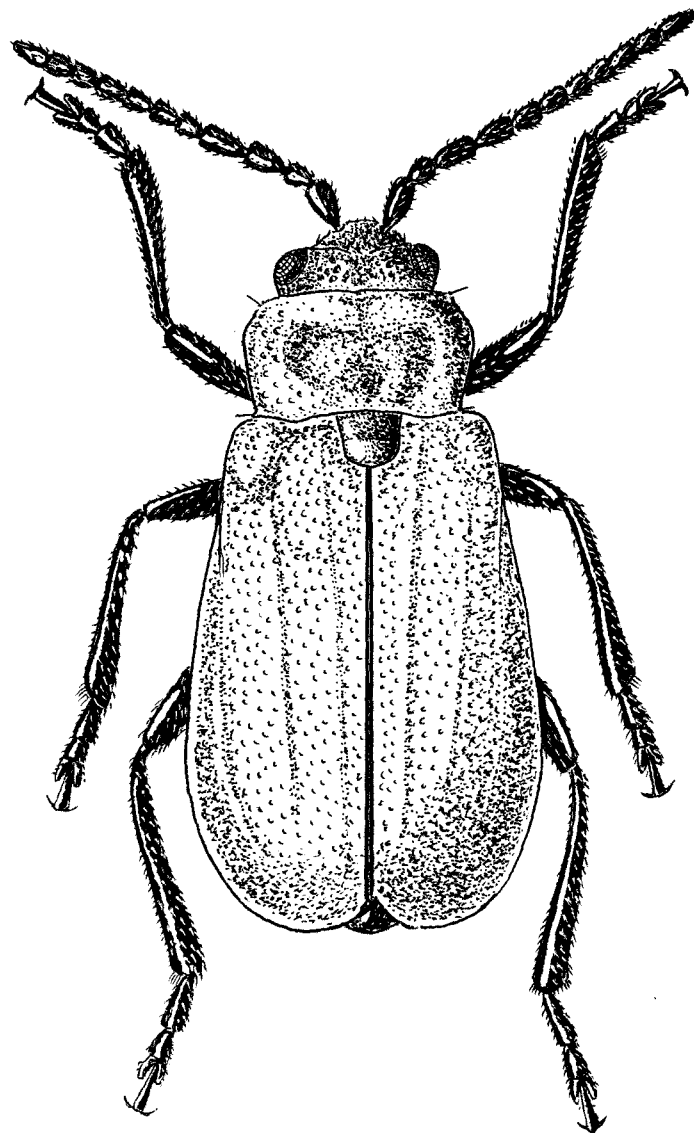
Total figure 48. *Sternoplatys segnis*. Length 3.1-4.0 mm.



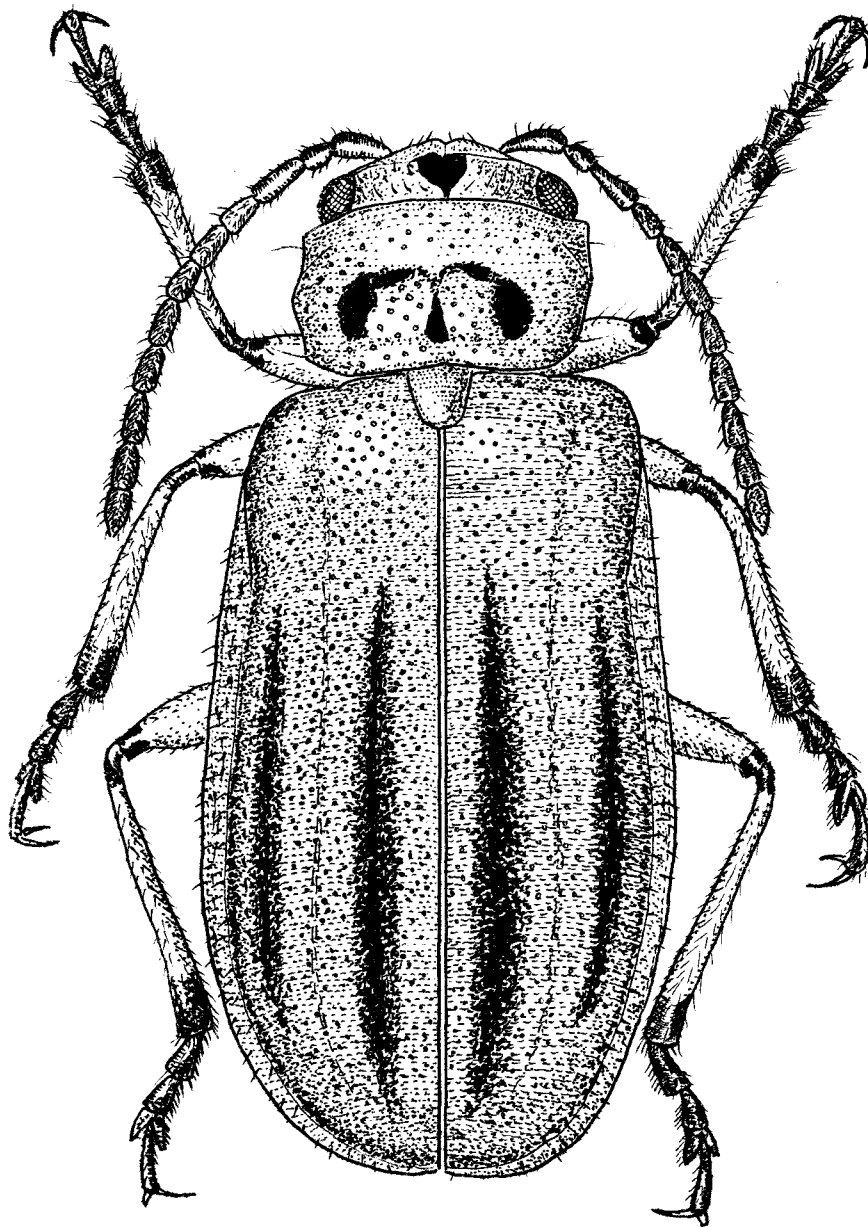
Total figure 49. *Galeruca tanacetii*. Length 6.0–10.8 mm.



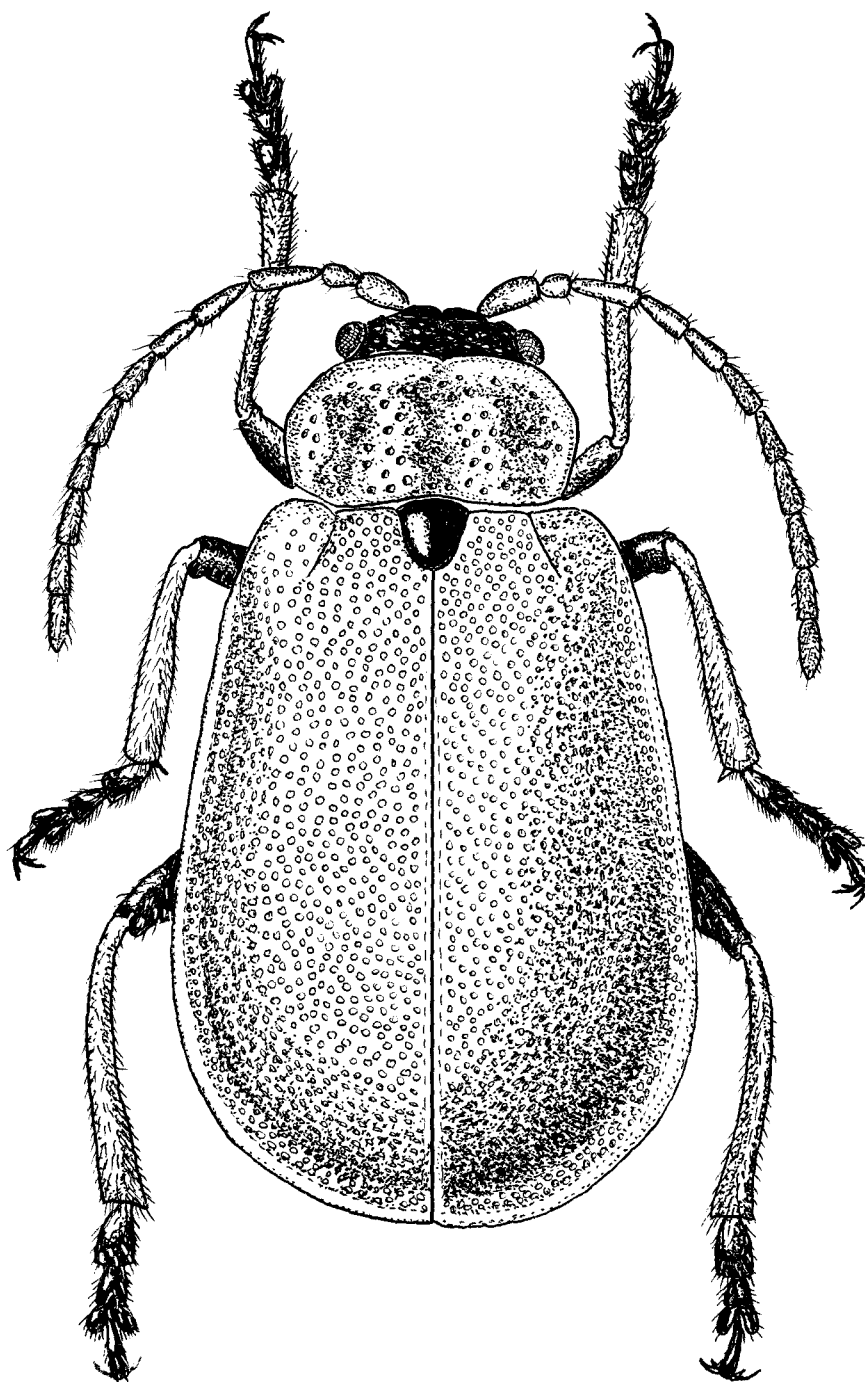
Total figure 50. *Pallasiola absinthii*. Length 5.5–8.0 mm.



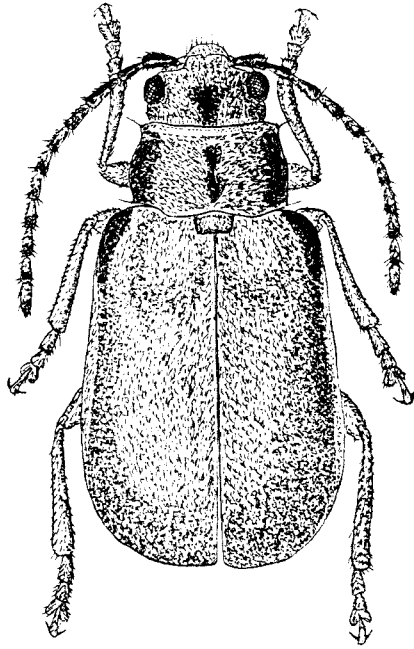
Total figure 51. *Theone silphoides*. Length 7.0-9.7 mm.



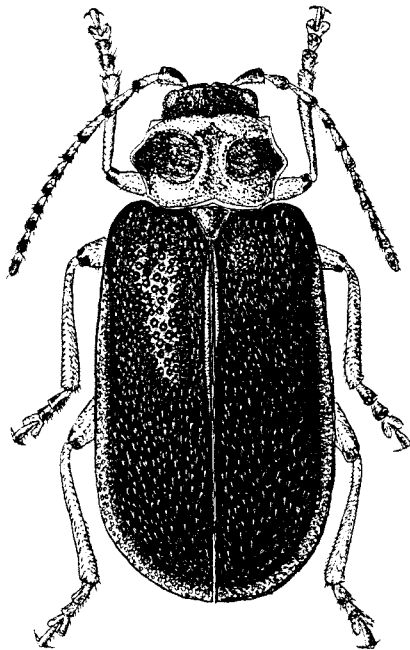
Total figure 52. *Diorhabda elongata*. Length 4.5–8.0 mm.



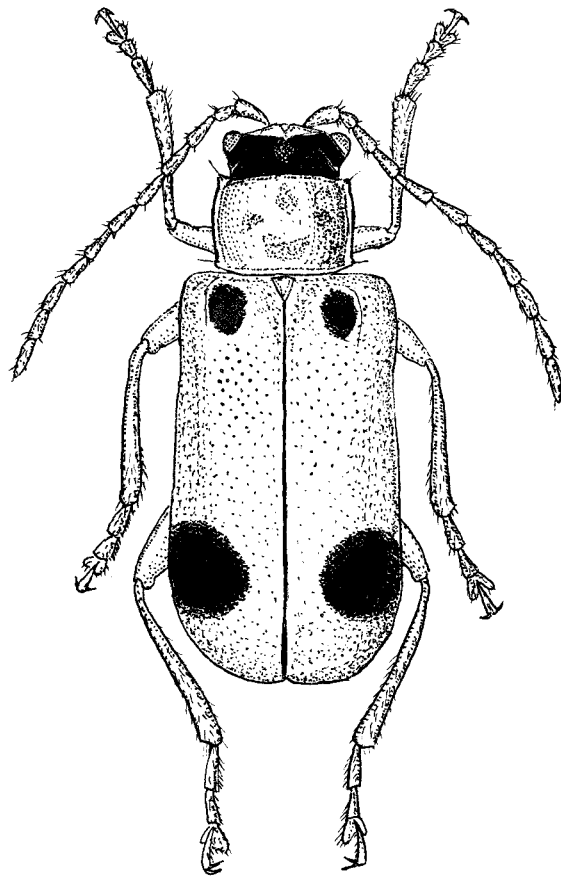
Total figure 53. *Lochmaea caprea*, male. Length 4.0–6.0 mm.



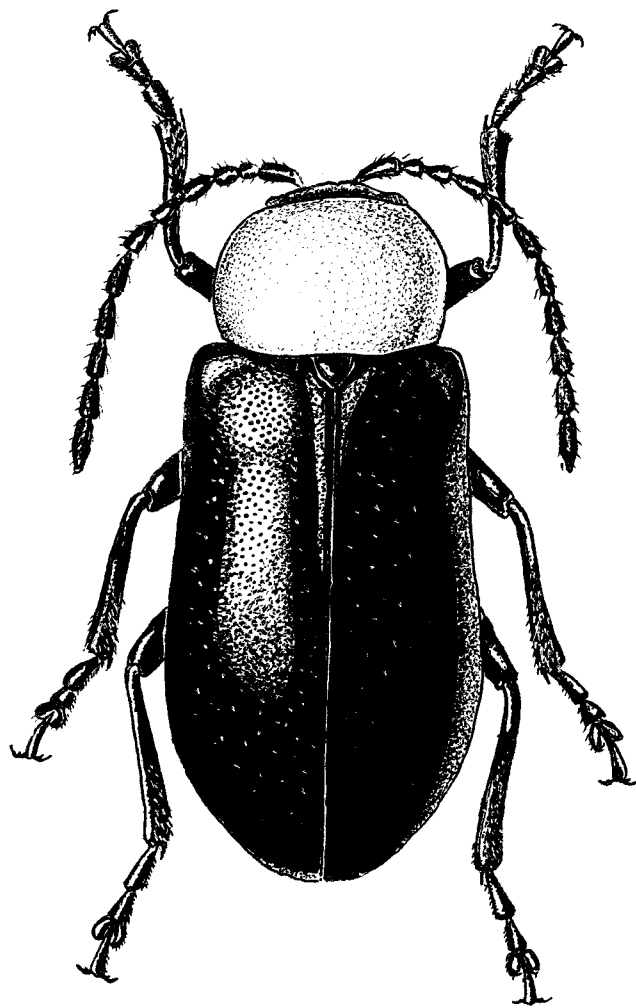
Total figure 54. *Pyrrhalta viburni*. Length 4.5–6.5 mm.



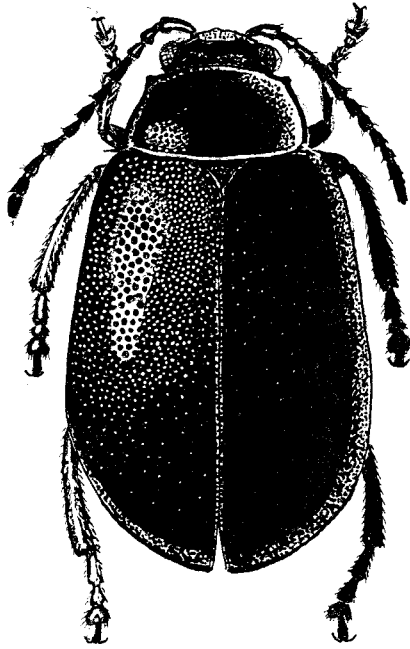
Total figure 55. *Galerucella nymphaeae*. Length 5.6–6.3 mm.



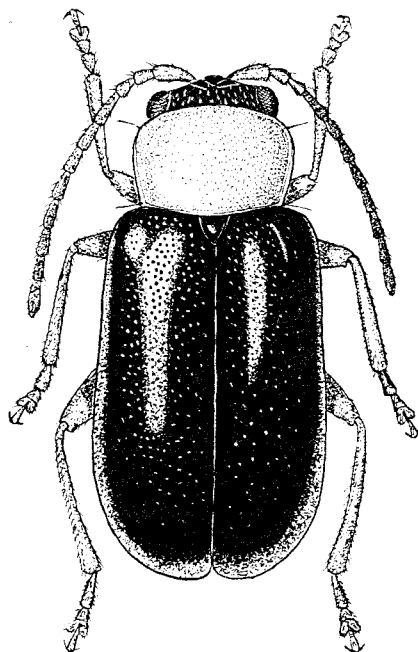
Total figure 56. *Phyllobrotica quadrimaculata*. Length 5.0–7.0 mm.



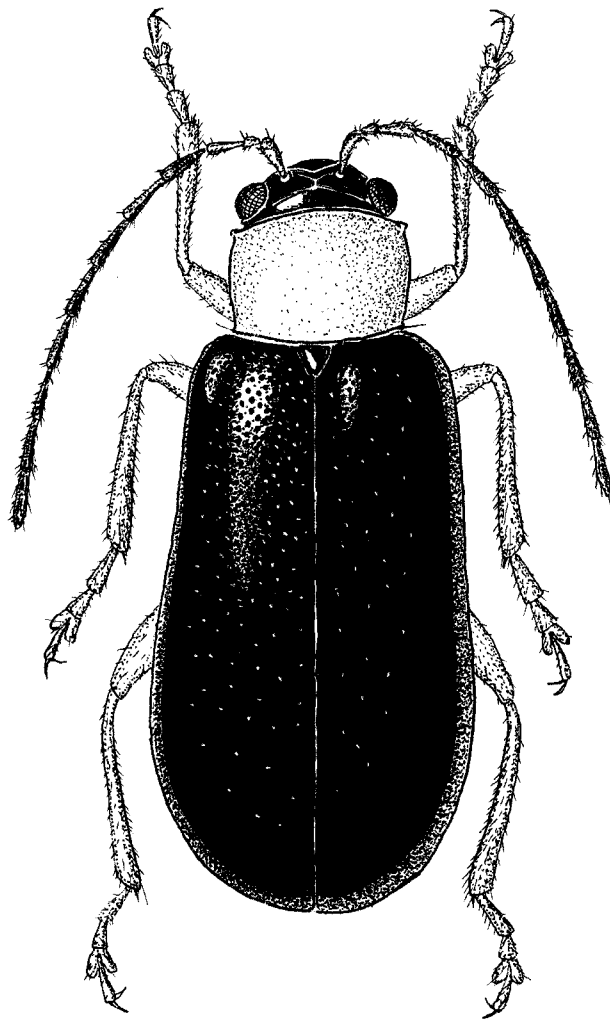
Total figure 57. *Exosoma collare*. Length 5.5–8.0 mm.



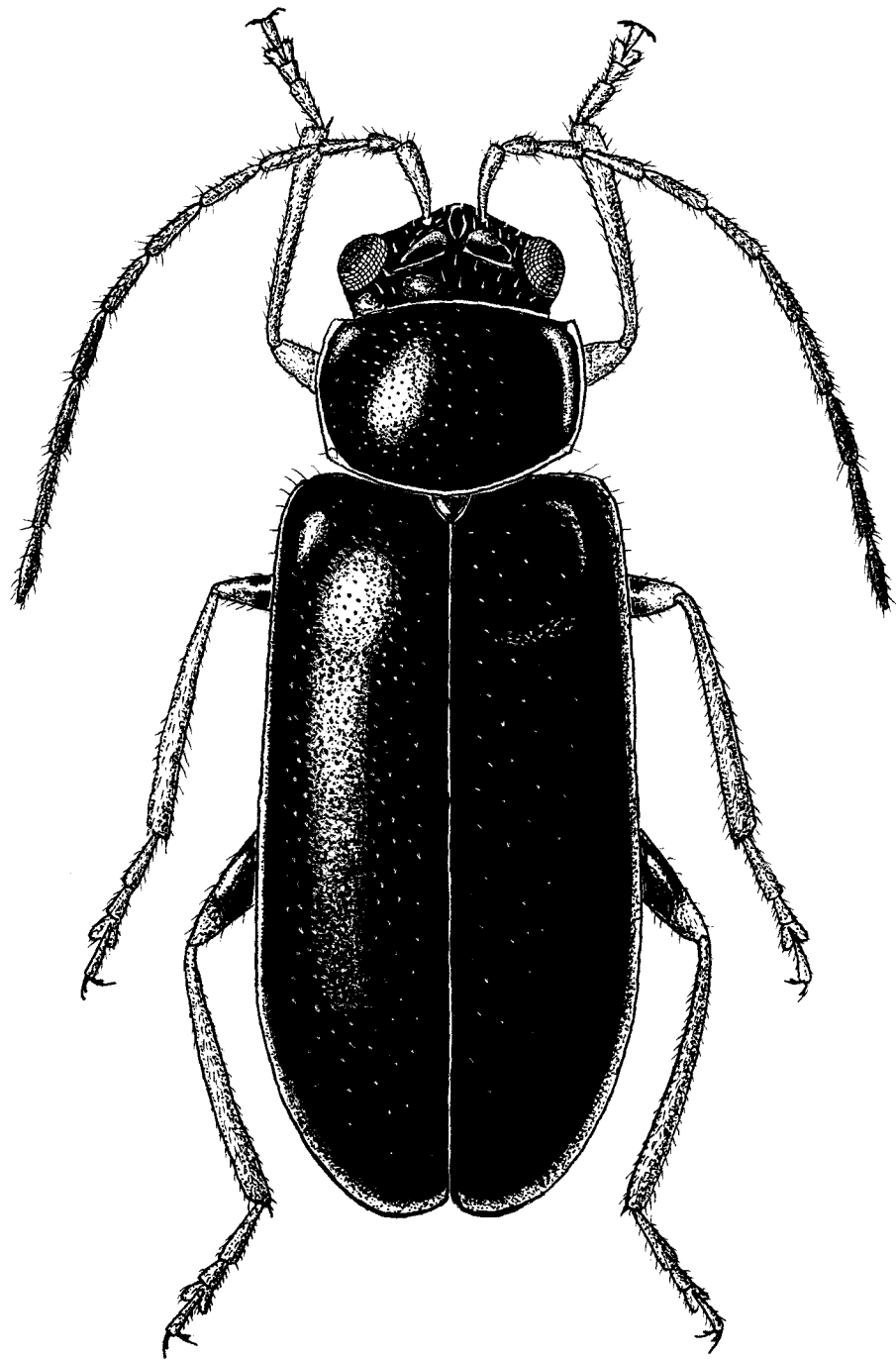
Total figure 58. *Agelastica alni*. Length 5.9–7.2 mm.



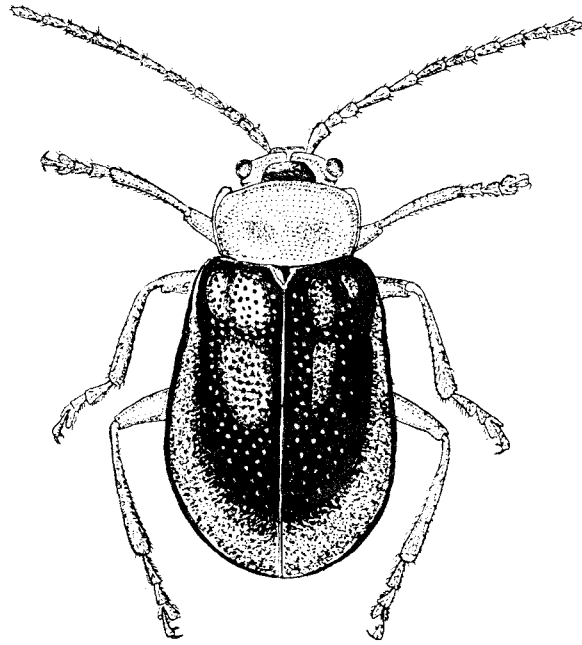
Total figure 59. *Calomicrus pinicola*. Length 2.3–4.3 mm.



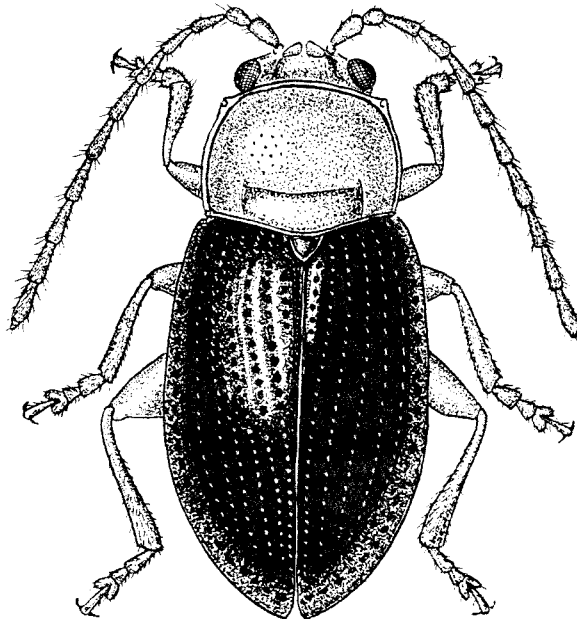
Total figure 60. *Luperus flavipes*, female. Length 3.6–5.0 mm.



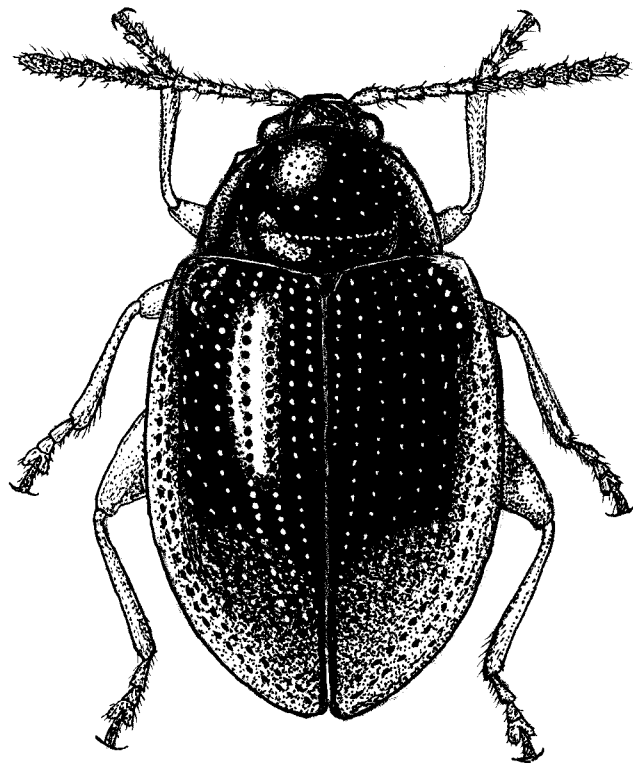
Total figure 61. *Euluperus xanthopus*. Length 4.0–5.0 mm.



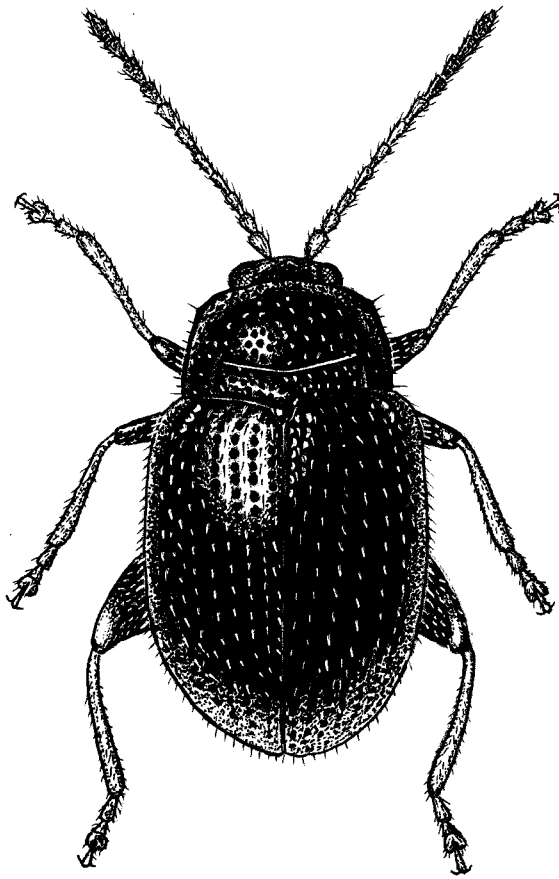
Total figure 62. *Sermylassa halensis*. Length 4.4–7.0 mm.



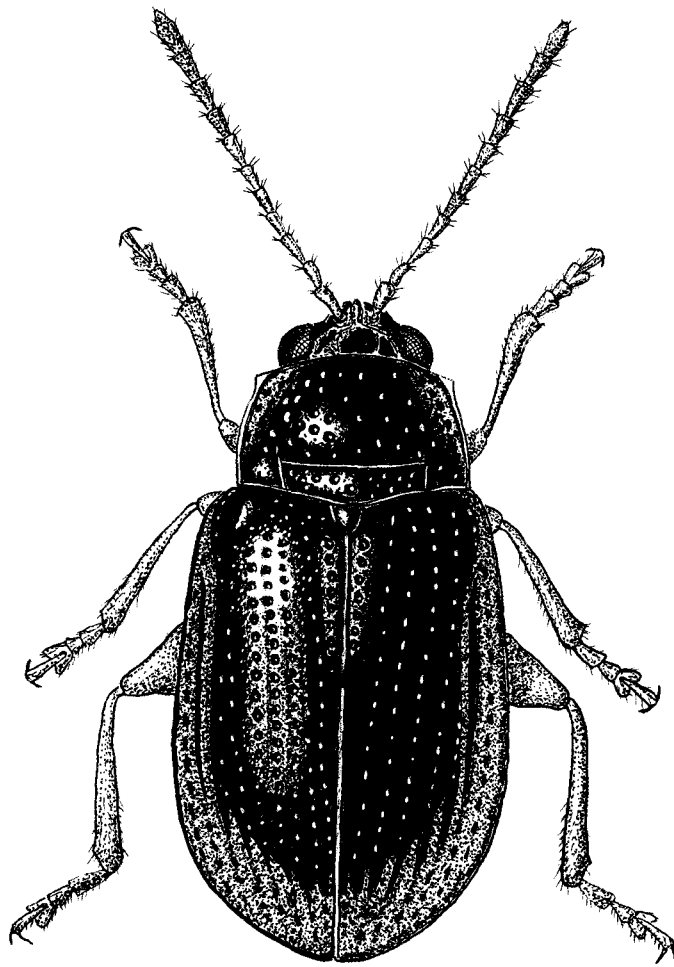
Total figure 63. *Derocrepis rufipes*. Length 2.3–3.8 mm.



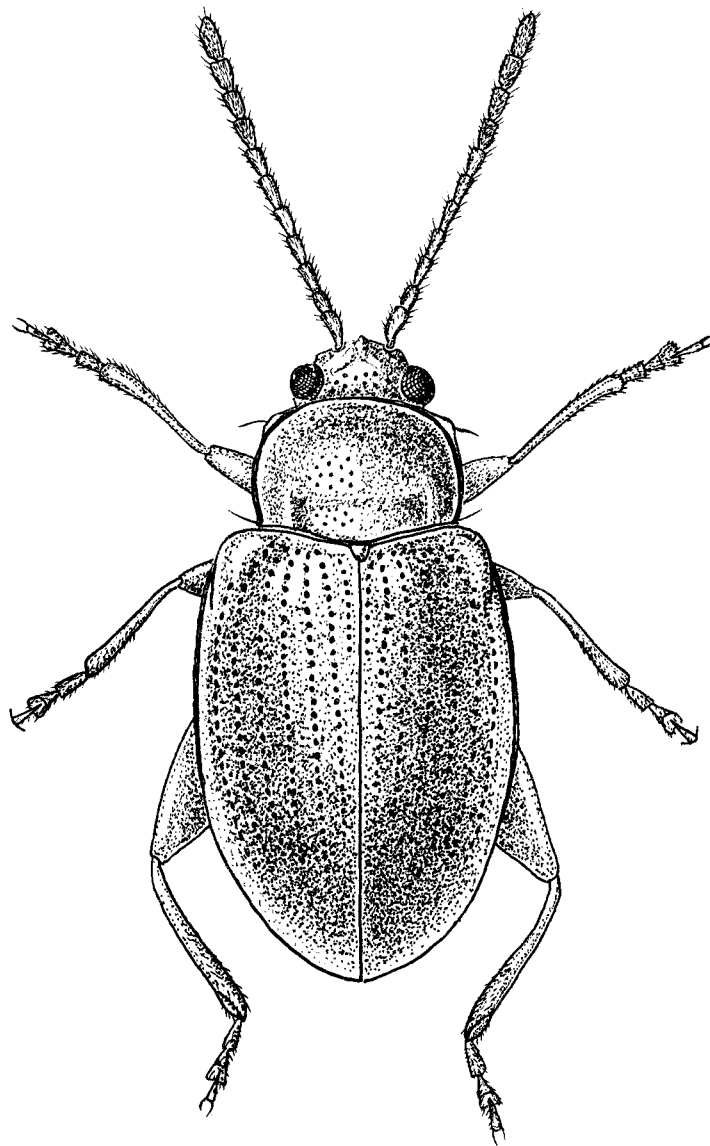
Total figure 64. *Hippuriphila modeeri*. Length 1.8–2.5 mm.



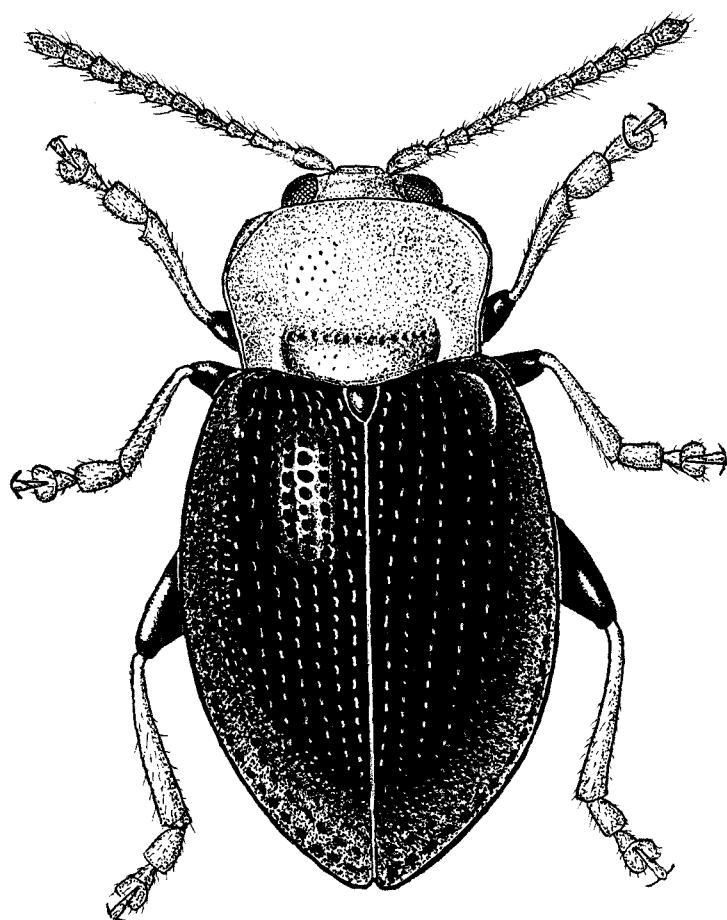
Total figure 65. *Epitrix pubescens*. Length 1.5–2.0 mm.



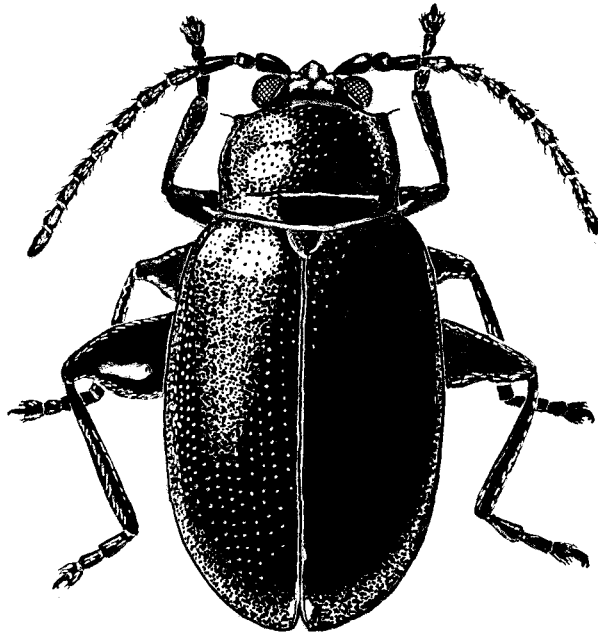
Total figure 66. *Crepidodera fulvicornis fulvicornis*. Length 2.5–3.5 mm.



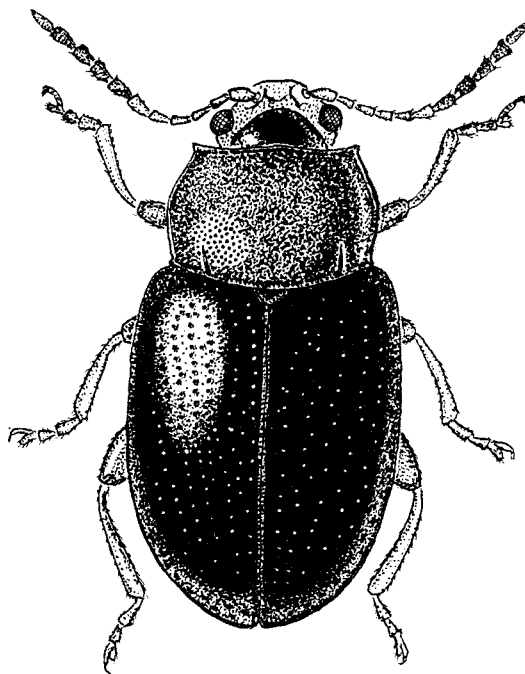
Total figure 67. *Ochrosis ventralis*. Length 2.1–2.5 mm.



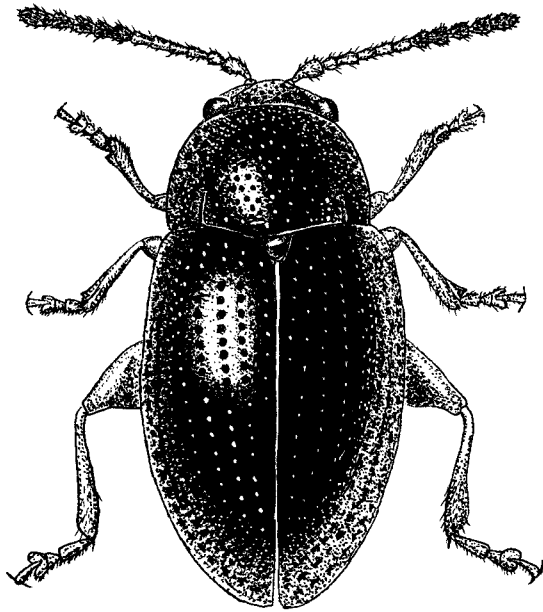
Total figure 68. *Neocrepidodera femorata*. Length 3.1–4.5 mm.



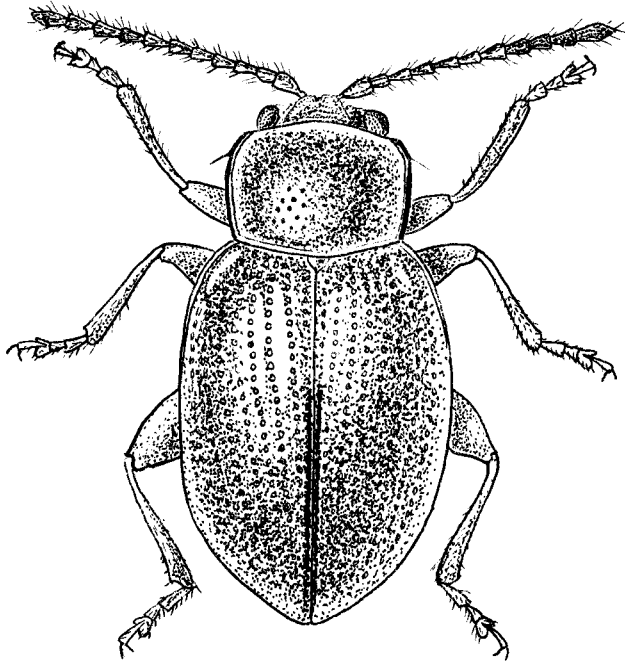
Total figure 69. *Altica oleracea*. Length 3.0–4.0 mm.



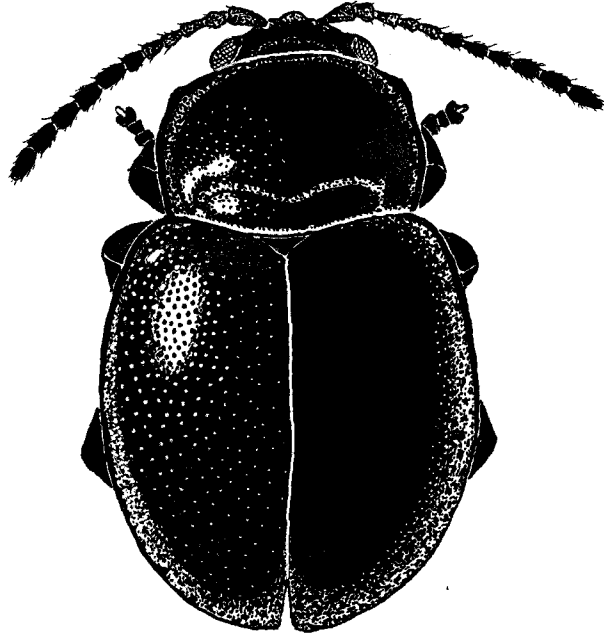
Total figure 70. *Podagrica malvae*. Length 2.5–3.6 mm.



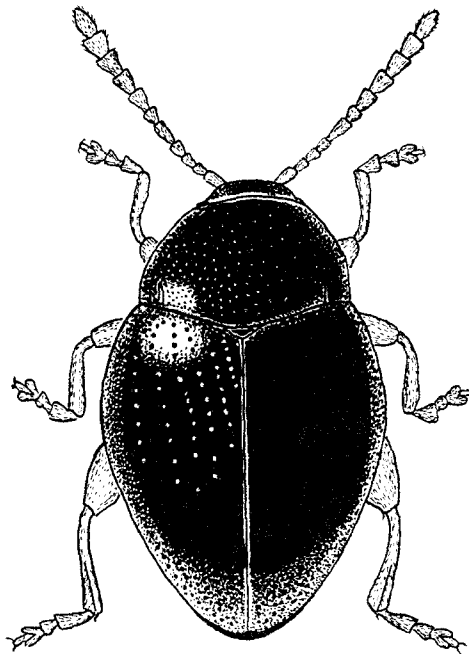
Total figure 71. *Mantura chrysanthemii*. Length 1.8–2.7 mm.



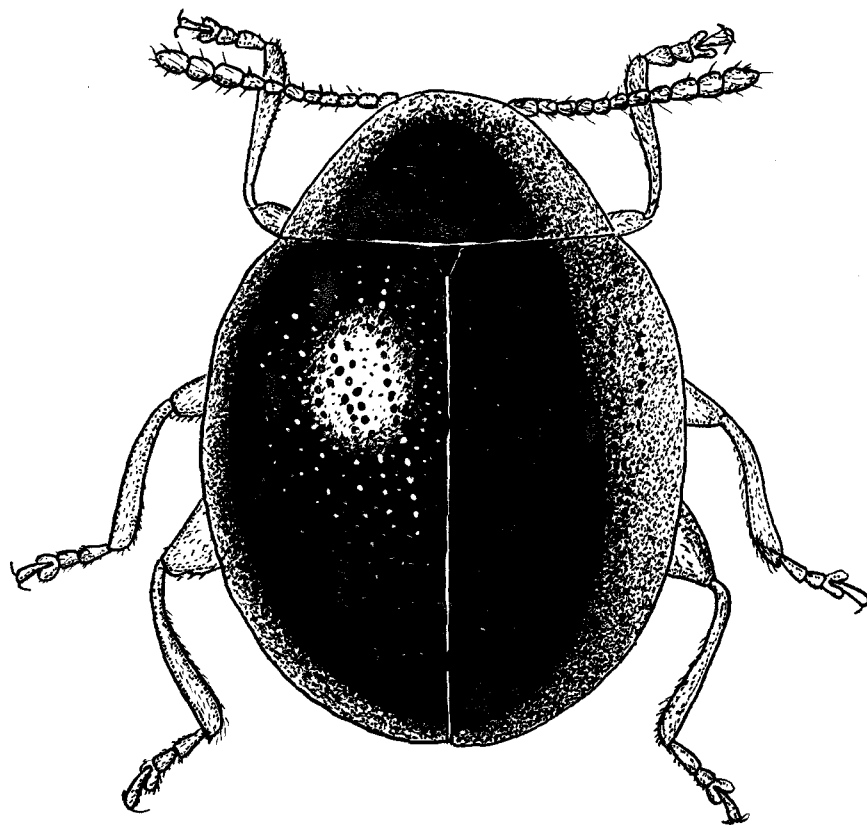
Total figure 72. *Lythraria salicariae*. Length 1.8–2.0 mm.



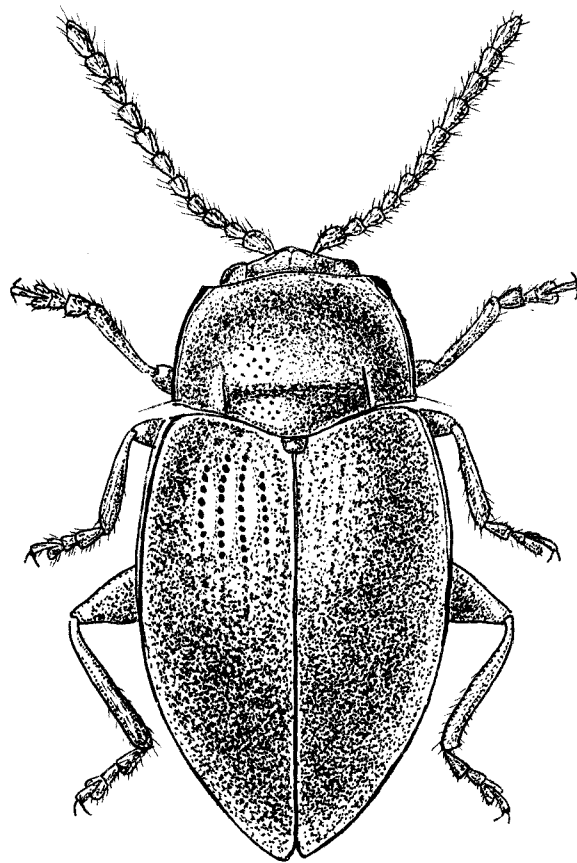
Total figure 73. *Hermaeophaga mercurialis*. Length 2.3–3.0 mm.



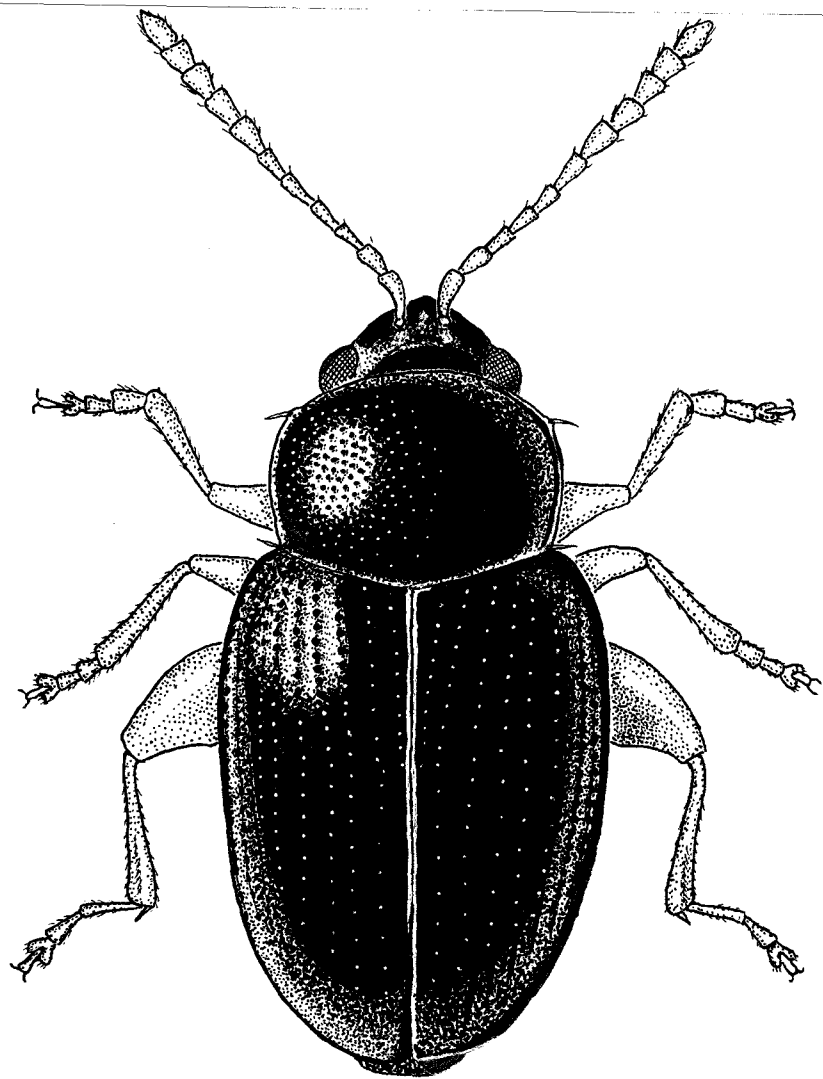
Total figure 74. *Minota carpathica*. Length 2.1–2.6 mm.



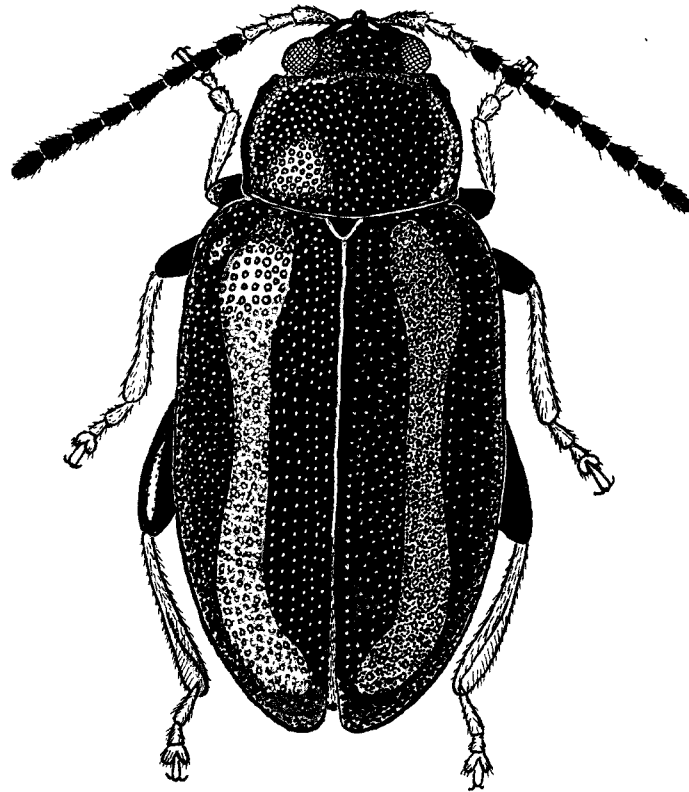
Total figure 75. *Mniophila muscorum*. Length 1.0–1.5 mm.



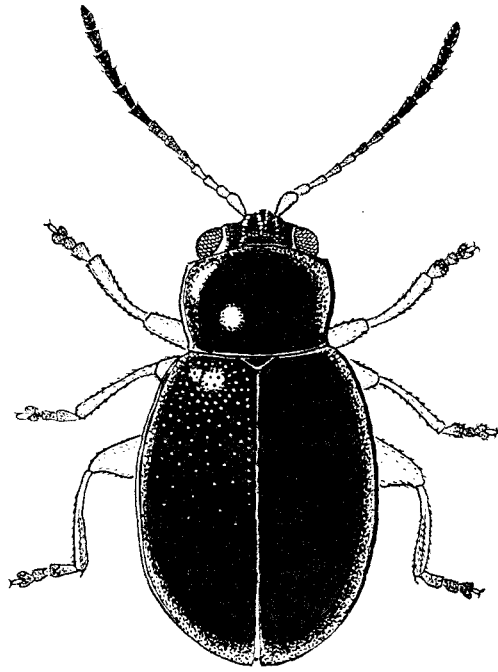
Total figure 76. *Orestia carpathica*. Length 2.2–2.5 mm.



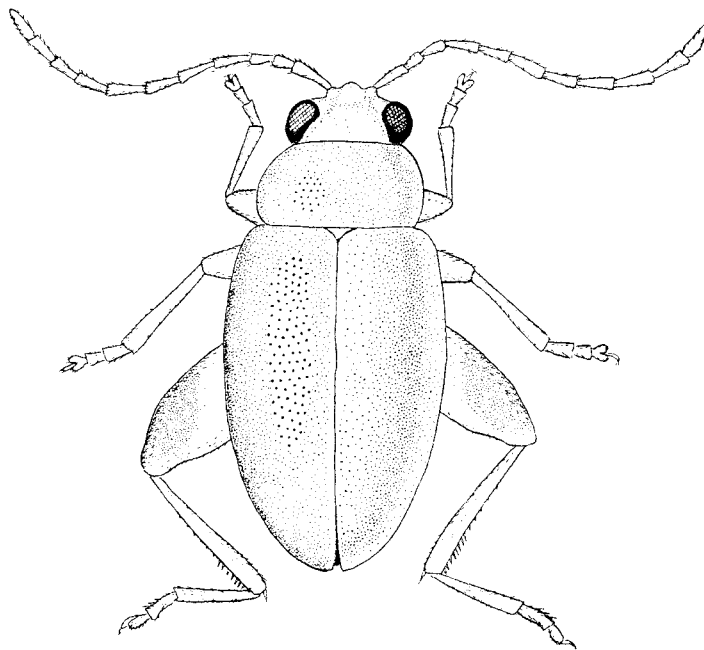
Total figure 77. *Batophila fallax*. Length 1.2–2.1 mm.



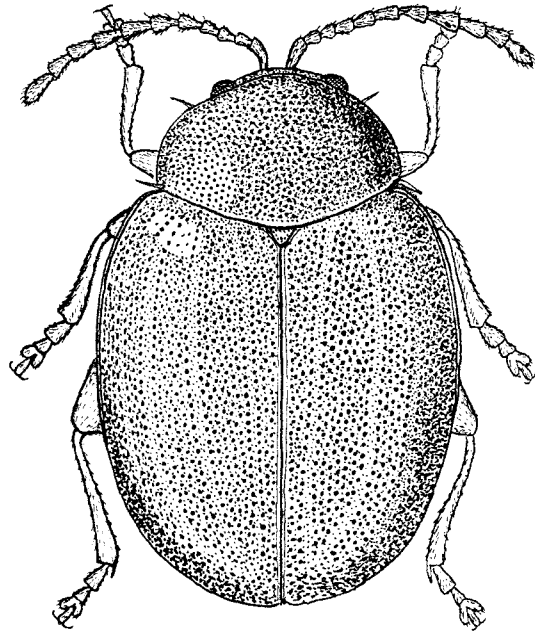
Total figure 78. *Phyllotreta nemorum*. Length 2.4–3.5 mm.



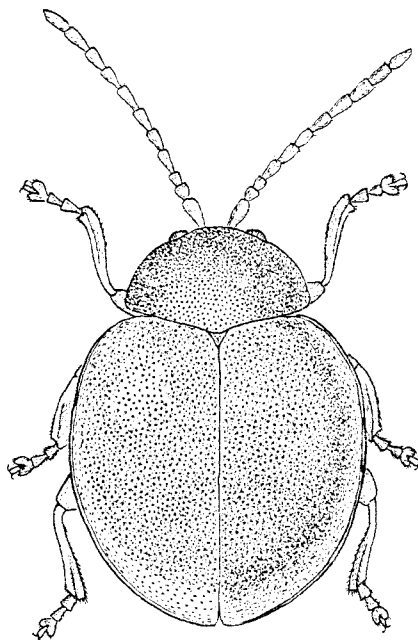
Total figure 79. *Aphthona erichsoni*. Length 1.7–2.5 mm.



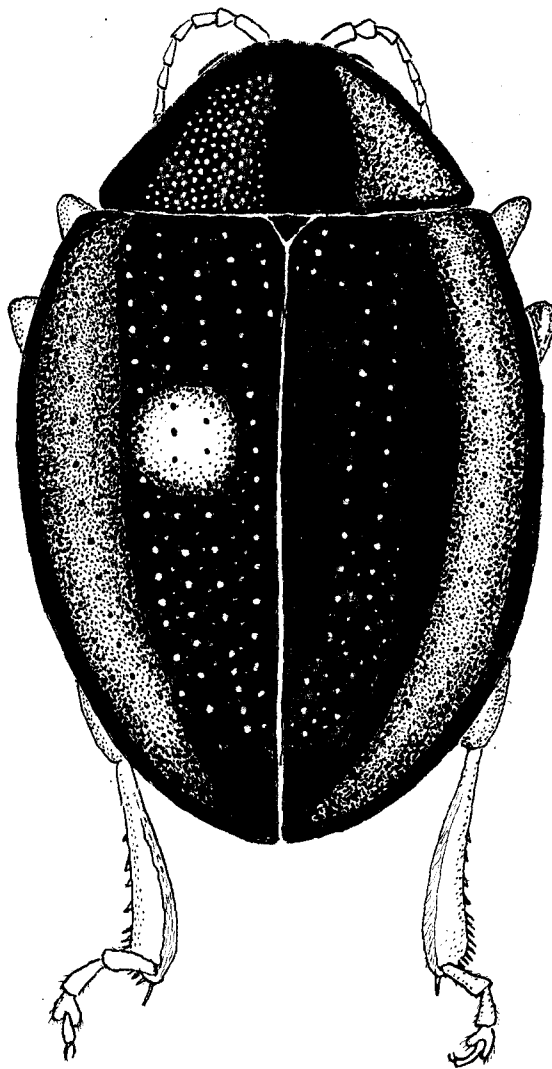
Total figure 80. *Longitarsus succineus*. Length 1.8–2.7 mm.



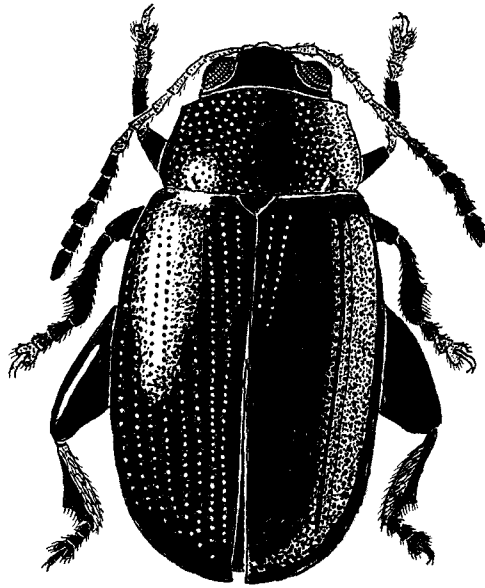
Total figure 81. *Sphaeroderma testacea*. Length 2.5–4.5 mm.



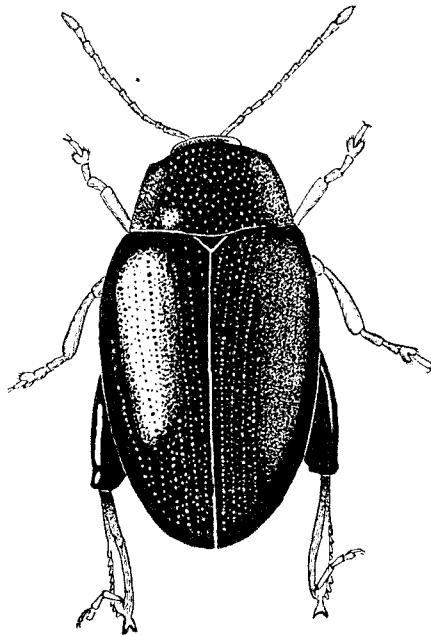
Total figure 82. *Argopus ahrensii*. Length 3.5–4.8 mm.



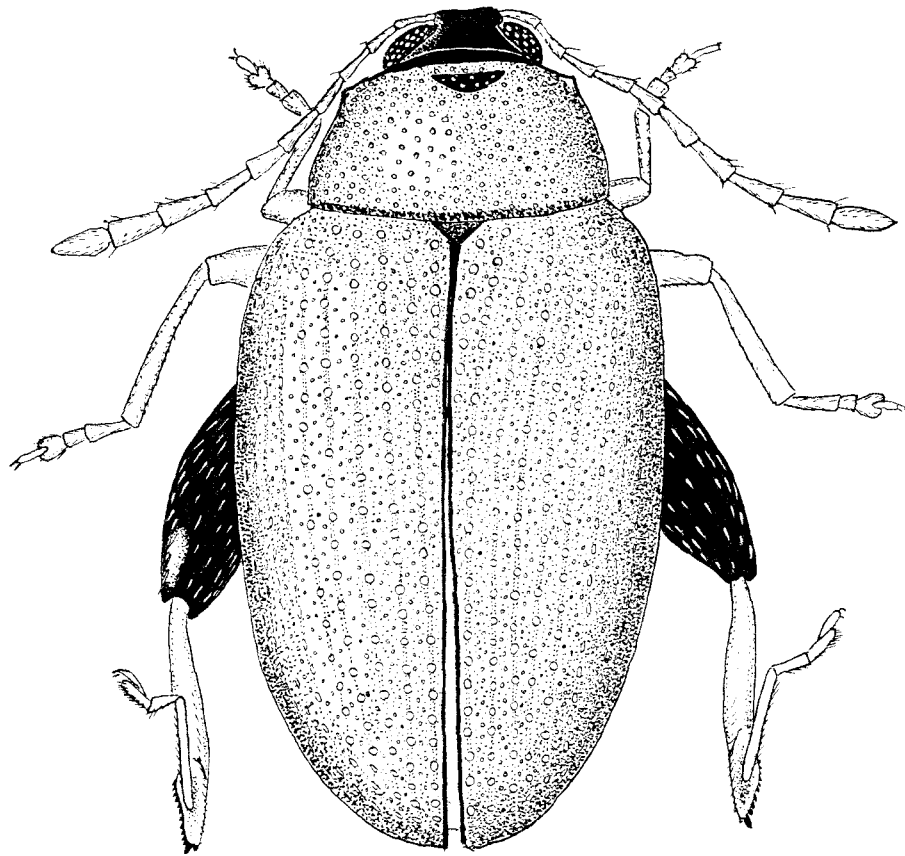
Total figure 83. *Apteropeda orbiculata*. Length 2.2–2.6 mm.



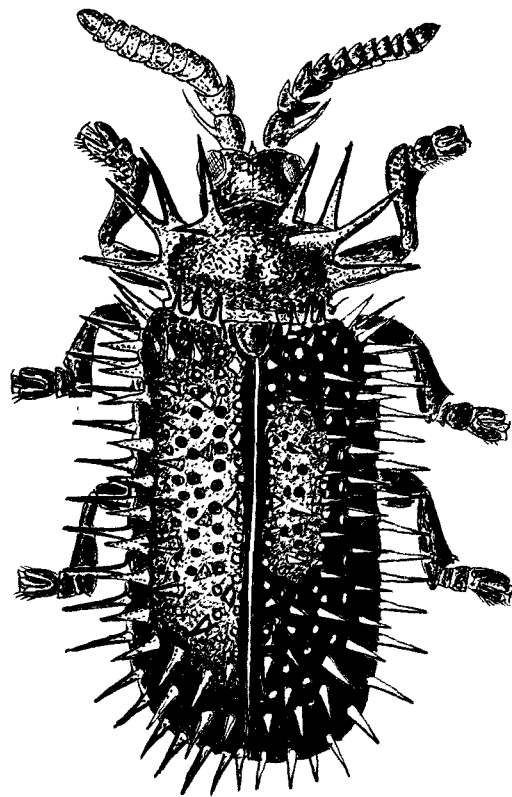
Total figure 84. *Chaetocnema chlorophana*. Length 3.0–3.5 mm.



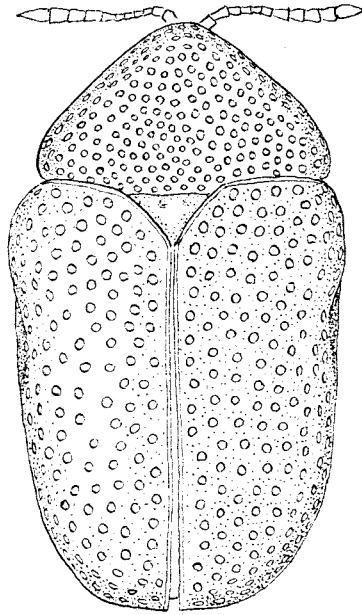
Total figure 85. *Dibolia metallica*. Length 3.0–4.0 mm.



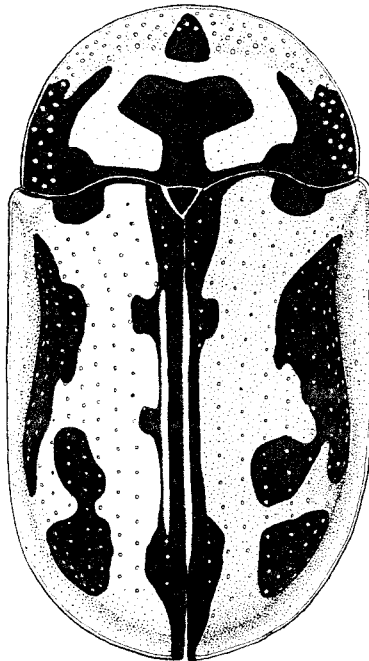
Total figure 86. *Psylliodes affinis*. Length 2.0–2.8 mm.



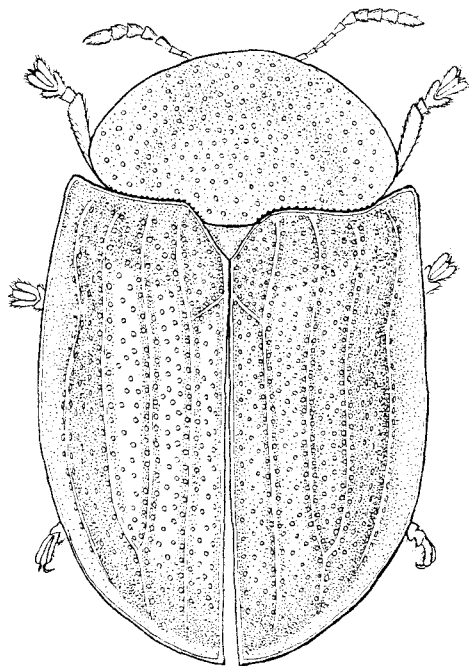
Total figure 87. *Hispa atra*. Length 3.0–4.6 mm.



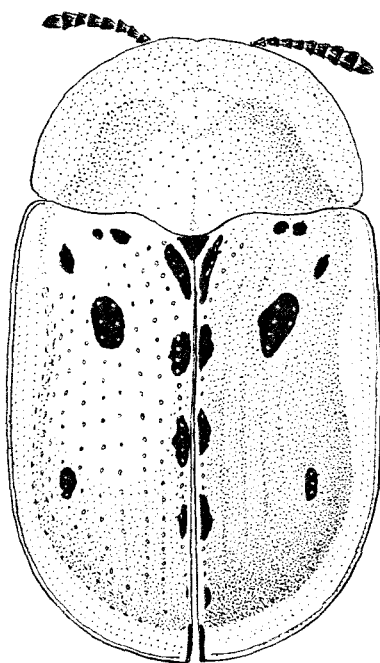
Total figure 88. *Ischyronota spaethi*. Length 4.4–6.0 mm.



Total figure 89. *Pilemostoma fastuosa*. Length 4.2–6.2 mm.



Total figure 90. *Hypocassida subferruginea*. Length 4.9–6.0 mm.



Total figure 91. *Cassida murraea*. Length 7.0–8.1 mm.

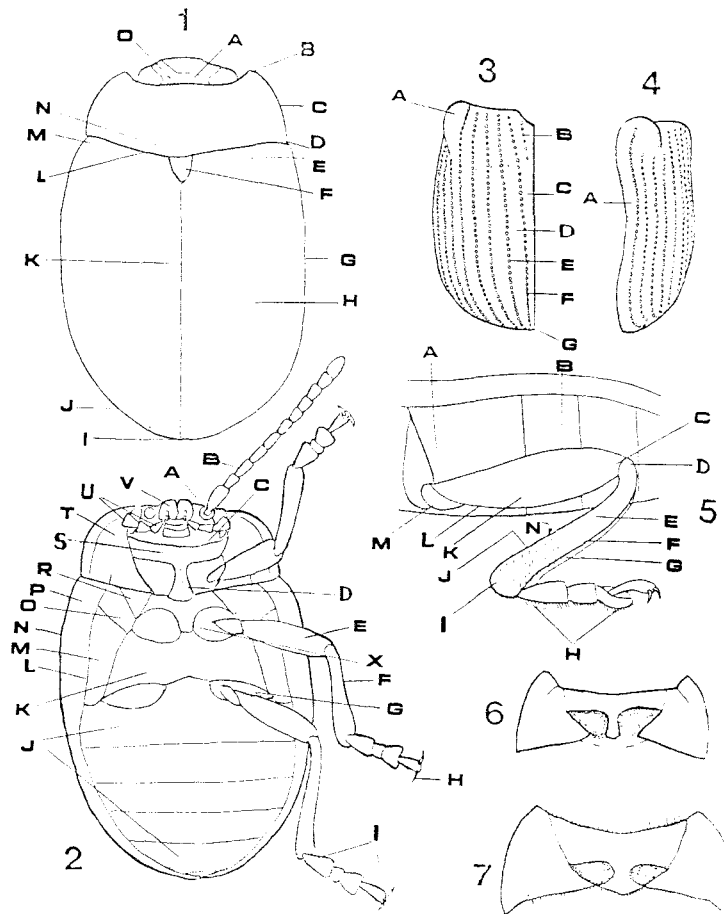


Figure 1: 1-2 — *Chrysolina sturmi*, dorsal and ventral view: 1: A — head, B — anterior corner of pronotum, C — lateral border of pronotum, D — posterior corner of pronotum, E — elytral base, F — scutellum, G — lateral side of elytron, H — elytron, I — apex of elytron, J — posterior margin of elytron, K — suture of elytra, L — posterior margin of pronotum, M — humerus of elytron, N — base of pronotum, O — anterior border of pronotum. 2: A — base of antenna, B — antenna, C — anterior border of prothorax, D — intercoxal prosternal process, E — femur, F — tibia, G — coxa, H — claw, I — tarsus, J — abdominal sternites, K — metasternum, L — interior border of elytral epipleura, M — metepisternum, N — exterior border of elytral epipleura, O — mesepimeron, P — epipleura of elytron, R — mesepisternum, S — prosternum, T — hypomera of prothorax, U — maxillary palpus, V — mandible, X — mesosternum. 3 — *Liliocerus merdigera*, elytron, dorsal view: A — humeral callus, B — sutural puncture row, C — sutural interval, D — interval between puncture rows, E — puncture row, F — sutural stria. 4 — *Liliocerus merdigera*, elytron, lateral view: A — lateral callus. 5 — *Chrysolina*, hind-leg: A — base of femur, B — upper border of femur, C — apex of femur, D — base of tibia, E — exterior side of tibia, F — upper external border of tibia, G — upper side of tibia, H — sole of tarsus, I — apex of tibia, J — lower side of tibia, K — exterior side of femur, L — lower border of femur, M — trochanter, N — interior side of tibia. 6 — *Gastrophysa viridula*, anterior coxal cavities open behind, 7 — *Entomoscelis adonidis*, anterior coxal cavities closed behind. (Orig.)

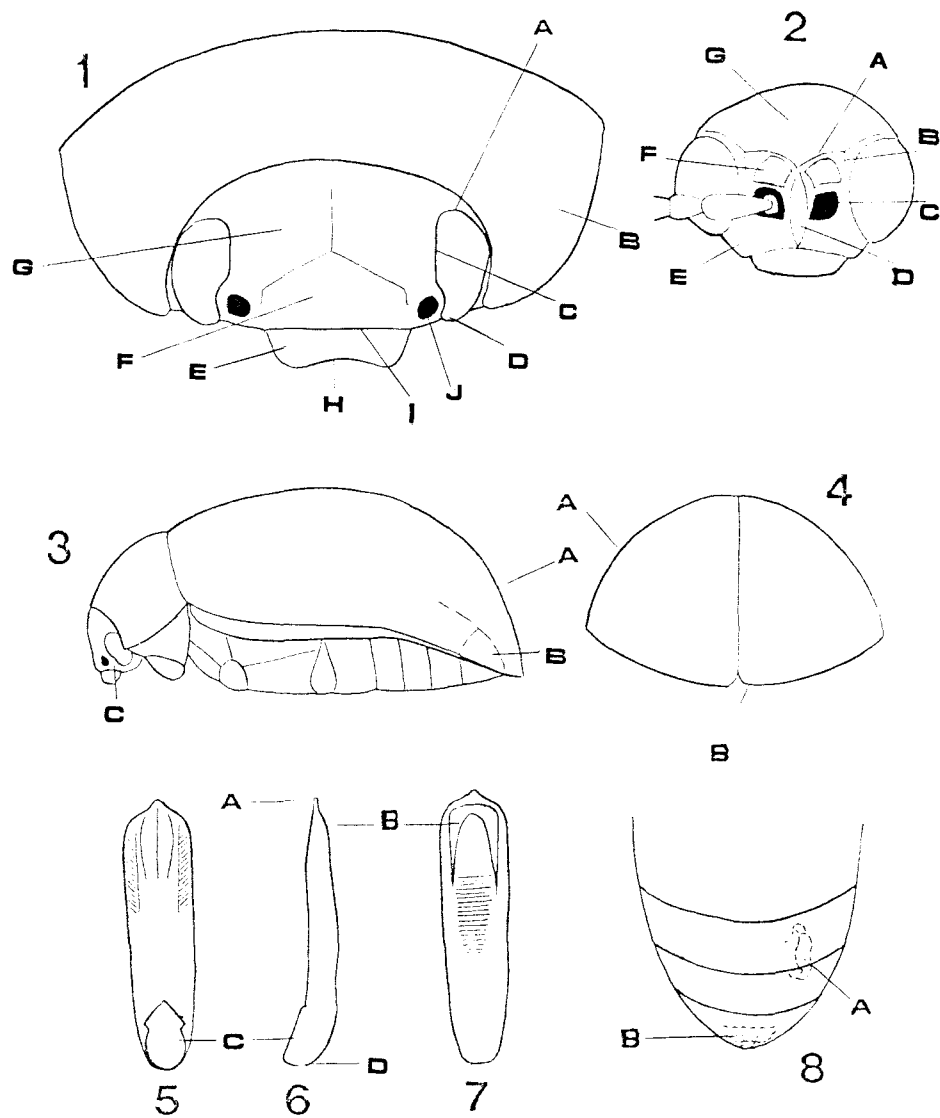


Figure 2: 1 — *Chrysolina sturmi*, head and pronotum: A — posterior border of eye, B — pronotum, C — interior border of eye, D — anterior border of eye, E — labrum, F — frons, G — vertex, H — anterior border of labrum, I — anterior border of frons, J — antennal insertion. 2 — *Crepidodera nitidula*, head: A — supracallinal sulcus, B — orbital line, C — antennal insertion, D — frontal ridge, E — gena, F — antennal callus, G — vertex. 3-4 — *Ch. sturmi*, lateral and posterior view: 3: A — declivity of elytron, B — pygidium, C — gena. 4: A — lateral slope of elytron. 5-7 — *Altica tamaricis*, aedeagus, ventral, lateral, dorsal view, respectively: A — apex, B — apical opening, C — basal opening, D — base. 8 — abdomen of female: A — spermatheca, B — vaginal sternite and vaginal palpi. (Orig.)

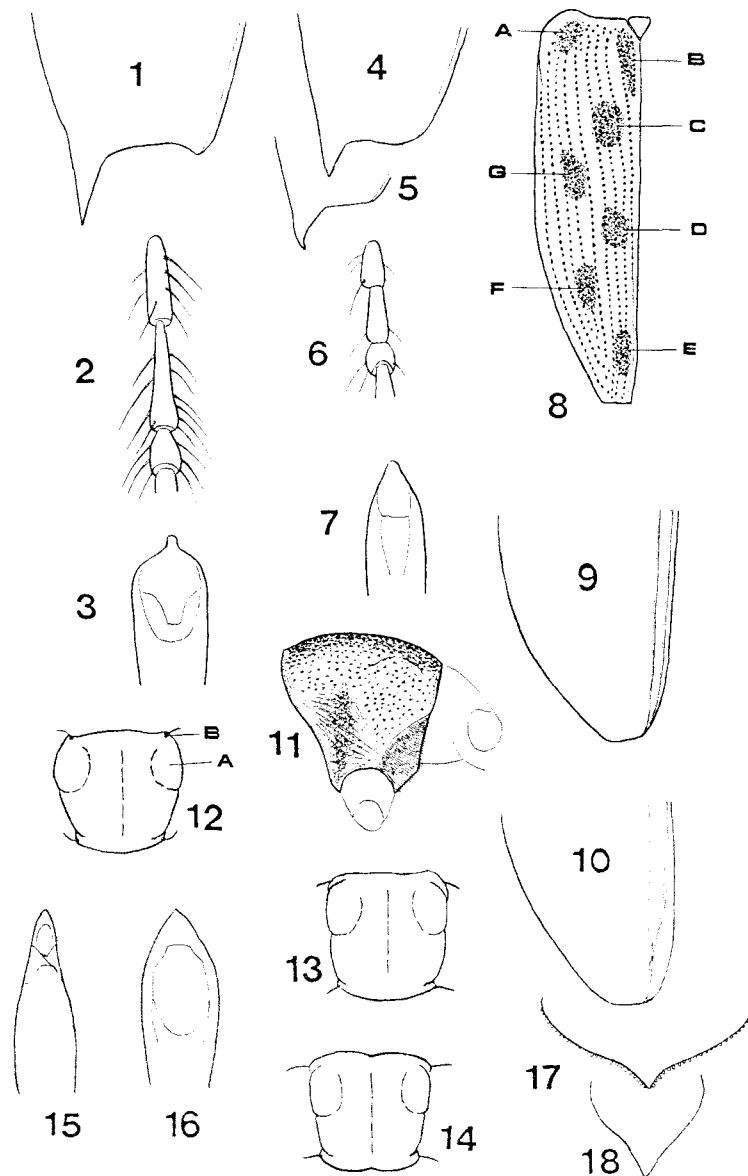


Figure 3: 1-3 — *Macroplea appendiculata*: 1 — apex of left elytron, 2 — 1st-3rd metatarsomeres, 3 — apex of aedeagus, dorsal view. 4-7 — *M. mutica*: 4-5 — apex of left elytron (4 — specimen from Karelia, 5 — specimen from Crimea), 6 — 1st-3rd metatarsomeres, 7 — apex of aedeagus, dorsal view. 8 — *Donacia bicolora*, A-G — impressions at left elytron: A — humeral, B — scutellar, C — 1st sutural, D — 2nd sutural, E — 3rd sutural, F — 2nd lateral, G — 1st lateral. 9-10 — apex of left elytron: 9 — *D. thalassina*, 10 — *Plateumaris sericea*. 11 — *P. discolor*, pronotum, lateral view. 12-14 — pronotum, dorsal view: 12 — *P. consimilis* (A — lateral callus, B — anterior setiferous pore), 13 — *P. affinis*, 14 — *P. rustica*. 15-16 — aedeagus, dorsal view: 15 — *P. affinis*, 16 — *P. weisei*. 17-18 — ventral ovipositor valve: 17 — *P. consimilis*, 18 — *P. affinis*. (Orig.)

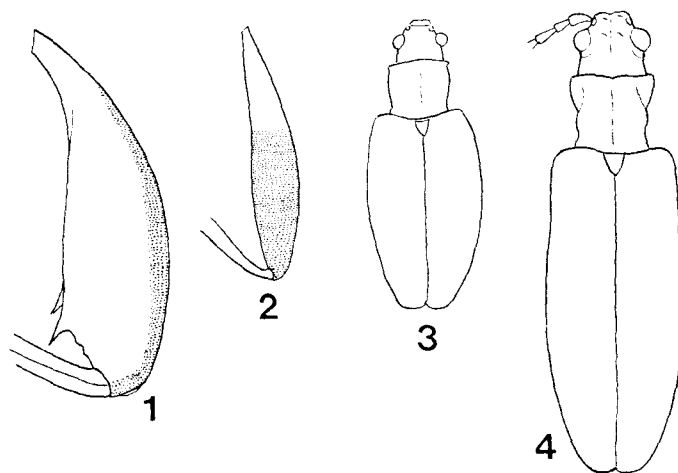


Figure 4: 1-2 — hind-femur: 1 — *Donacia dentata*, male, 2 — *D. vulgaris*, male. 3-4 — dorsal view: 3 — *D. semicuprea*, 4 — *D. clavipes*. (Orig.)

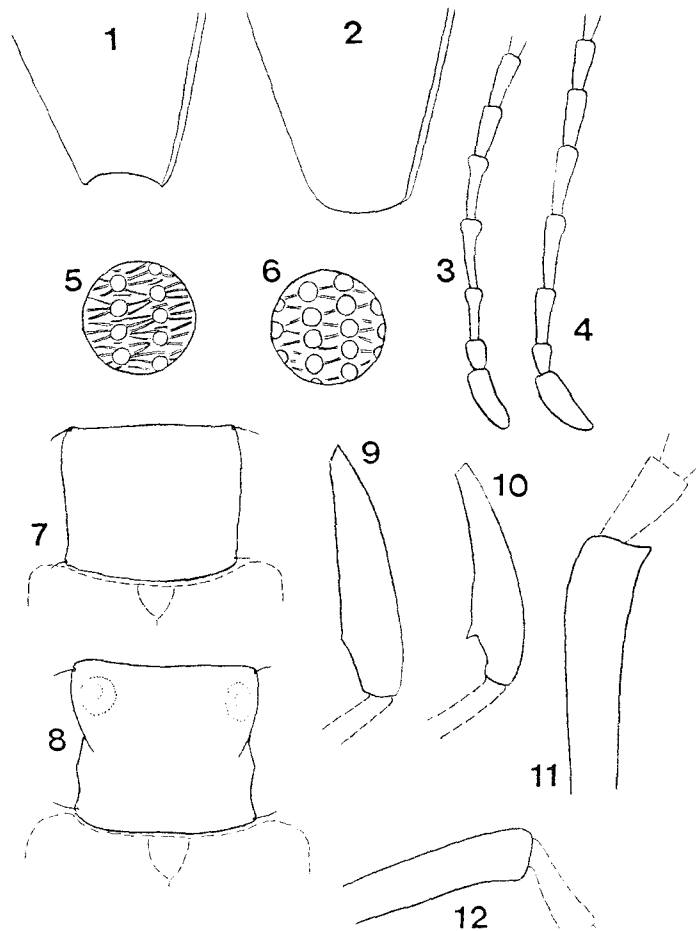


Figure 5: 1-2 — apex of left elytron: 1 — *Donacia vulgaris*, 2 — *D. simplex*. 3-4 — 1st-7th antennomeres: 3 — *D. sparganii*, 4 — *D. aquatica*. 5-6 — microrelief on elytron: 5 — *D. aequidorsis*, 6 — *D. dentata*. 7-8 — pronotum: 7 — *D. semicuprea*, 8 — *D. clavipes*. 9-10 — hind-femur: 9 — *D. impressa*, 10 — *D. thalassina*. 11-12 — apex of fore-tibia: 11 — *D. cinerea*, 12 — *D. tomentosa*. (Orig.)

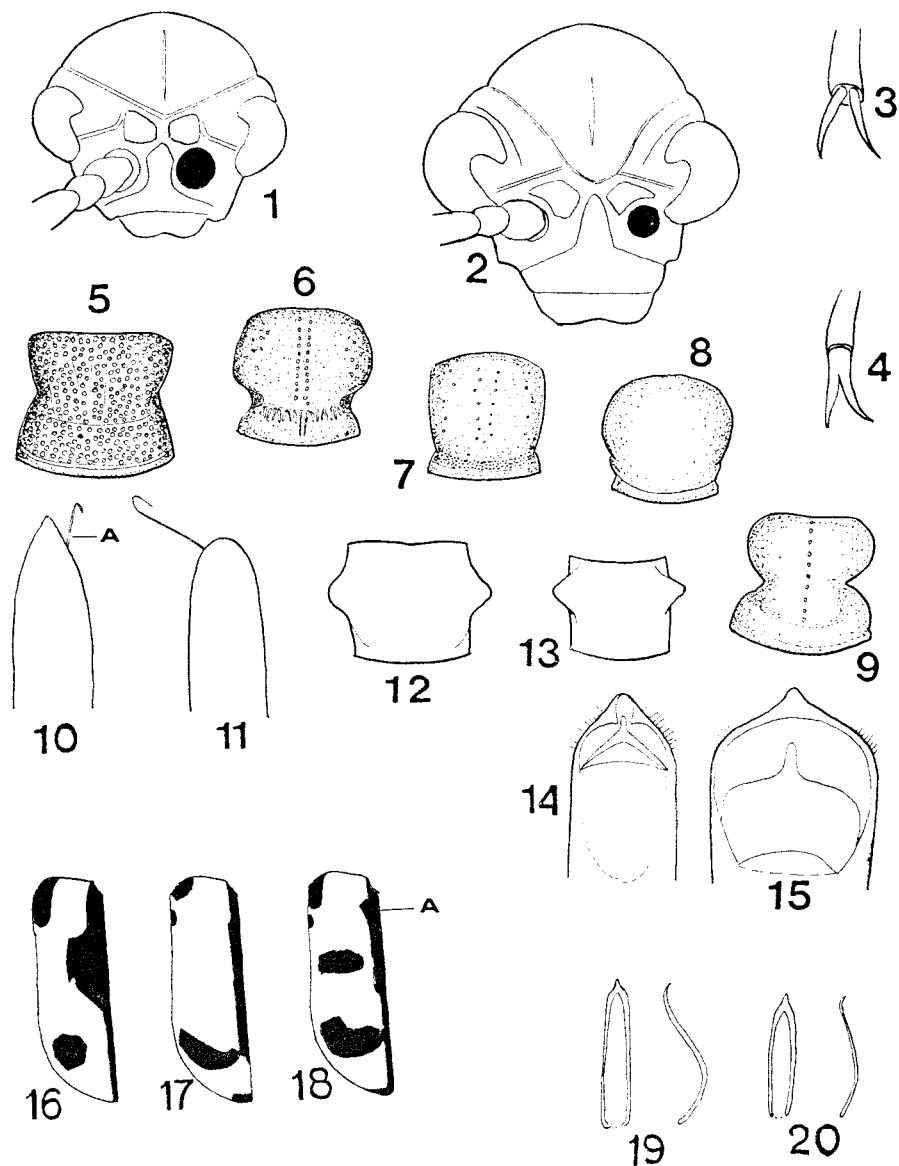


Figure 6: 1-2 — head: 1 — *Oulema erichsonii*, 2 — *Lema cyanella*. 3-4 — claws: 3 — *Liliocerus merdigera*, 4 — *Lema cyanella*. 5-9 — pronotum: 5 — *Lema cyanella*, 6 — *O. gallaeciana*, 7 — *O. erichsonii*, 8 — *Crioceris quinquepunctata*, 9 — *Liliocerus merdigera*. 10-11 — aedeagus, ventral view: 10 — *Oulema erichsonii* (A — flagellum), 11 — *O. septentrionis*. 12-13 — pronotum: 12 — *Zeugophora frontalis*, 13 — *Z. flavicollis*. 14-15 — aedeagus, dorsal view: 14 — *Labidostomis metallica*, 15 — *L. senicula*. 16-18 — left elytron: 16 — *Crioceris quinquepunctata*, 17 — *C. paracenthesis*, 18 — *C. bicrucata* (A — sutural marking). 19-20 — aedeagus: 19 — *Zeugophora frontalis*, 20 — *Z. flavicollis*. (after Steinhausen, 1985: 19, 20; others — orig.)

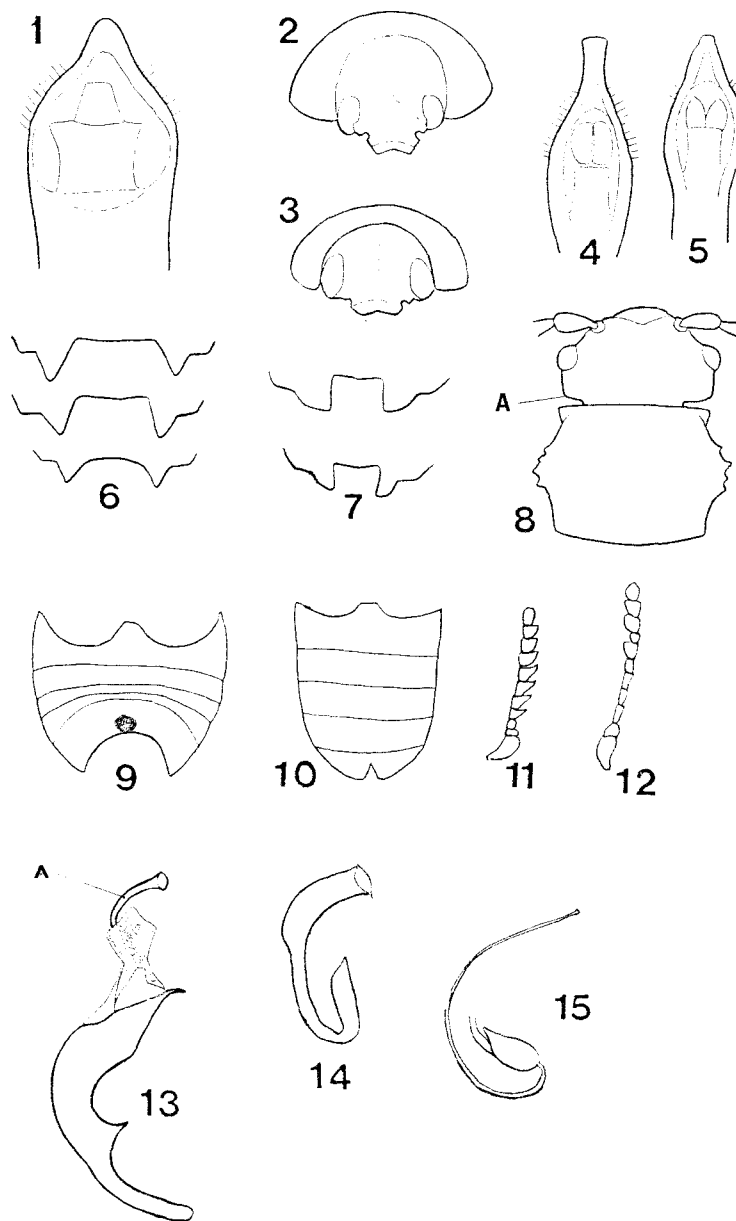


Figure 7: 1 — *Labidostomis pachysoma*, aedeagus, dorsal view. 2-3 — head and pronotum, anterior view: 2 — *Clytra valeriana taurica*, 3 — *C. laeviuscula*. 4-5 — aedeagus, dorsal view: 4 — *Cheilotoma erythrostroma*, 5 — *Ch. musciformis*. 6-7 — anterior border of clypeus in male: 6 — *Ch. erythrostroma*, 7 — *Ch. musciformis*. 8 — *Syneta betulae*, head and pronotum (A — temple). 9-10 — abdominal sternites of female: 9 — *Cryptocephalus octopunctatus*, 10 — *Galerucella aquatica*. 11-12 — antenna: 11 — *Clytra quadripunctata*, 12 — *Oomorphus concolor*. 13 — *Oulema melanopus*, aedeagus, lateral view (A — flagellum). 14-15 — flagellum: 14 — *Oulema melanopus* (Crimea: Simferopol), 15 — *O. duftschmidi* (Crimea: Kerch). (Orig.)

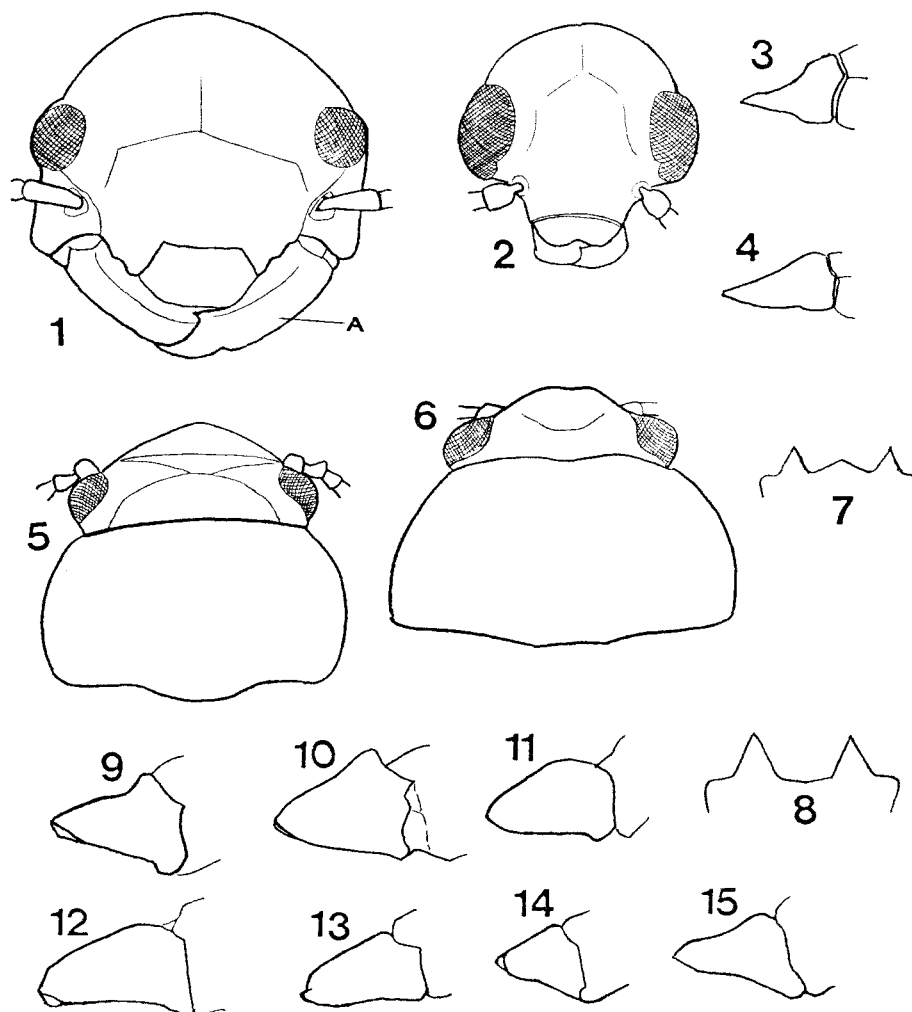


Figure 8: 1-2 — head of male: 1 — *Cheilotoma erythrostroma* (A — upper external border of mandible), 2 — *Clytra quadripunctata*. 3, 4 — left mandible of male, lateral view: 3 — *Coptocephala quadrimaculata*, 4 — *C. gebleri*. 5-6 — head and pronotum of male, dorsal view: 5 — *Coptocephala rubicunda rossica*, 6 — *Smaragdina salicina*. 7-8 — anterior border of clypeus in male: 7 — *L. longimana longimana*, 8 — *L. humeralis*. 9-15 — left mandible of male, lateral view: 9 — *Labidostomis lucida axillaris*, 10 — *L. beckeri*, 11 — *L. metallica*, 12 — *L. humeralis*, 13 — *L. senicula senicula*, 14 — *L. tridentata*, 15 — *L. longimana*. (Orig.)

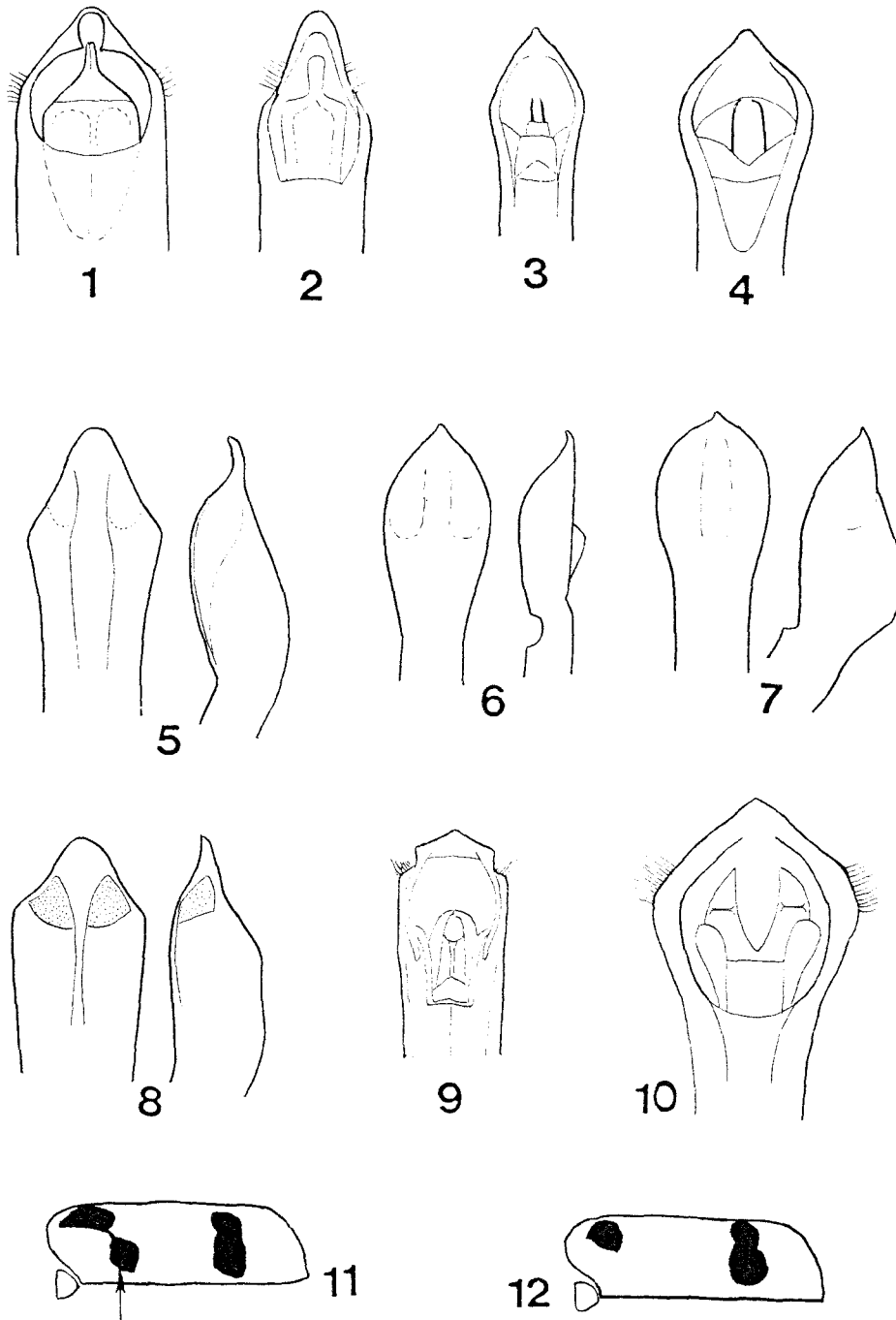


Figure 9: 1-10 — aedeagus (1-4, 9-10 — dorsal view, 5-8 — ventral and lateral view): 1 — *Labidostomis cyanicornis*, 2 — *L. lepida*, 3 — *Smaragdina flavicollis*, 4 — *S. salicina*, 5 — *Coptocephala gebleri*, 6 — *C. scopolina*, 7 — *C. quadrimaculata*, 8 — *C. rubicunda rubicunda*, 9 — *Clytra laeviuscula*, 10 — *C. arida*. 11-12 — right elytron: 11 — *Clytra atraphaxidis*, 12 — *C. valerianae*. (Orig.)

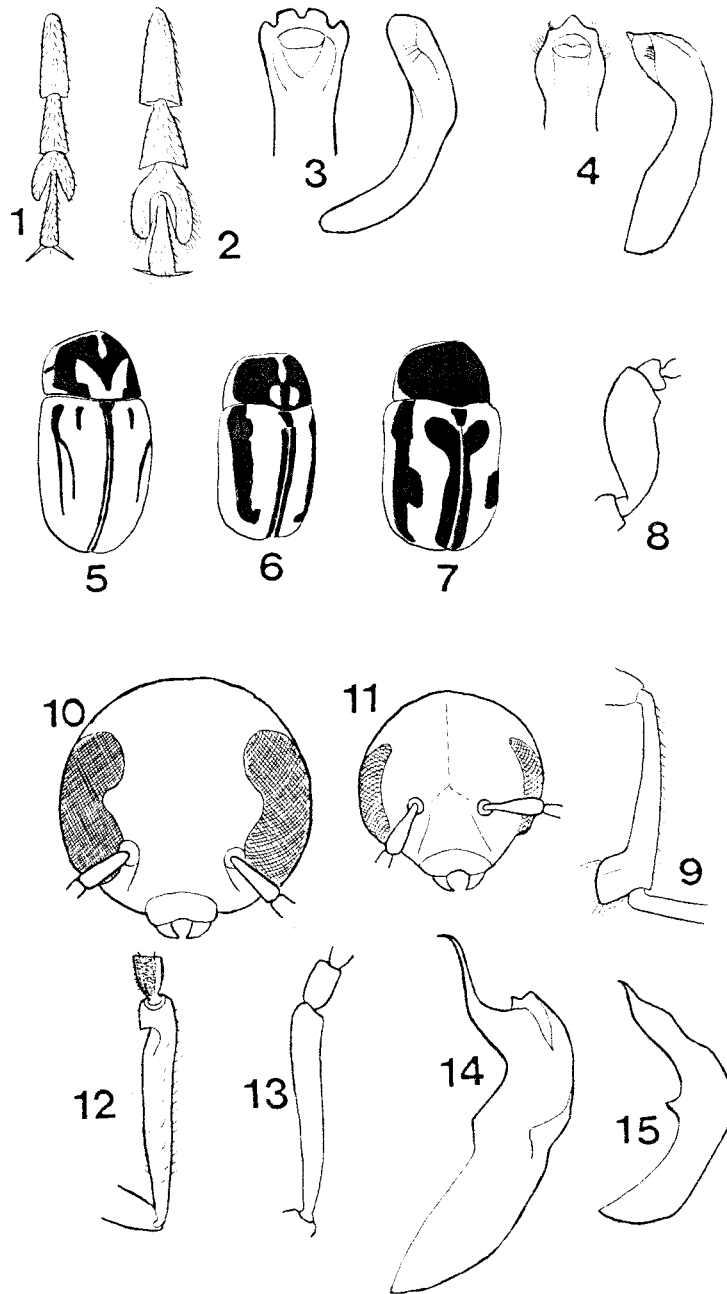


Figure 10: 1-2 — hind-tarsus: 1 — *Cryptocephalus (Asionus) apicalis*, 2 — *C. (s.str.) bipunctatus*. 3-4 — aedeagus, dorsal and lateral view: 3 — *C. quatuordecimmaculatus* (Bashkortostan: Aksjonovo Vill.), 4 — *C. floralis*. 5-7 — dorsal view: 5 — *C. gamma*, 6 — *C. bohemiensis*, 7 — *C. flexuosus*. 8 — *C. pini*, male, fore-tibia. 9 — *C. schaefferi*, male, hind-tibia. 10-11 — head: 10 — *C. (s.str.) sericeus*, 11 — *C. (Burlinius) ocellatus*. 12-13 — male, fore-tibia: 12 — *C. laevicollis*, 13 — *C. sericeus*. 14-15 — aedeagus, lateral view: 14 — *C. aureolus*, 15 — *C. solivagus*. (Orig.)

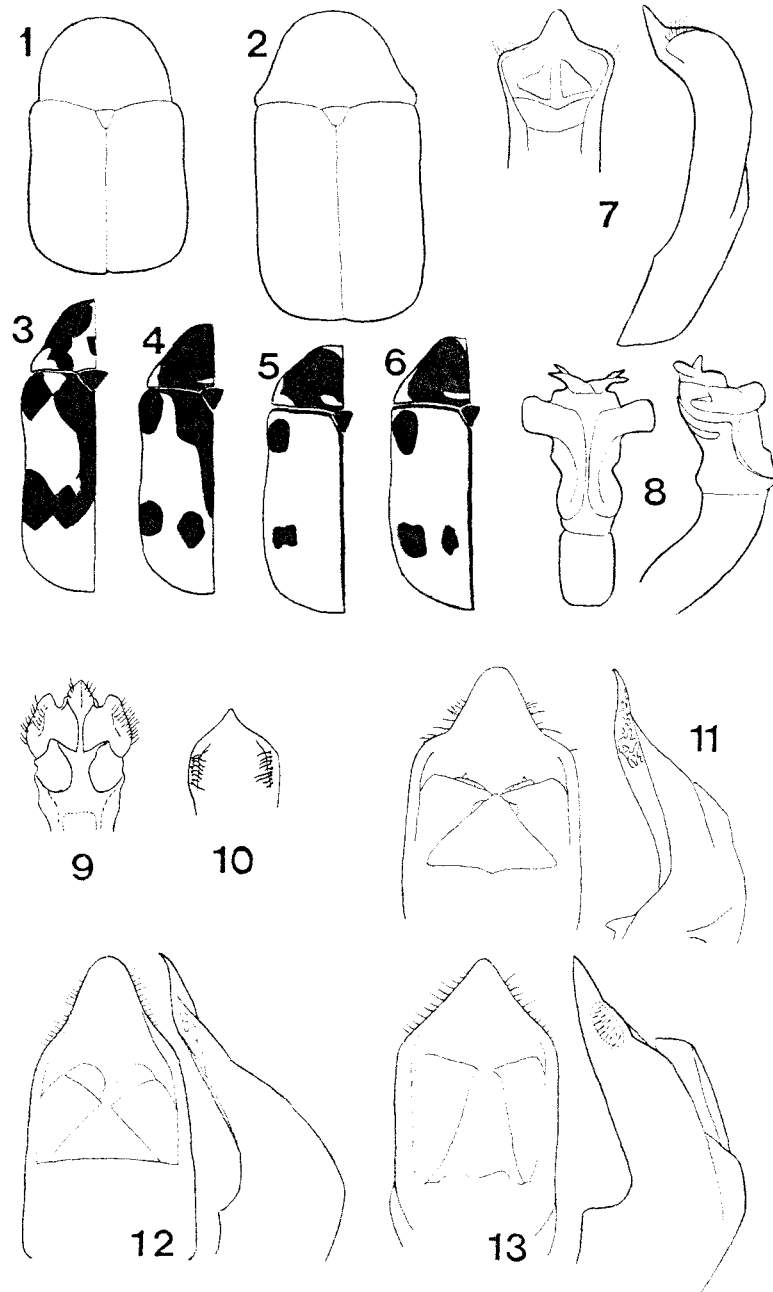


Figure 11: 1-2 — shape of body, dorsal view: 1 — *Cryptocephalus coronatus*, 2 — *C. flavicollis*. 3-6 — pronotal and elytral pattern, dorsal view: 3, 4 — *C. cruciger*: 3 — female, 4 — male (Leningrad reg.), 5, 6 — *C. distinguendus*. 7-8 — aedeagus, dorsal and lateral view: 7 — *C. cruciger* (Leningrad reg.), 8 — *C. distinguendus*. 9-10 — aedeagus: 9 — *C. orotshena*, 10 — *C. krutovskyi*. 11-13 — aedeagus, dorsal and lateral view: 11 — *C. hypochoeridis*, 12 — *C. solivagus*, 13 — *C. praticola*. (after Medvedev, Dubeshko, 1992: 9, 10; Leonardi, Sassi, 2001: 11; others — orig.)

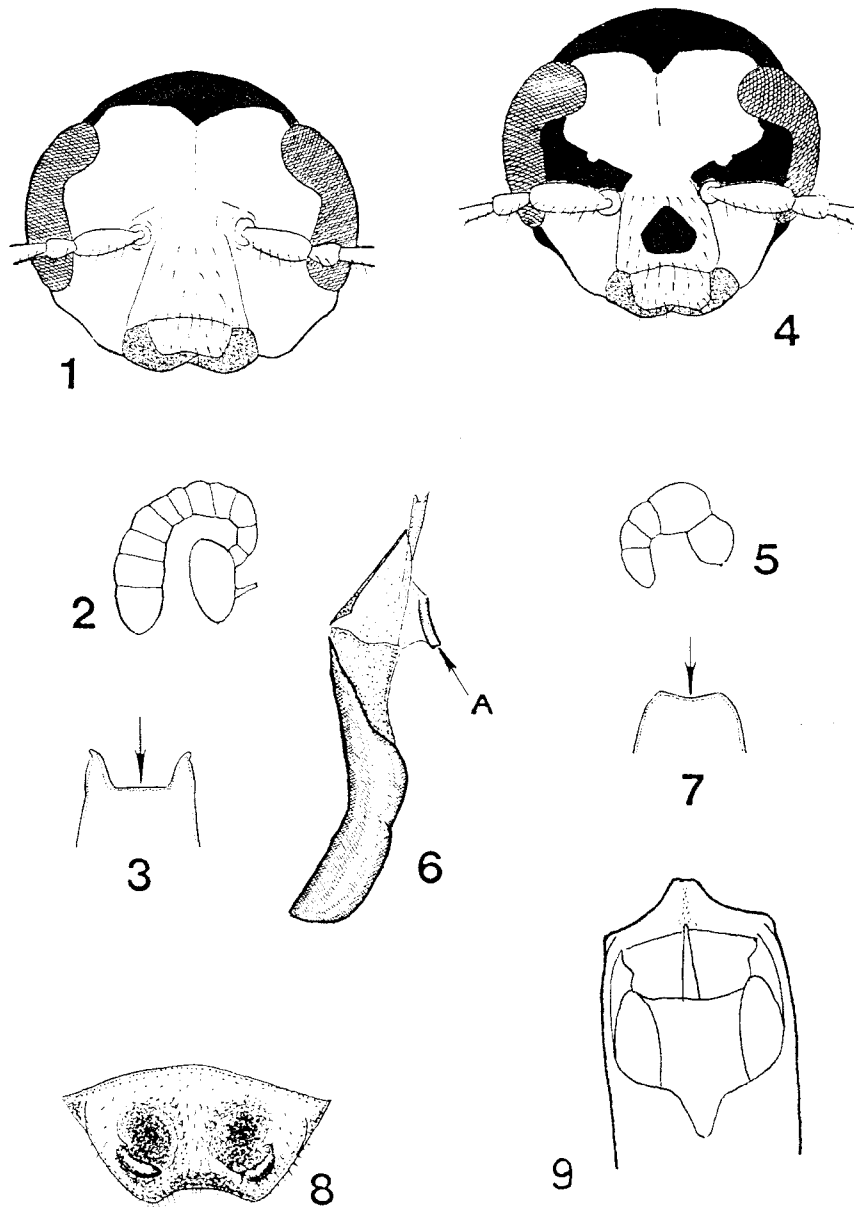


Figure 12: 1-3 — *Cryptocephalus flavipes* (1, 2 — Bashkortostan, 3 — Lugansk reg.): 1 — head of female, 2 — spermatheca of female, 3 — sclerotized plate of internal sac of aedeagus. 4-7 — *C. bameuli* (Moscow reg.): 4 — head of female, 5 — spermatheca of female, 6 — aedeagus with everted internal sac, lateral view (A — sclerotized plate), 7 — sclerotized plate of internal sac of aedeagus. 8 — *C. impressipygus*, female, pygidium. 9 — *C. marginatus*, male, aedeagus, dorsal view. (Orig.)

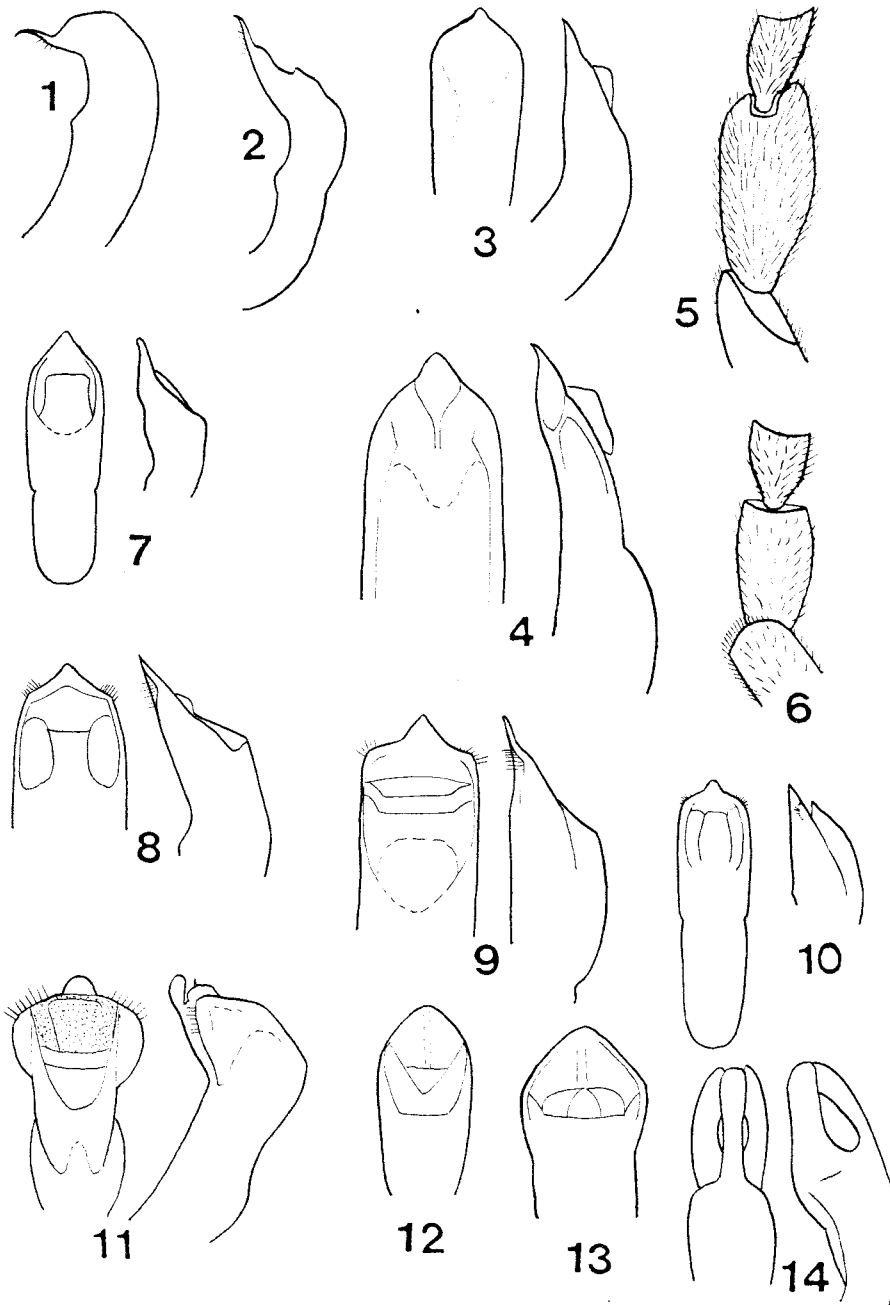


Figure 13: 1-2 — aedeagus, lateral view: 1 — *Cryptocephalus virens*, 2 — *C. violaceus*. 3-4 — aedeagus, ventral and lateral view: 3 — *C. nitidulus*, 4 — *C. nitidus*. 5, 6 — 1st and 2nd protarsomeres of male: 5 — *C. rufofasciatus*, 6 — *C. bipunctatus*. 7-11 — aedeagus, dorsal and lateral view: 7 — *C. parvulus*, 8 — *C. caerulescens*, 9 — *C. biguttulus*, 10 — *C. bicolor*, 11 — *C. laevicollis*. 12-13 — *C. decemmaculatus*, aedeagus, dorsal view. 14 — *C. populi*, aedeagus, dorsal and lateral view. (after Warchalowski, 1991a: 7, 10; others — orig.)

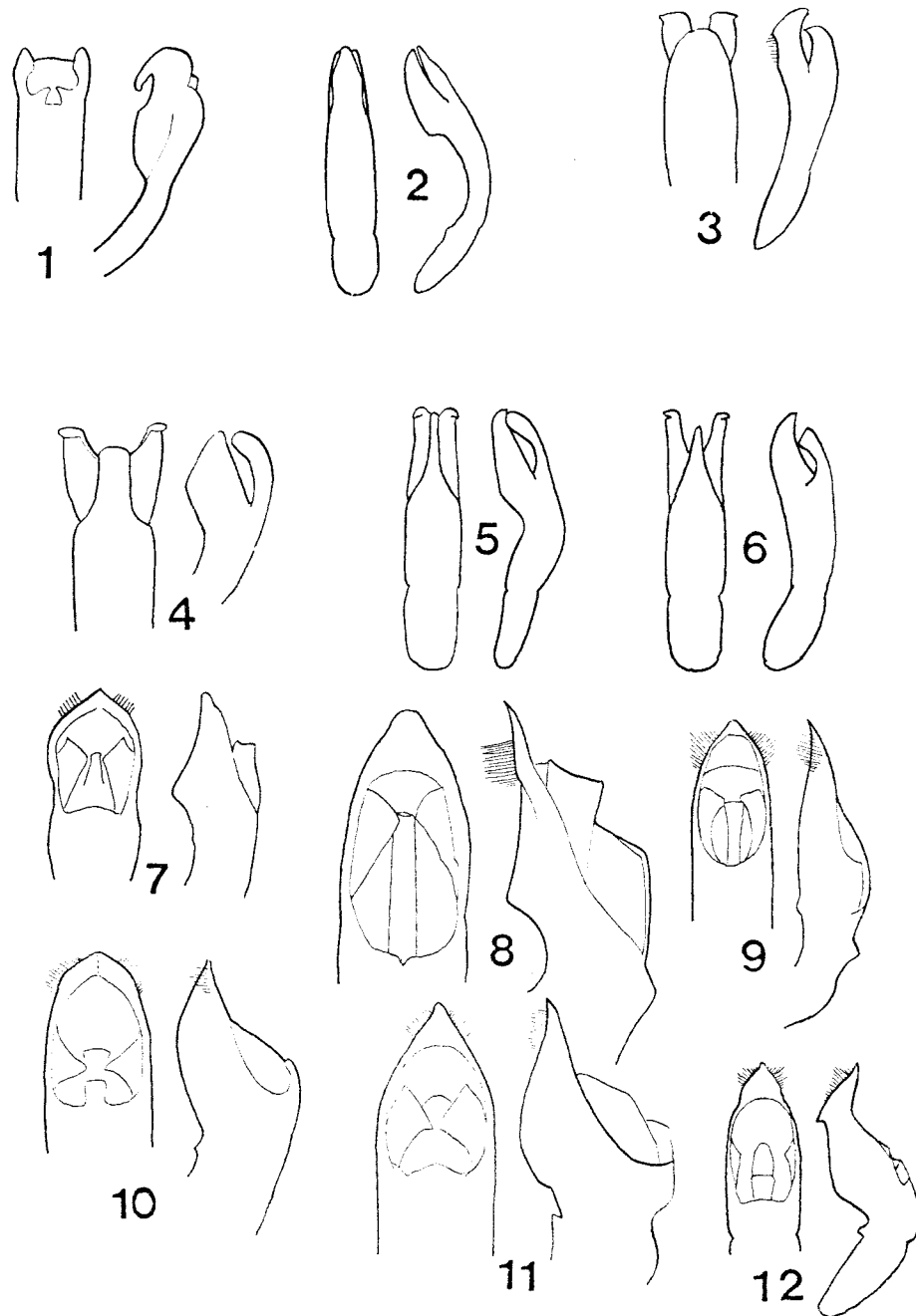


Figure 14: 1-12 — aedeagus, dorsal and lateral view: 1 — *Cryptocephalus carpathicus* (Transcarpathians), 2 — *C. saliceti*, 3 — *C. fulvus*, 4 — *C. macellus*, 5 — *C. pusillus*, 6 — *C. rufipes*, 7 — *Pachybrachis vermicularis*, 8 — *P. pistor* (Astrakhan reg.), 9 — *P. cribricollis*, 10 — *P. hieroglyphicus*, 11 — *P. scriptidorsum*, 12 — *P. limbatus*. (after: Warchałowski, 1999 — 2; Warchałowski, 1991a — 5, 6, 12; Lopatin, 1977 — 7; others — orig.)

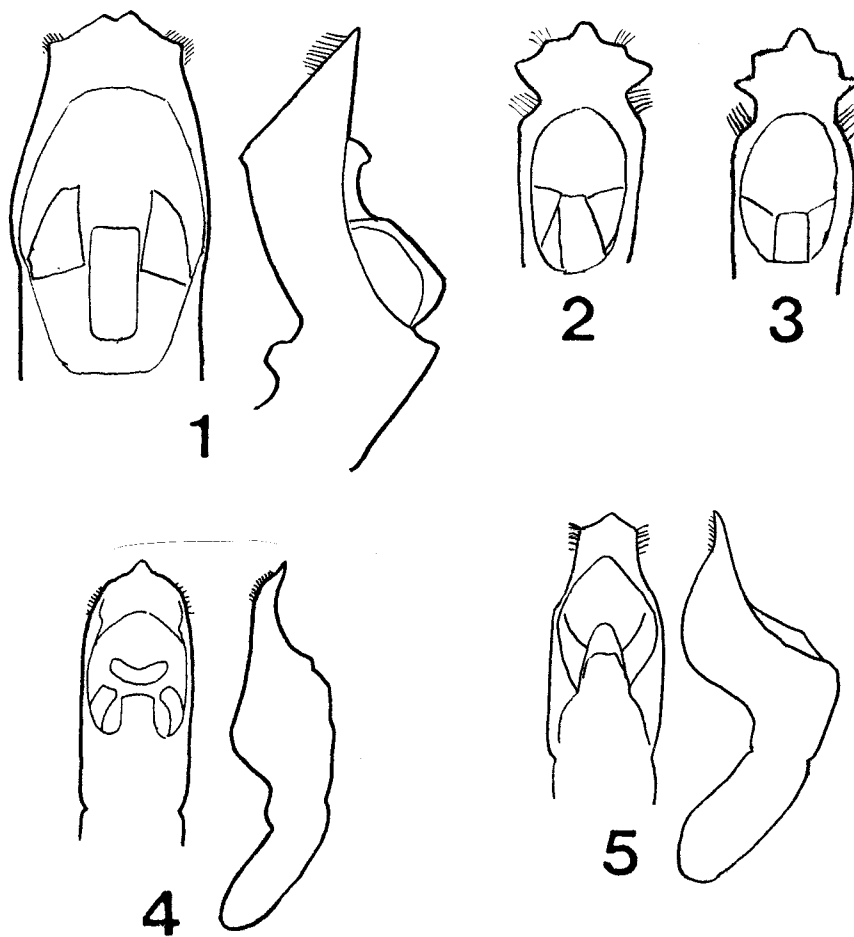


Figure 15: 1-5 —aedeagus (1, 4, 5 — dorsal and lateral view, 2 and 3 —dorsal view): 1 — *Pachybrachis tessellatus*, 2 — *P. fimbriolatus*, 3 — *P. mendax*, 4 — *P. sinuatus*, 5 — *P. pallidulus*. (after Warchałowski, 1991a: 4, 5, others — orig.)

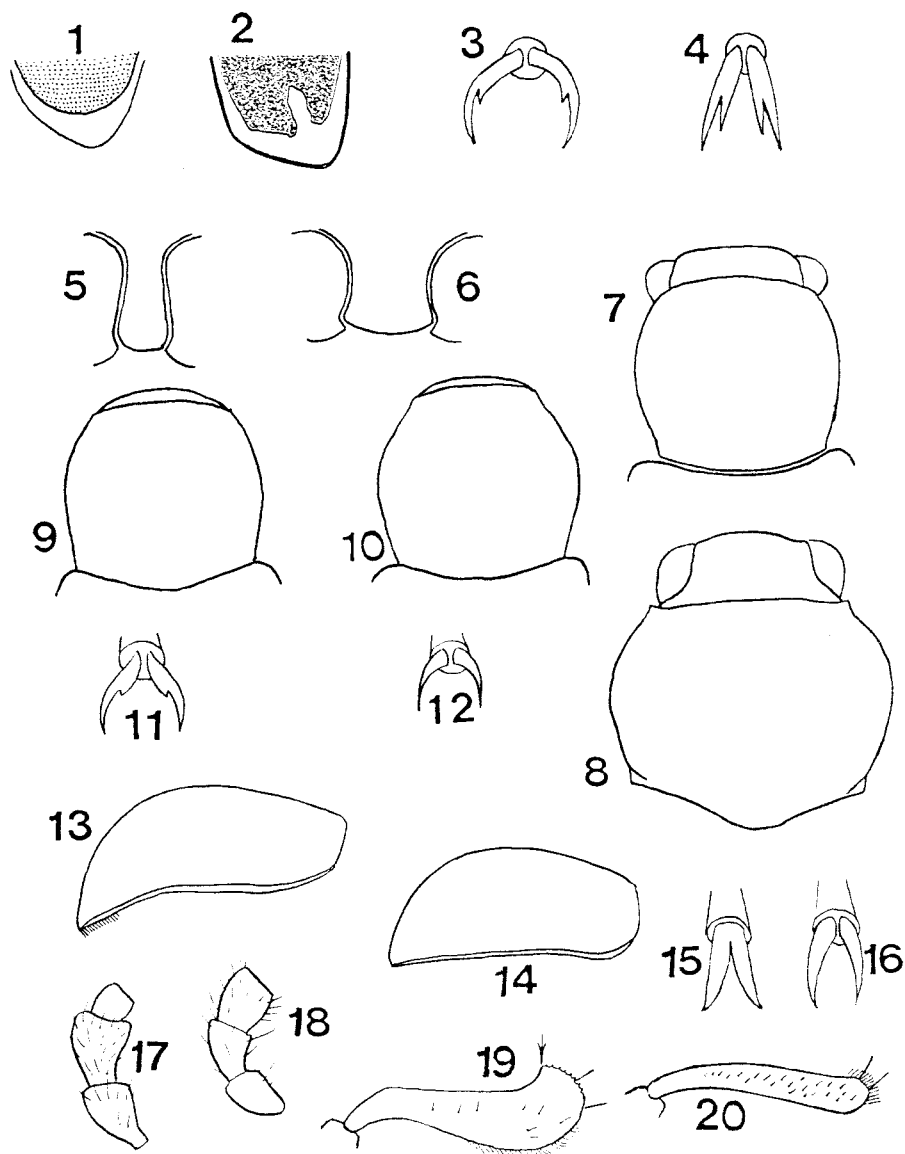


Figure 16: 1-2 — yellow marginal stripe on elytral apex: 1 — *Pachybrachis limbatus*, 2 — *P. tessellatus*. 3-4 — claws: 3 — *Chrysochares asiatica*, 4 — *Eumolpus asclepiadeus*. 5-6 — mesosternum between mid-coxae: 5 — *Chrysochares asiatica*, 6 — *Eumolpus asclepiadeus*. 7-10 — head and pronotum, dorsal view: 7 — *Malegia turkestanica*, 8 — *Bromius obscurus*, 9 — *Pachnephorus tessellatus*, 10 — *P. pilosus*. 11-12 — claws: 11 — *Pachnephorus tessellatus*, 12 — *P. pilosus*. 13-14 — right elytron, lateral view: 13 — *Chrysolina*, 14 — *Goniocetena*. 15-16 — claws: 15 — *Zygogramma suturalis*, 16 — *Chrysolina polita*. 17-18 — maxillary palpus: 17 — *Leptinotarsa decemlineata*, 18 — *Chrysolina herbacea*. 19-20 — fore-tibia: 19 — *Chrysolina platyscelidina*, 20 — *Ch. herbacea*. (after: Warchalowski, 1991a: 1; others — orig.)

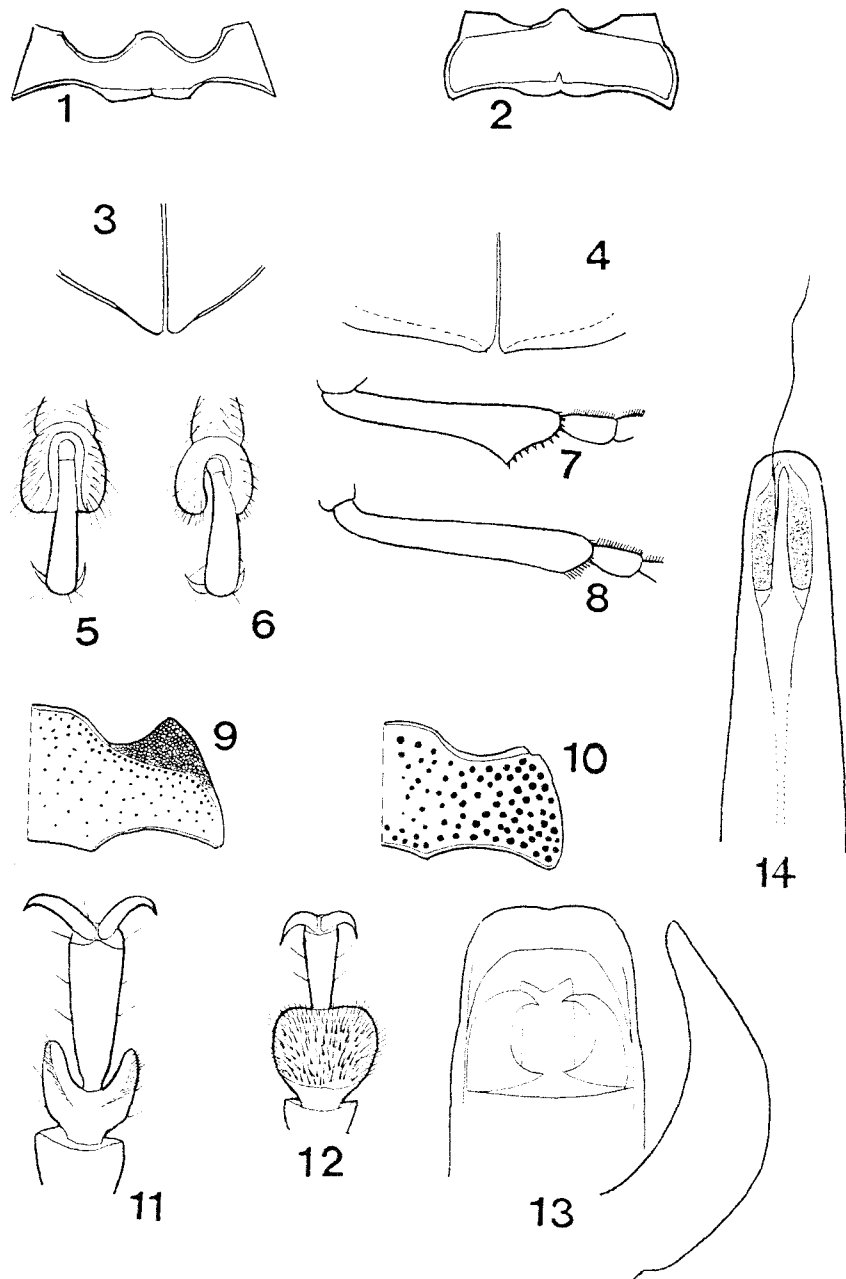


Figure 17: 1-2 — metasternum: 1 — *Timarcha tenebricosa*, 2 — *Chrysomela populi*. 3-4 — apices of elytra viewed from behind: 3 — *Colaphus sophiae*, 4 — *Plagiosterna aenea*. 5-6 — 3rd-4th tarsomeres, dorsal view: 5 — *Sclerophaedon carniolicus*, 6 — *Phaedon cochleariae*. 7-8 — hind-femur: 7 — *Goniocтена viminalis*, 8 — *Phratora vitellinae*. 9-10 — metasternum, left half: 9 — *Phaedon armoraciae*, 10 — *Hydrothassa glabra*. 11-12 — 3rd-4th metatarsomeres, ventral view: 11 — *Crosita altaica*, 12 — *Chrysolina herbacea*. 13 — *Chrysolina tundralis* (Lipetsk reg.: Pliuschan' Forestry), aedeagus, dorsal and lateral view. 14 — *Chrysolina umbratilis*, aedeagus, dorsal view. (Orig.)

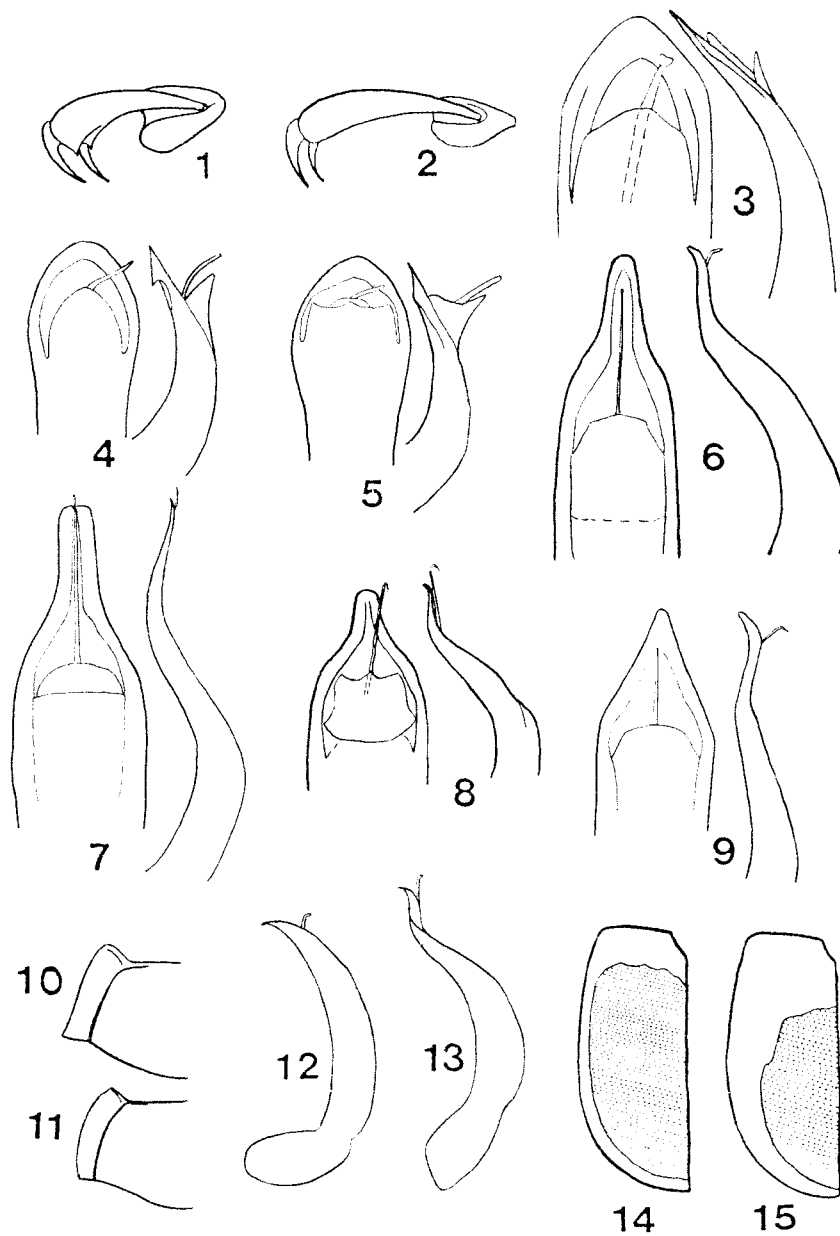


Figure 18: 1-2 — 3rd-4th tarsomeres: 1 — *Chrysolina fastuosa*, 2 — *Ch. polita*. 3-9 — aedeagus, dorsal and lateral view: 3 — *Ch. kuesteri*, 4 — *Ch. sanguinolenta*, 5 — *Ch. gypsophila*, 6 — *Ch. carnifex*, 7 — *Ch. marginata marginata* (Chelyabinsk reg.), 8 — *Ch. marginata marginata* (Khibini Mts.), 9 — *Ch. hyrcana* (Volgograd reg.). 10-11 — pronotum, left half: 10 — *Ch. oricalcia*, 11 — *Ch. chalcites*. 12-13 — aedeagus, lateral view: 12 — *Ch. limbata*, 13 — *Ch. jenssei*. 14-15 — left elytron, dorsal view: 14 — *Ch. limbata limbata*, 15 — *Ch. limbata discipennis*. (Orig.)

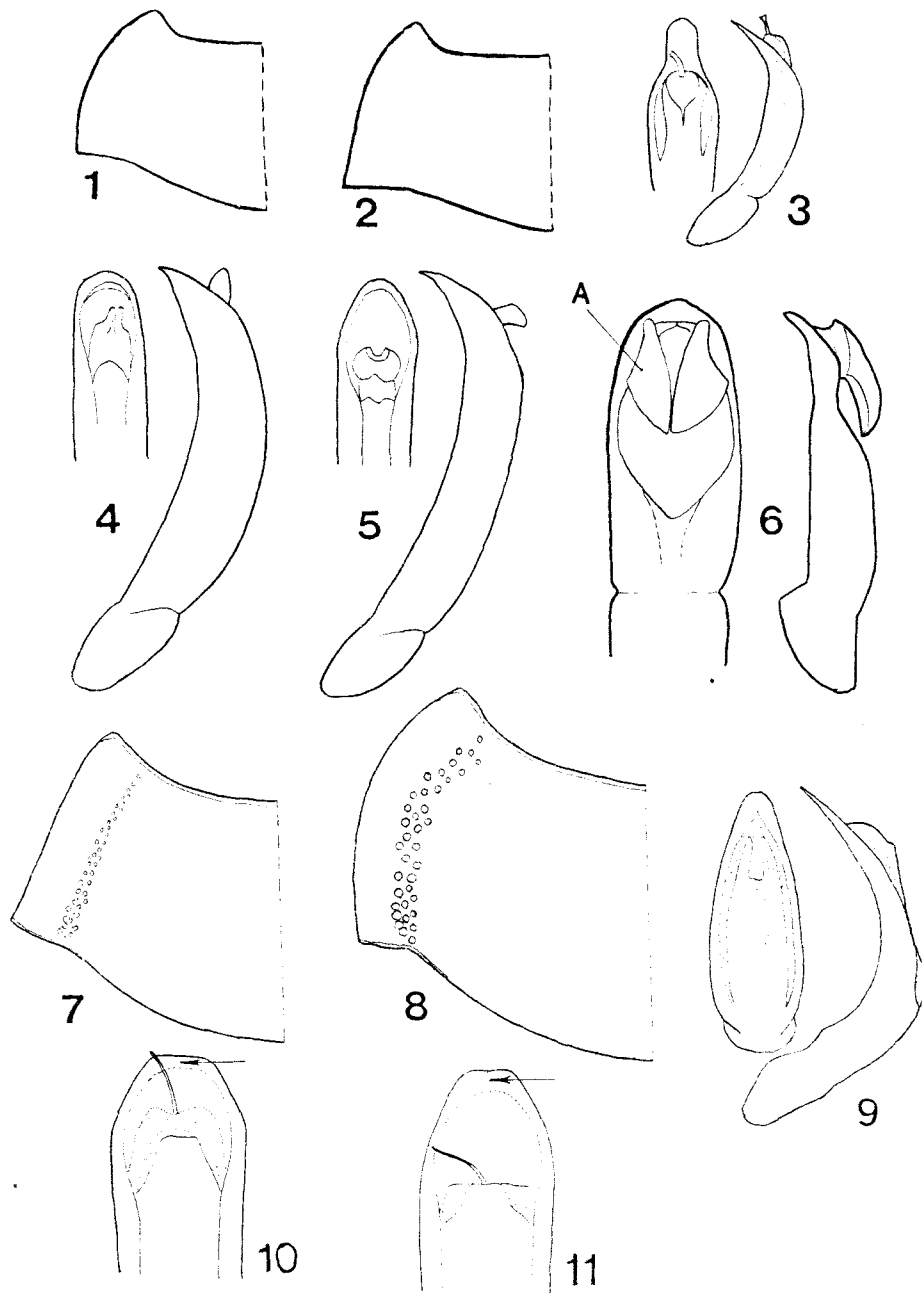


Figure 19: 1-2 — outline of pronotum, dorsal view, left half: 1 — *Chrysolina cuprina*, 2 — *Ch. geminata*. 3-6 — aedeagus, dorsal and lateral view: 3 — *Ch. hyperici*, 4 — *Ch. cuprina* (Chelyabinsk reg.), 5 — *Ch. geminata*, 6 — *Ch. tolli* (A — alae). 7-8 — pronotum, dorsal view, left half: 7 — *Ch. rossia*, 8 — *Ch. sanguinolenta*. 9-11 — aedeagus: 9 — *Ch. ordinata* (Ulyanovsk reg.: Radischevo Distr.), 10 — *Ch. lichenis*, 11 — *Ch. carpathica*. (Orig.)

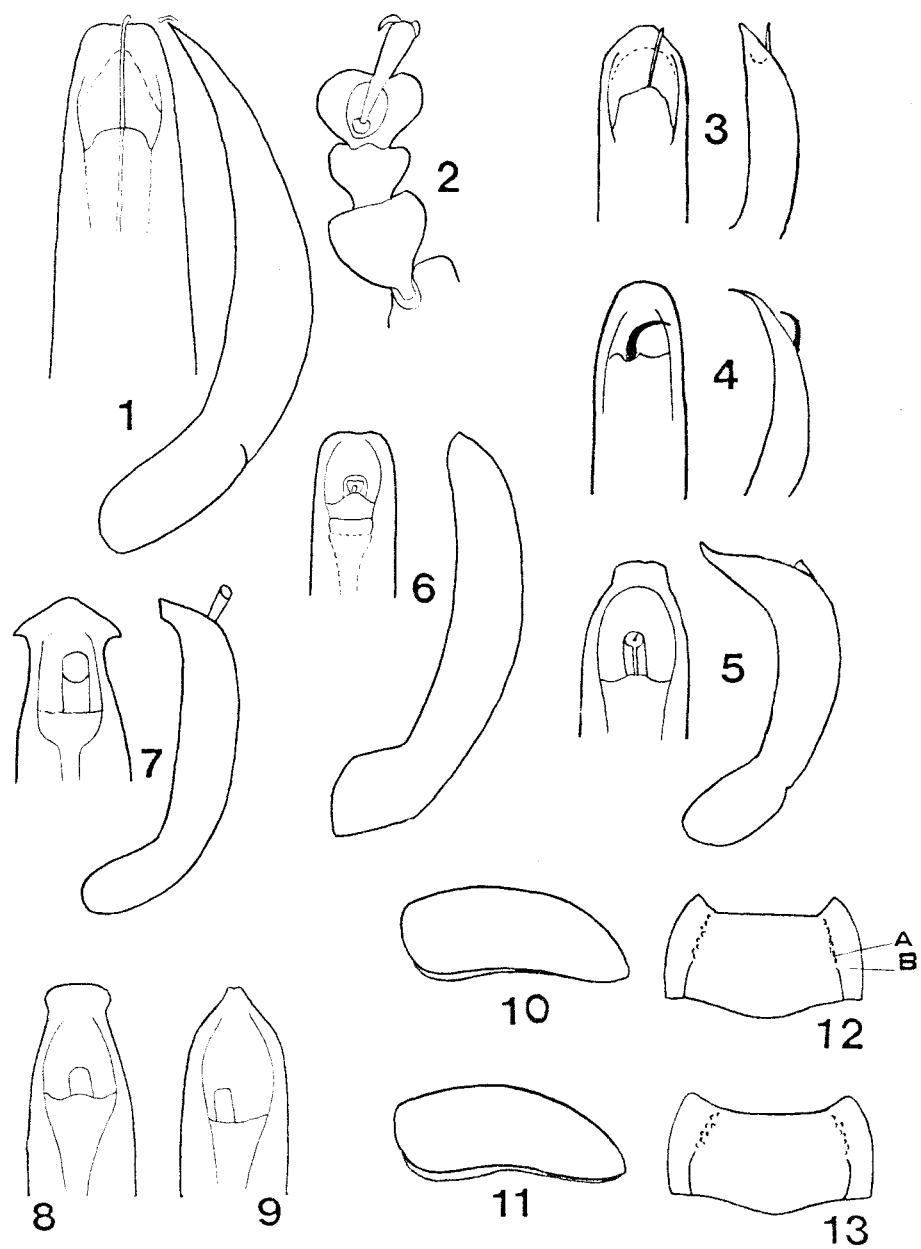


Figure 20: 1-2 — *Chrysolina eurina* (Moscow reg.: Lukhovitsy Distr.): 1 — aedeagus, dorsal and lateral view, 2 — male, fore-tarsus. 3-7 — aedeagus, dorsal and lateral view: 3 — *Ch. imperfecta* (Volgograd reg.), 4 — *Ch. reitteri*, 5 — *Ch. cerealis*, 6 — *Ch. relucens*, 7 — *Ch. aurichalcea bohémica*. 8-9 — aedeagus, dorsal view: 8 — *Ch. herbacea*, 9 — *Ch. coeruleans*. 10-11 — elytron, lateral view: 10 — *Ch. herbacea*, 11 — *Ch. graminis*. 12-13 — pronotum, dorsal view: 12 — *Ch. purpurascens* (A — lateral impression, B — lateral callus), 13 — *Ch. pliginskii*. (Orig.)

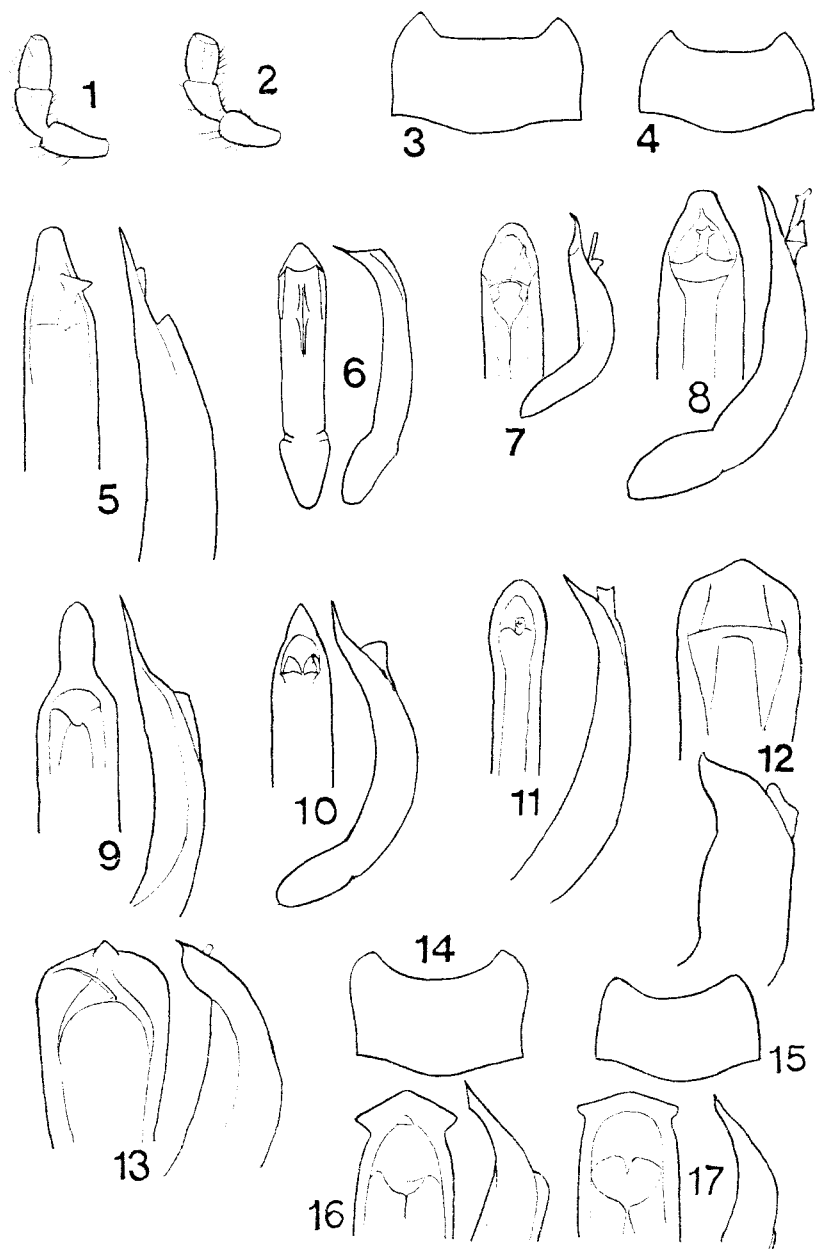


Figure 21: 1-2 — maxillary palpus of male: 1 — *Oreina cacaliae senecionis*, 2 — *O. virgulata praefica*. 3-4 — outline of pronotum: 3 — *O. cacaliae senecionis*, 4 — *O. speciosissima*. 5-13 — aedeagus, dorsal and lateral view: 5 — *O. bifrons*, 6 — *O. viridis*, 7 — *O. bidentata*, 8 — *O. coerulea*, 9 — *O. cacaliae senecionis*, 10 — *O. speciosissima*, 11 — *O. alpestris*, 12 — *O. intricata*, 13 — *O. virgulata*. 14-15 — outline of pronotum: 14 — *Chrysomela tremula*, 15 — *Ch. saliceti*. 16-17 — aedeagus, dorsal and lateral view: 16 — *Ch. tremula*, 17 — *Ch. saliceti*. (after Brovdij, 1977a: 6; others — orig.)

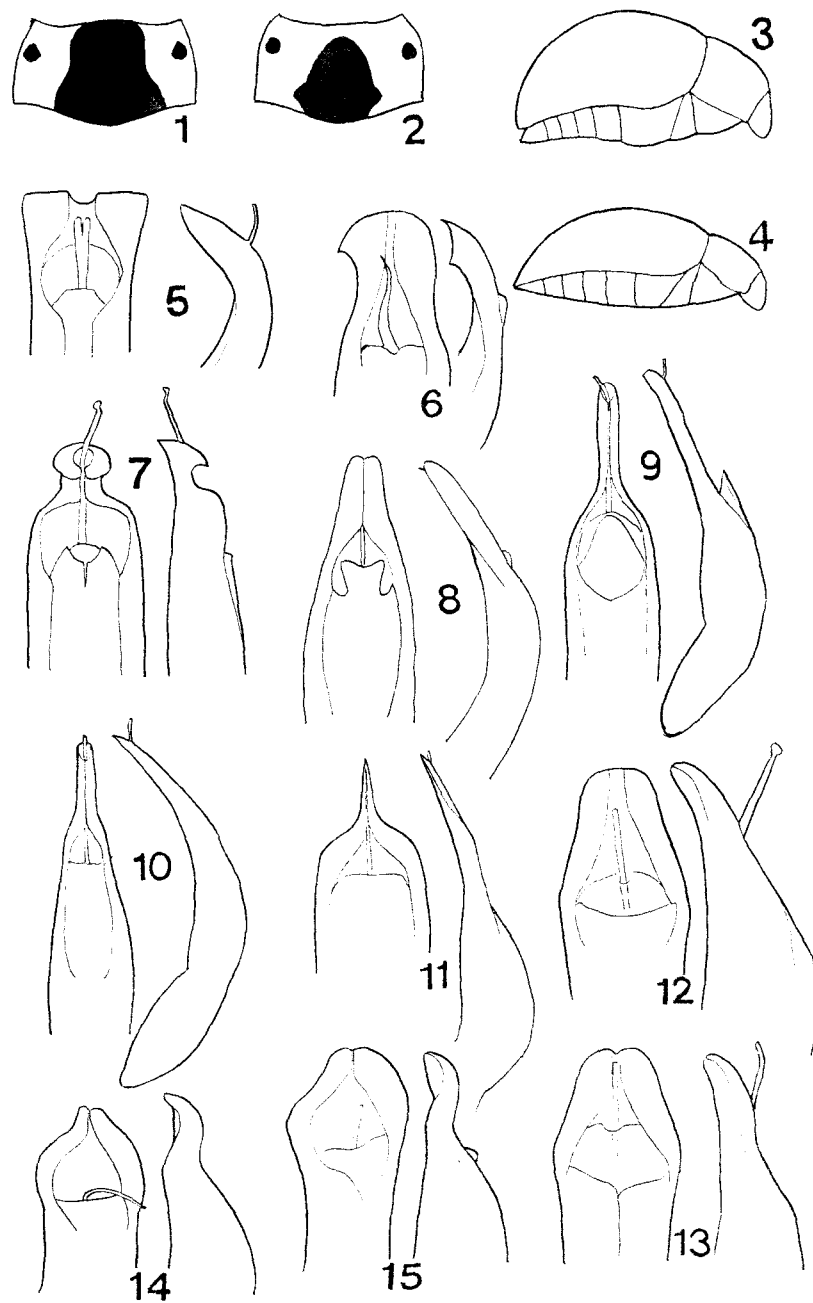


Figure 22: 1-2 — pronotum, dorsal view: 1 — *Entomoscelis adonidis*, 2 — *E. suturalis*. 3-4 — lateral view: 3 — *Goniocтена fornicata*, 4 — *G. decemnotata*. 5-15 — aedeagus, dorsal and lateral view: 5 — *G. fornicata*, 6 — *G. olivacea*, 7 — *G. viminalis*, 8 — *G. flavicornis*, 9 — *G. sundmani*, 10 — *G. decaspilota*, 11 — *G. linnaeana*, 12 — *G. pallida*, 13 — *G. interposita*, 14 — *G. quinquepunctata quinquepunctata*, 15 — *G. quinquepunctata intermedia*. (Orig.)

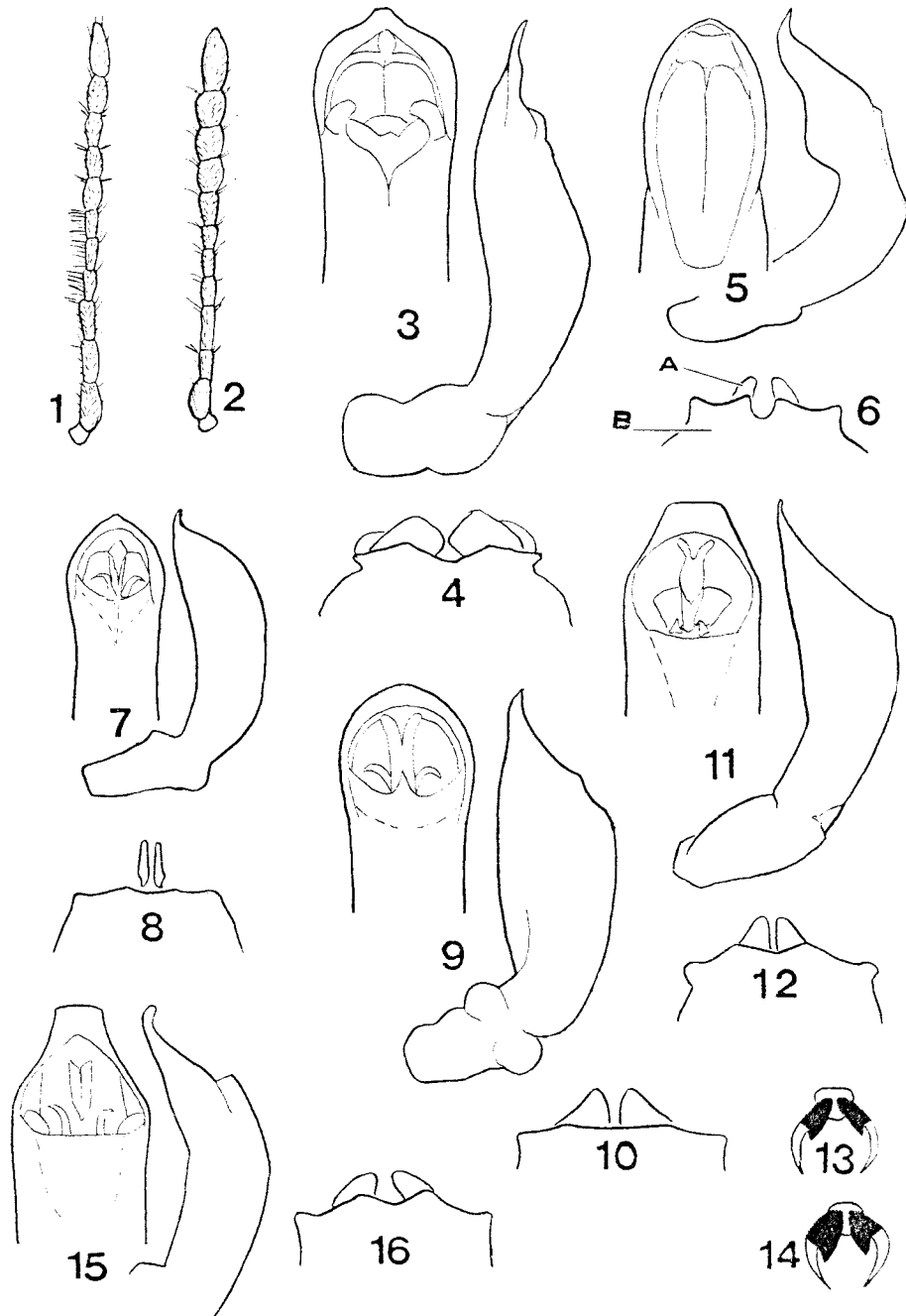


Figure 23: 1-2 — antenna: 1 — *Phratora vulgatissima*, 2 — *Ph. atrovirens*. 3, 5, 7, 9, 11, 15 — aedeagus, dorsal and lateral view; 4, 6, 8, 10, 12, 16 — vaginal sternite and vaginal palpi of female: 3, 4 — *Phratora vulgatissima*; 5, 6 — *Ph. laticollis* (A — vaginal palpi, B — vaginal sternite); 7, 8 — *Ph. atrovirens*; 9, 10 — *Ph. vitellinae*; 11, 12 — *Ph. polaris*; 15, 16 — *Ph. tibialis*. 13-14 — claws: 13 — *Ph. tibialis*, 14 — *Ph. polaris*. (Orig.)

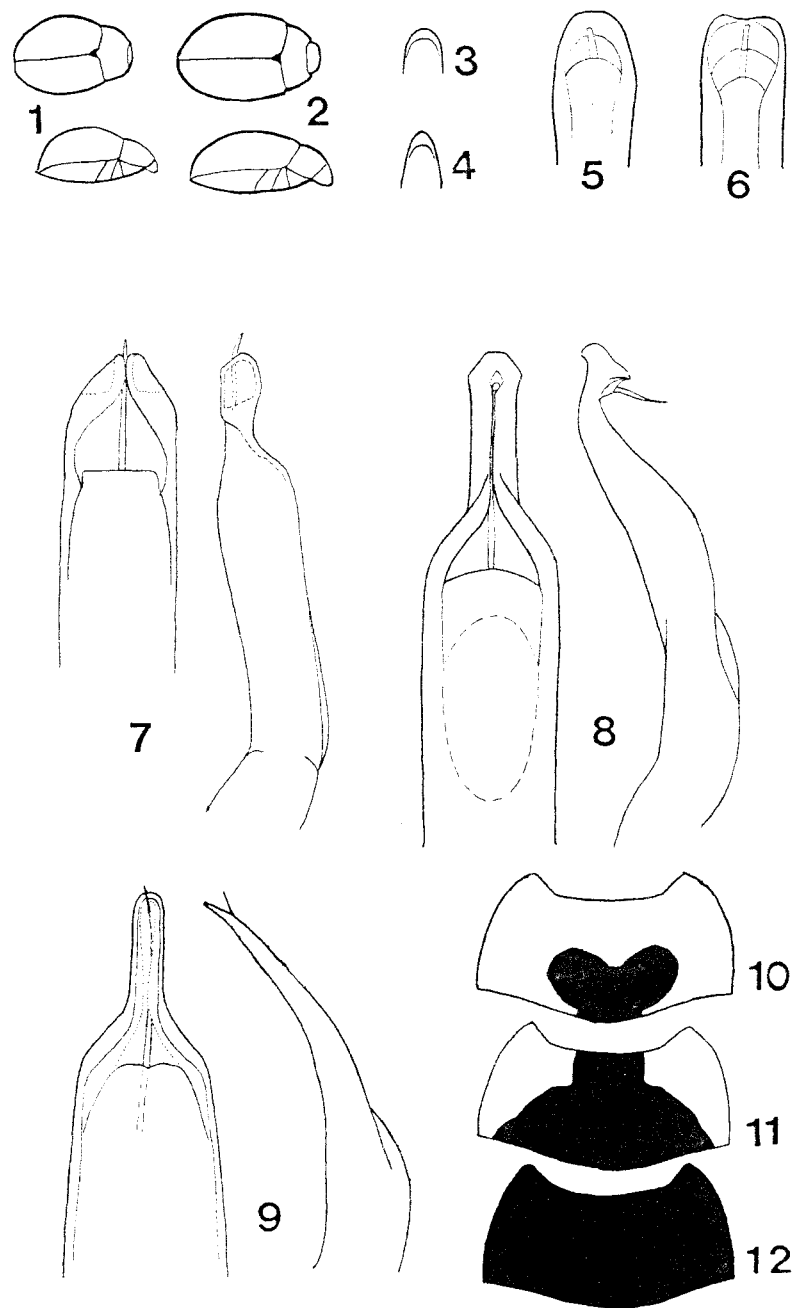


Figure 24: 1-2 — dorsal and lateral view: 1 — *Phaedon laevigatus*, 2 — *Ph. cochleariae*. 3-6 — apex of aedeagus, dorsal view: 3 — *Ph. concinnus*, 4 — *Ph. armoraciae*, 5 — *Sclerophaedon carpathicus*, 6 — *S. carniolicus*. 7-9 — aedeagus, dorsal and lateral view: 7 — *Gonioctena sibirica* (Udmurt Republic: Siumsi Distr.), 8 — *G. decemnotata*, 9 — *G. norvegica*. 10-12 — pronotum, dorsal view: 10 — *G. norvegica*, 11-12 — *G. linnaeana*. (Orig.)

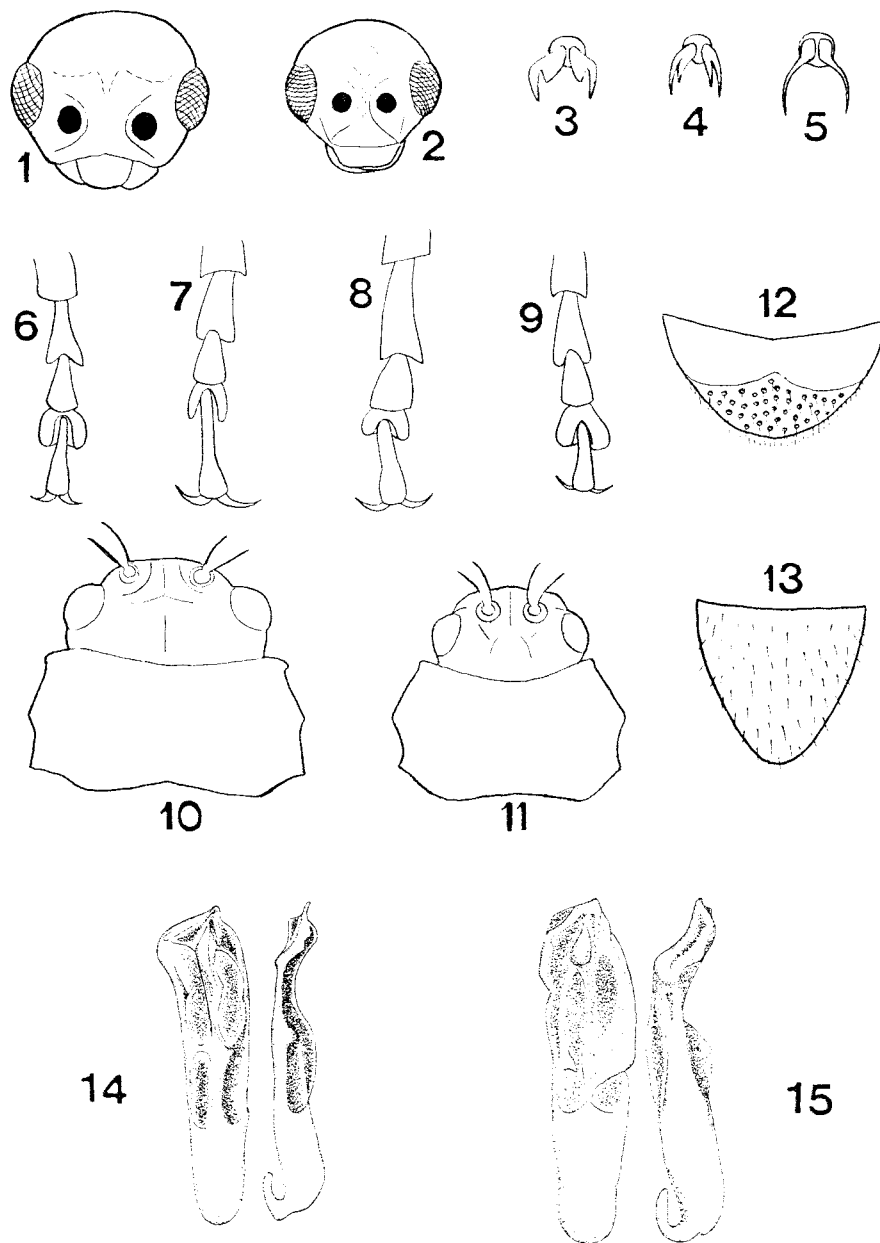


Figure 25: 1-2 — head with place of antennal insertions: 1 — *Galeruca tanacetii*, 2 — *Agelastica alni*. 3-5 — claws of different shape: 3 — appendiculate (*A. alni*), 4 — bifid (*G. tanacetii*), 5 — simple (*Theone silphoides*). 6-9 — hindtarsus: 6 — *G. pomonae*, 7 — *Diorhabda elongata*, 8 — *T. silphoides*, 9 — *Pallasiola absinthii*. 10-11 — head and pronotum, dorsal view: 10 — *Pyrrhalta viburni*, 11 — *Galerucella nymphaeae*. 12-13 — pygidium: 12 — *A. alni*, 13 — *Luperus armeniacus*. 14-15 — aedeagus, dorsal and lateral view: 14 — *Lochmaea caprea*, 15 — *L. suturalis*. (Orig.)

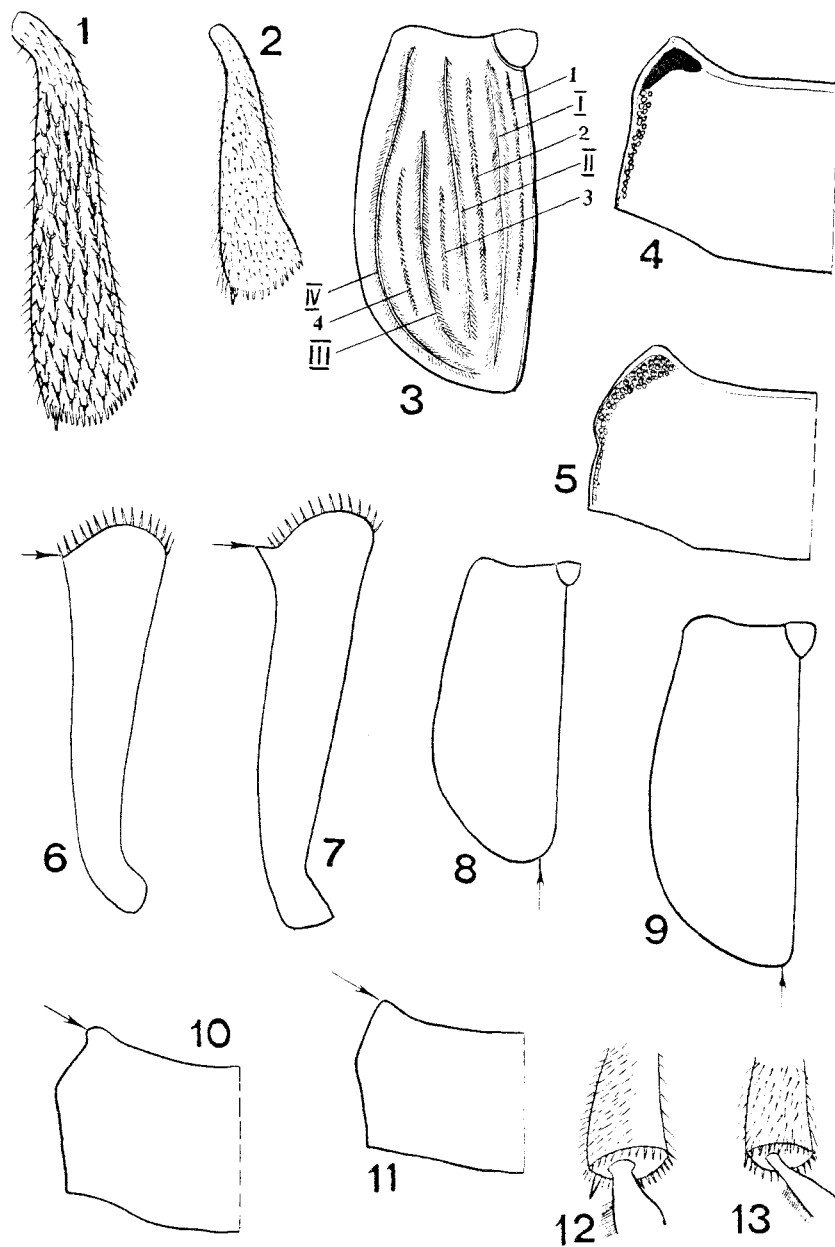


Figure 26: 1-2 — lateral side of mid-tibia: 1 — *Galeruca pomonae*, 2 — *G. rufa*. 3 — elytron of *Galeruca* (I-IV — primary costae, 1-4 — secondary costae). 4-5 — lateral furrow of pronotum in dorsal view: 4 — *G. pomonae*, 5 — *G. interrupta circumdata*. 6-7 — shape of fore-tibia: 6 — *G. laticollis*, 7 — *G. interrupta circumdata*. 8-9 — outline of elytron: 8 — *G. interrupta circumdata*, 9 — *G. interrupta armeniaca*. 10-11 — outline of pronotum, left half: 10 — *G. dahli*, 11 — *G. laticollis*. 12-13 — apex of hind-tibia: 12 — *G. rufa*, 13 — *G. melanocephala*. (Orig.)

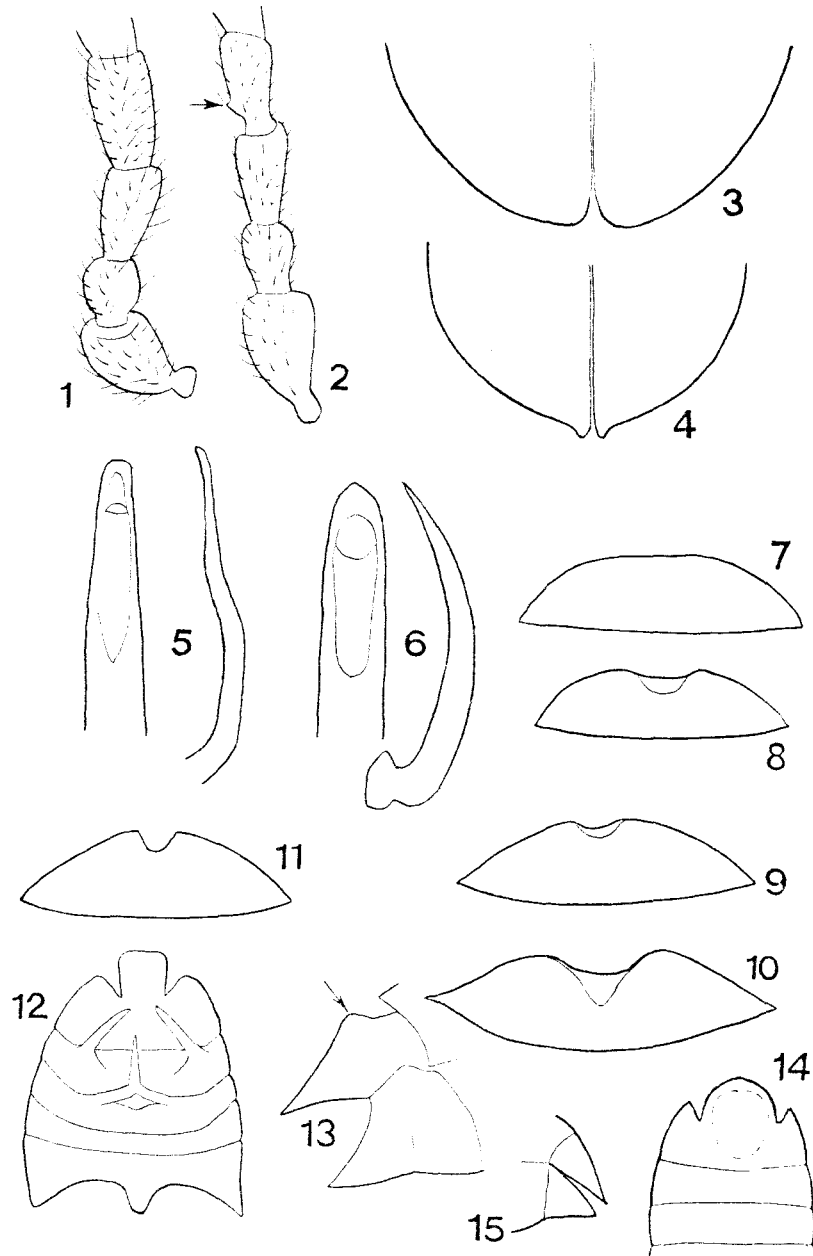


Figure 27: 1-2 — 1st-4th antennomeres of male: 1 — *Diorhabda persica*, 2 — *D. fischeri*. 3-4 — shape of elytral apex: 3 — *Galerucella grisescens*, 4 — *G. nymphaeae*. 5-6 — aedeagus, dorsal and lateral view: 5 — *G. calmariensis*, 6 — *G. tenella*. 7-11 — 5th abdominal sternite: 7 — *G. tenella*, female, 8 — *G. tenella*, male, 9 — *G. pusilla*, female, 10 — *G. pusilla*, male, 11 — *G. calmariensis*, female. 12-13 — *Luperus pravei*: 12 — abdominal sternites of male, 13 — apex of abdomen of female, lateral view. 14-15 — *L. armeniacus*: 14 — 3rd-5th abdominal sternites of male, 15 — apex of abdomen of female, lateral view. (Orig.)

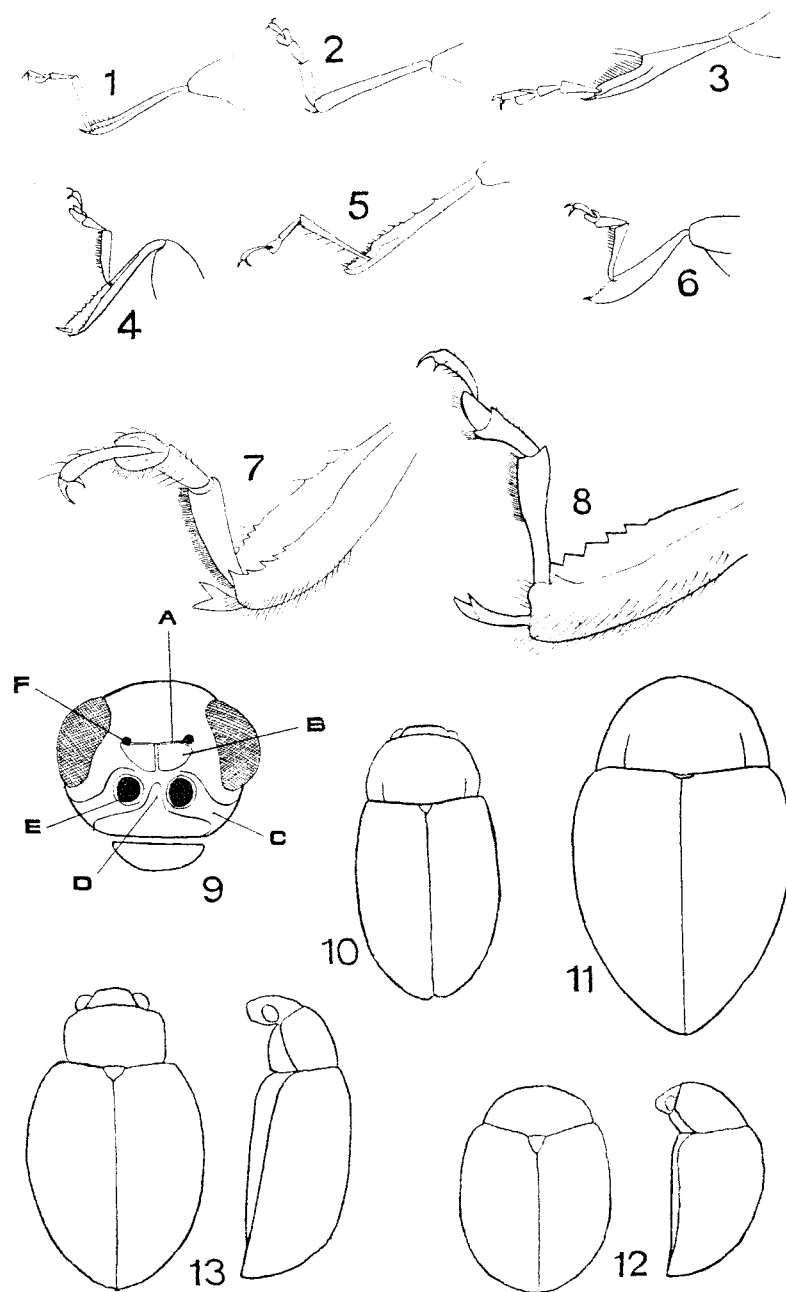


Figure 28: 1-8 — hind-tibia and tarsus: 1 — *Longitarsus pellucidus*, 2 — *Phyllotreta nigripes*, 3 — *Chaetocnema concinna*, 4 — *Psylliodes (Semicnema) macellus agropyri*, 5 — *P. (s.str.) attenuatus*, 6 — *P. (s.str.) hyoscyami*, 7 — *Diboldia rugulosa*, 8 — *D. metallica*. 9 — *Diboldia timida*, head (A — supracallinal sulcus, B — antennal callus, C — antennal impression, D — frontal ridge, E — antennal insertion, F — frontal pore). 10-13 — shape of body: 10 — *Mantura chrysanthemii*, 11 — *Minota carpathica*, 12 — *Sphaeroderma testacea*, 13 — *Aphthona erichsoni*. (Orig.)

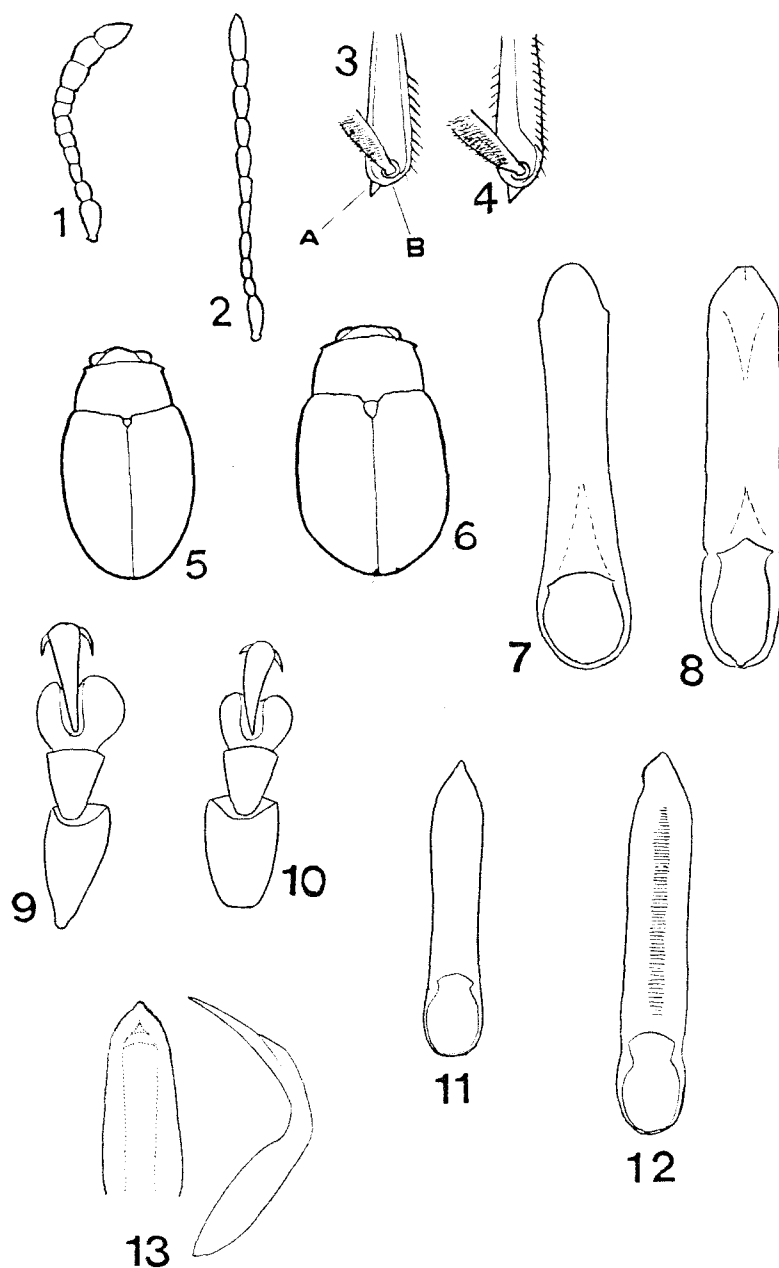


Figure 29: 1-2 — antenna: 1 — *Mniophila muscorum*, 2 — *Argopus ahrensi*. 3-4 — apex of hind-tibia, upper side: 3 — *Aphthona czwalinae* (A — apical spur, B — lower side of tibial apex), 4 — *Phyllotreta nemorum*. 5-6 — shape of body: 5 — *Epirix intermedia*, 6 — *E. pubescens*. 7-8 — aedeagus: 7 — *Crepidodera aurata*, 8 — *C. fulvicornis lapponica* (Murmansk reg.). 9-10 — fore-tarsus of male: 9 — *Altica quercetorum*, 10 — *A. longicollis*. 11-13 — aedeagus: 11 — *Chaetocnema chlorophana*, 12 — *Ch. coyei*, 13 — *Ch. compressa*. (Orig.)

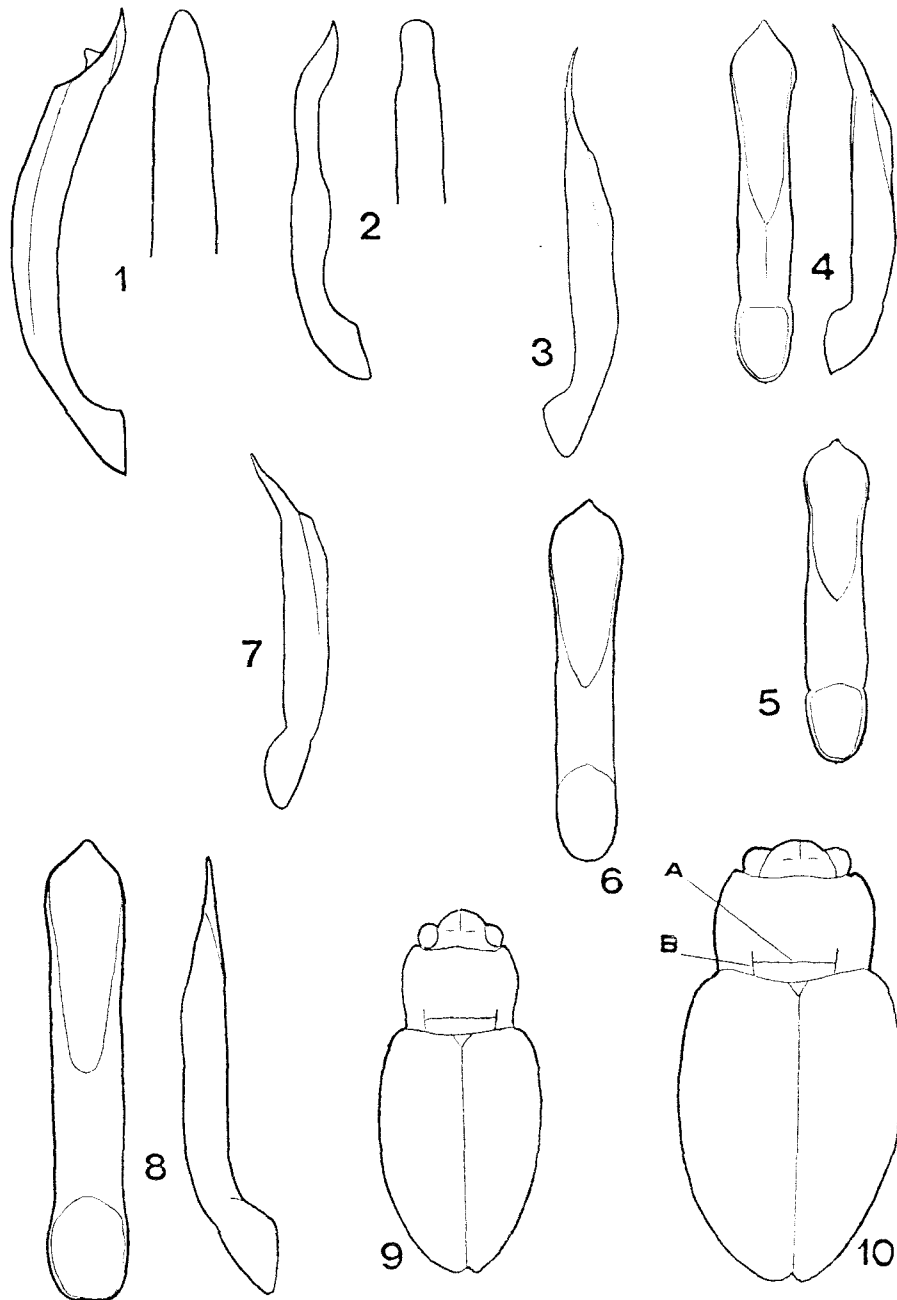


Figure 30: 1-8 — aedeagus: 1 — *Derocrepis rufipes* (lateral and ventral view), 2 — *D. serbica* (lateral and ventral view), 3 — *Neocrepidodera crassicornis* (lateral view), 4 — *N. motschulskii* (ventral and lateral view), 5 — *N. ferruginea* (ventral view), 6 — *N. brevicollis* (ventral view), 7 — *N. impressa* (lateral view), 8 — *N. transversa* (ventral and lateral view). 9-10 — general view from above: 9 — *N. motschulskii*, 10 — *N. ferruginea* (A — antebasal impression, B — basal furrow). (Orig.)

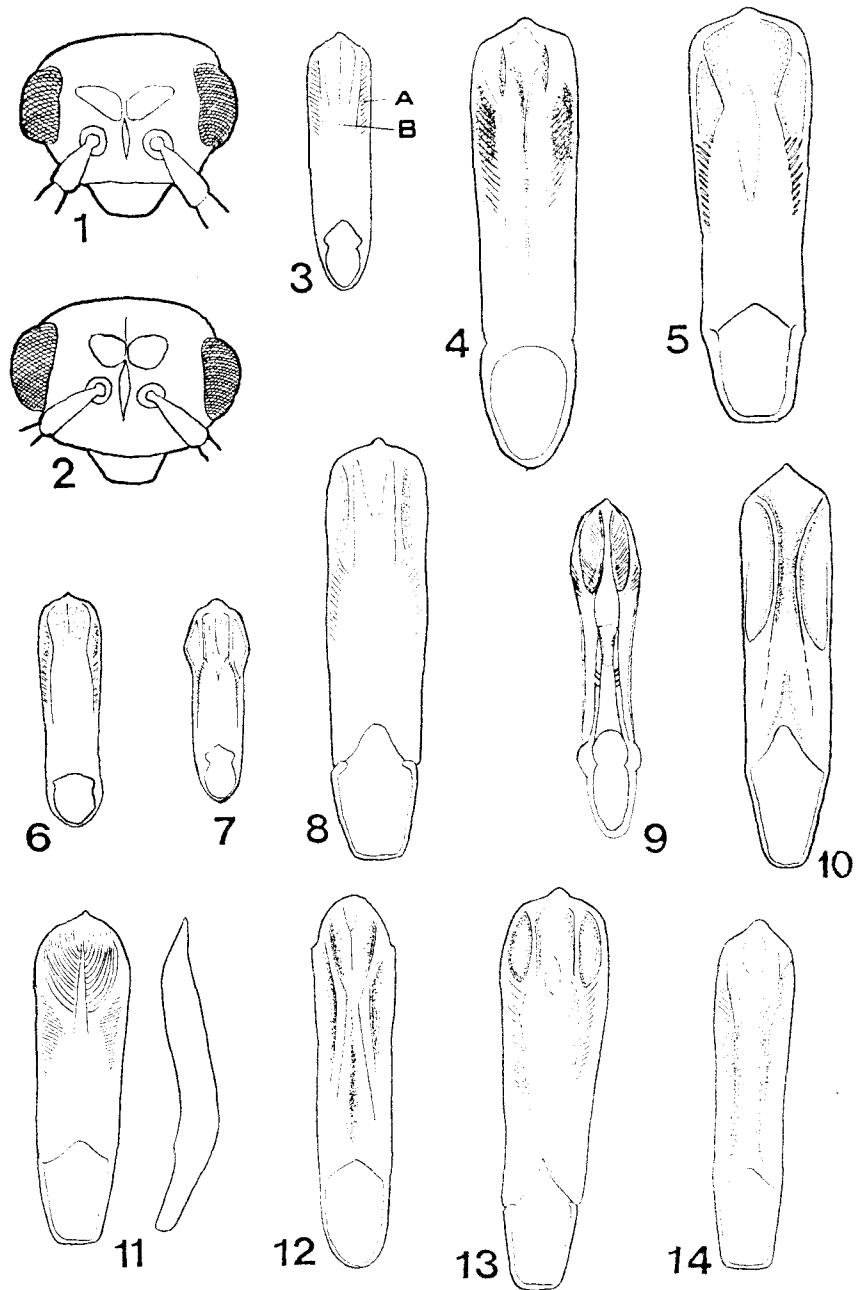


Figure 31: 1-2 — head: 1 — *Altica tamaricis*, 2 — *A. brevicollis*. 3-10 — aedeagus, ventral view: 3 — *A. deserticola* (A — lateral area, B — mid area), 4 — *A. tamaricis*, 5 — *A. quercetorum*, 6 — *A. brevicollis*, 7 — *A. ampelophaga*, 8 — *A. aenescens*, 9 — *A. impressicollis*, 10 — *A. carduorum*. 11 — *A. he-lianthemi*, aedeagus, ventral and lateral view. 12-14 — aedeagus, ventral view: 12 — *A. oleracea*, 13 — *A. lythri*, 14 — *A. palustris*. (after Warchałowski, 1998: 7; others — orig., including fig. 9 made by Mrs. O.E. Chaschina)

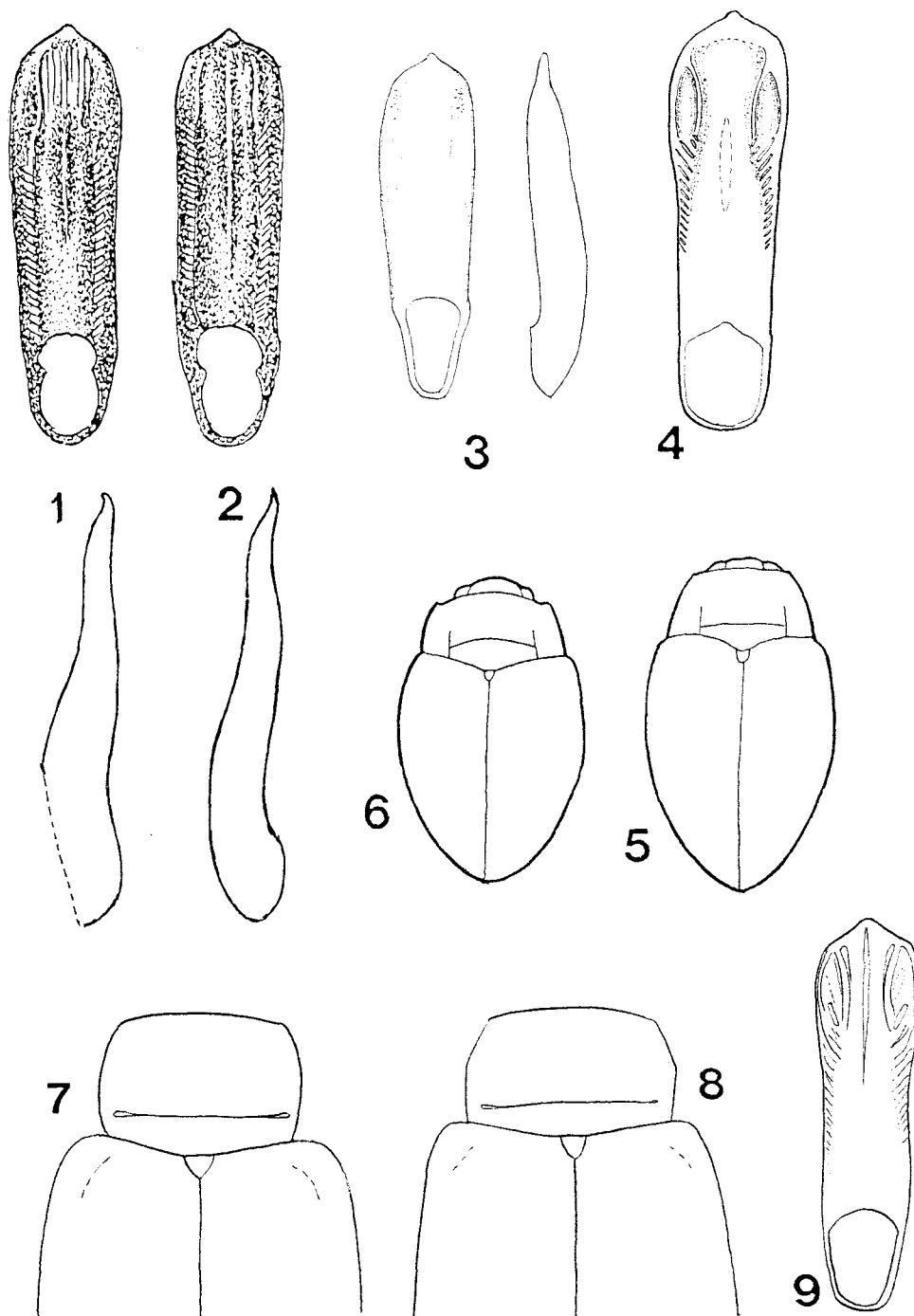


Figure 32: 1-3 — aedeagus, ventral and lateral view: 1, 2 — *Altica cornivorax*, 3 — *A. carinthiaca* (Leningrad reg.). 4 — *A. longicollis*, aedeagus, ventral view. 5-6 — general view from above: 5 — *Orestia carpathica*, 6 — *O. aubei*. 7-8 — pronotum and elytral base, dorsal view: 7 — *A. tamaricis*, 8 — *A. deserticola*. 9 — *A. cornivorax*, aedeagus, ventral view. (after Lyubischev, 1971 (manuscript): 1, 2; others — orig.)

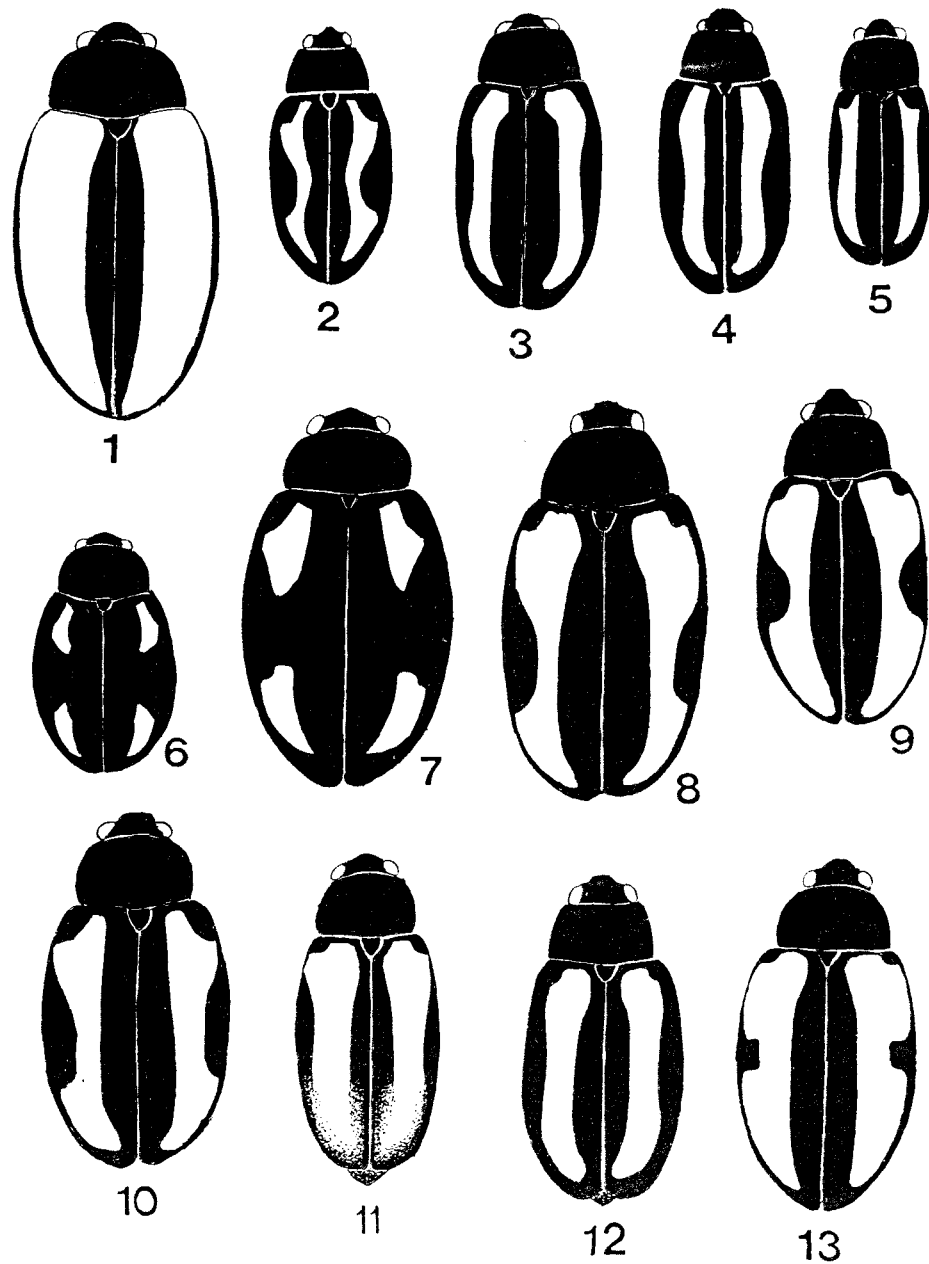


Figure 33: 1-13 — colour pattern of dorsal side: 1 — *Phyllostreta armoraciae*, 2 — *Ph. zimmermanni*, 3 — *Ph. undulata*, 4 — *Ph. nemorum*, 5 — *Ph. vittula*, 6 — *Ph. exclamationis*, 7 — *Ph. tetrastigma*, 8 — *Ph. striolata*, 9 — *Ph. ochripes*, 10 — *Ph. flexuosa*, 11 — *Ph. pallidipennis*, 12 — *Ph. erysimi*, 13 — *Ph. reitteri* (Crimea: envir. Simferopol). (Orig.)

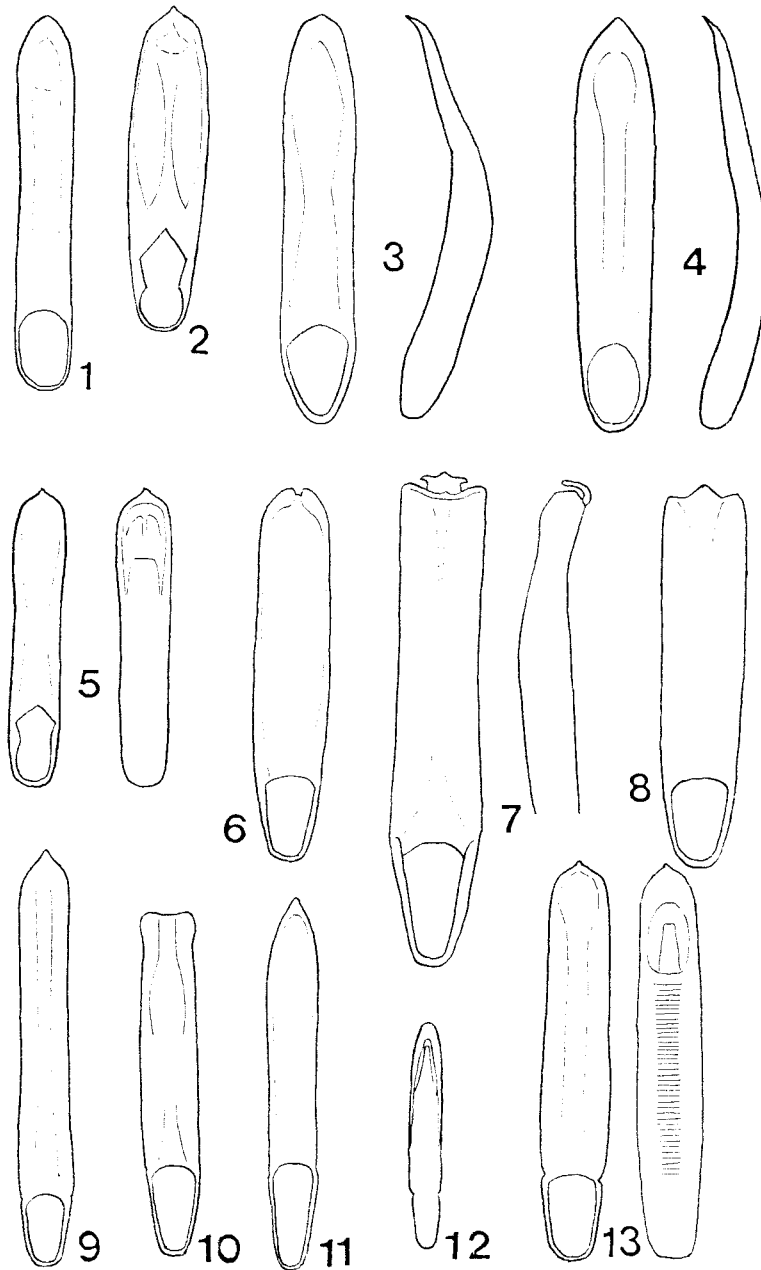


Figure 34: 1–13 — *Phyllotreta*, aedeagus: 1 — *Ph. wiseana*, 2 — *Ph. misella* (S. Urals: Ilmensky Res.), 3 — *Ph. astrachanica*, 4 — *Ph. diademata*, 5 — *Ph. aerea*, 6 — *Ph. christinae*, 7 — *Ph. nemorum*, 8 — *Ph. ochripes*, 9 — *Ph. striolata*, 10 — *Ph. exclamationis*, 11 — *Ph. atra*, 12 — *Ph. tetrastigma*, 13 — *Ph. scheuchi* (Crimea: envir. Simferopol). 1, 2, 6, 8–11 — ventral view; 3, 4, 7 — ventral and lateral view; 5, 13 — ventral and dorsal view; 12 — dorsal view. (after Warchałowski, 1995: 12; others — orig.)

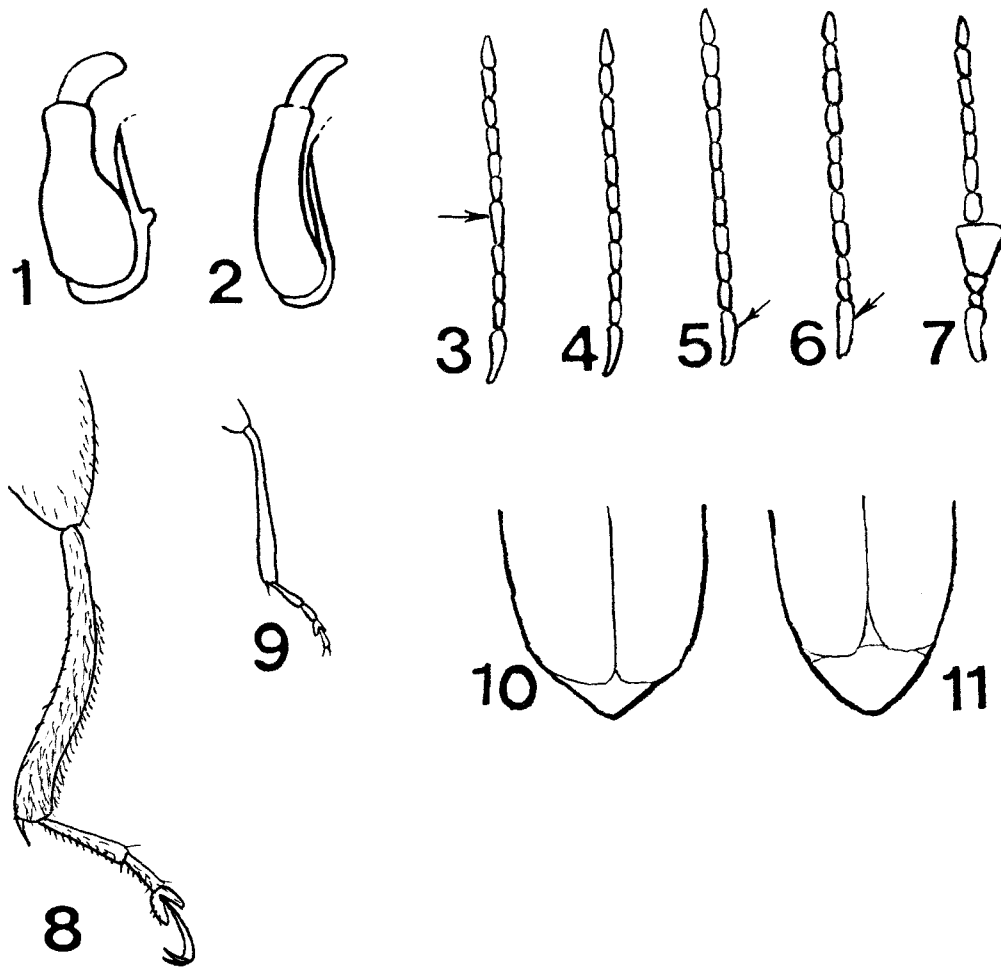


Figure 35: 1-2 — spermatheca: 1 — *Phyllotreta astrachanica*, 2 — *Ph. diademata*. 3-7 — antenna: 3 — *Ph. ochripes*, female; 4 — *Ph. striolata*, female; 5 — *Ph. praticola*, male; 6 — *Ph. procera*, female; 7 — *Ph. nodicornis*, male. 8-9 — hind-tibia and tarsus: 8 — *Ph. ogloblini*, 9 — *Ph. cruciferae*. 10-11 — elytral apex, dorsal view: 10 — *Ph. praticola*, 11 — *Ph. nodicornis*. (after: Warchałowski, 1995: 1, 2; others — orig.)

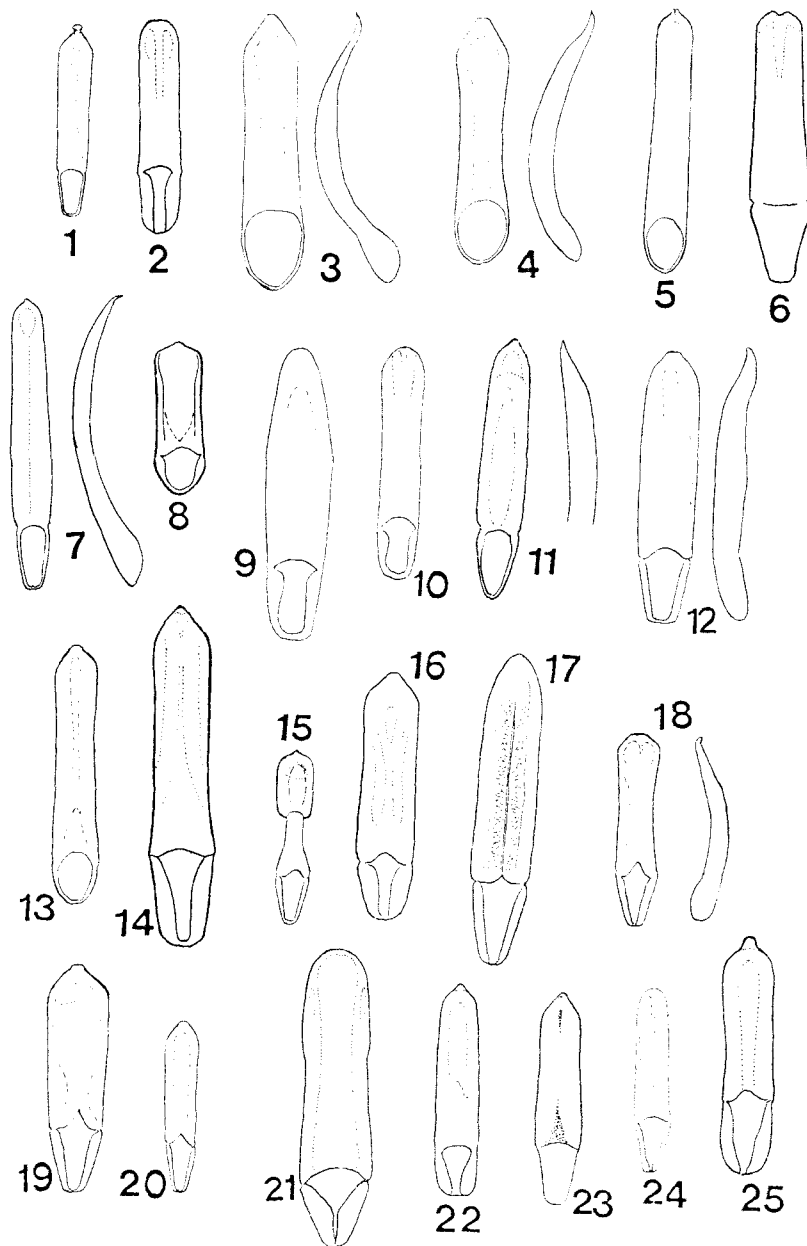


Figure 36: 1-25 — aedeagus: 1 — *Aphthona lutescens*, 2 — *A. kuntzei*, 3 — *A. franzi*, 4 — *A. placida*, 5 — *A. nigriscutis*, 6 — *A. cyparissiae*, 7 — *A. abdominalis*, 8 — *A. maculata*, 9 — *A. erichsoni*, 10 — *A. nonstriata*, 11 — *A. atrocaerulea*, 12 — *A. pygmaea*, 13 — *A. czwalinae*, 14 — *A. semicyanea*, 15 — *A. gracilis*, 16 — *A. violacea*, 17 — *A. rugipennis*, 18 — *A. venustula*, 19 — *A. euphorbiae*, 20 — *A. aeneomicans*, 21 — *A. herbigrada*, 22 — *A. atrovirens*, 23 — *A. sarmatica*, 24 — *A. ovata*, 25 — *A. konstantinovi*. (after Lopatin, 1977a: 8; Konstantinov, 1998: 2, 6, 14, 20-23, 25; others — orig.)

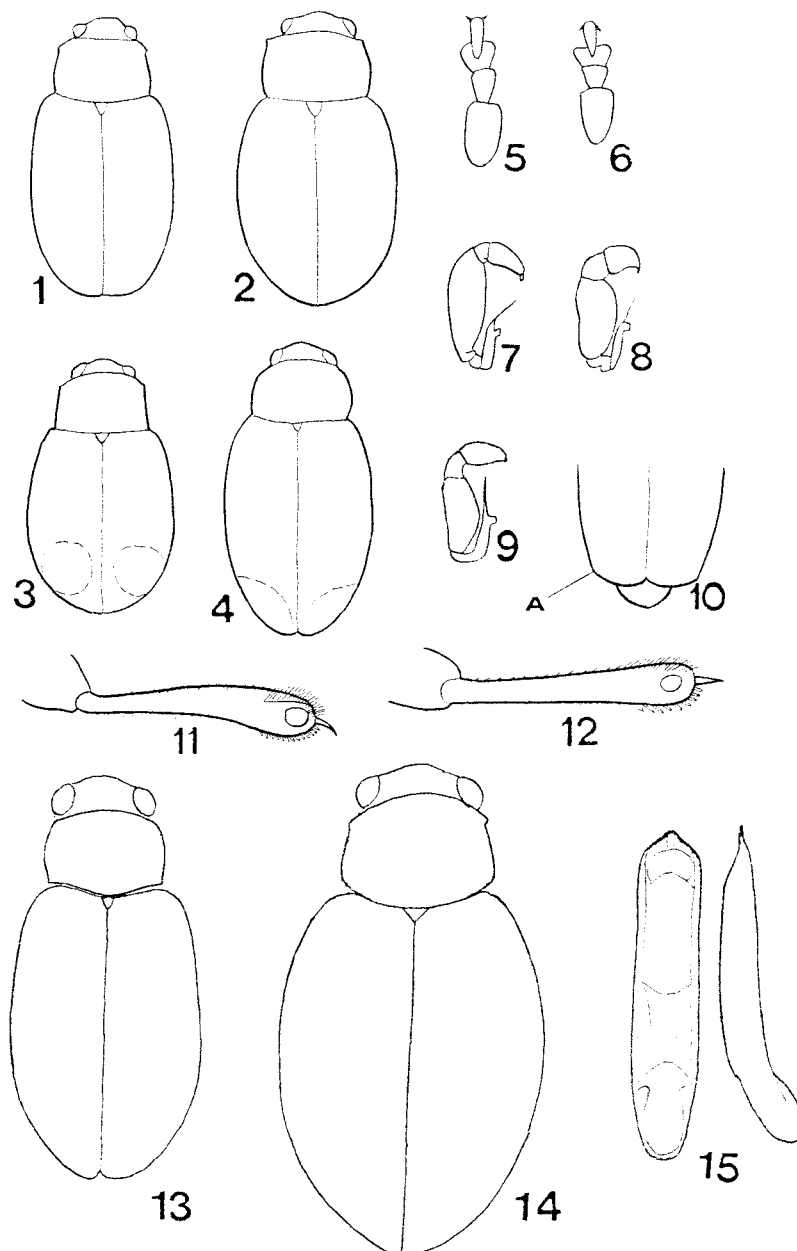


Figure 37: 1-4 — general view from above: 1 — *Aphthona herbigrada*, 2 — *A. sarmatica*, 3 — *Longitarsus holsaticus*, 4 — *L. apicalis*; 5-6 — protarsus of male: 5 — *L. kutscherae*, 6 — *L. plantagomaritimus*; 7-9 — spermatheca of female: 7 — *L. plantagomaritimus*, 8 — *L. melanocephalus*, 9 — *L. kutscherae*; 10 — *L. fuscoaeenus*, apex of elytron (A — outer apical angle of elytron); 11-12 — upper side of hind-tibia: 11 — *L. fuscoaeenus*, 12 — *L. anchusae*; 13-14 — general view from above (male): 13 — *L. foudrasi*, 14 — *L. tabidus*; 15 — *L. jacobaeae*, aedeagus, ventral and lateral view. (after Kippenberg, Döberl, 1994: 8; Bieńkowski, 1997: 5-7; others — orig.)

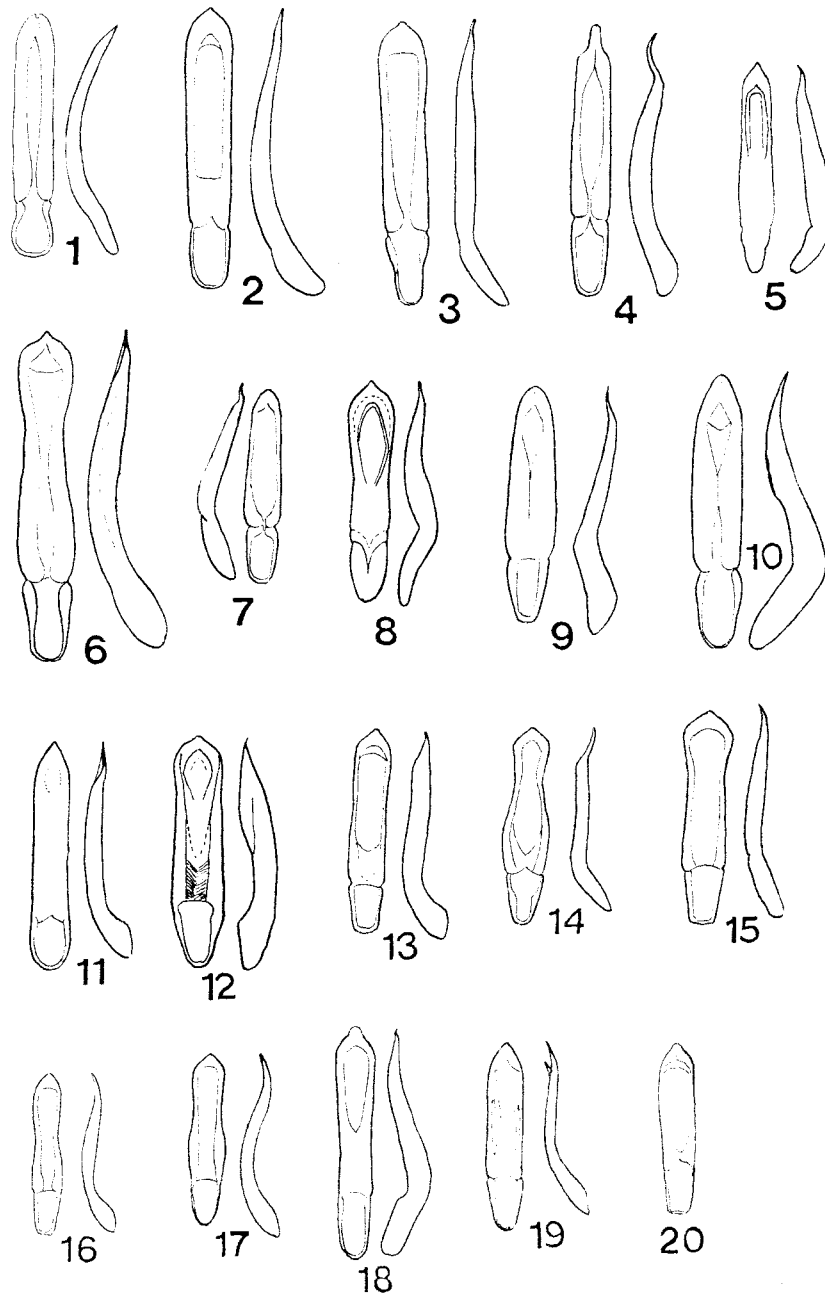


Figure 38: 1–20 — aedeagus: 1 — *Longitarsus echii*, 2 — *L. linnaei*, 3 — *L. fallax*, 4 — *L. nigrofasciatus*, 5 — *L. foudrasi*, 6 — *L. picicollis*, 7 — *L. ballotae*, 8 — *L. salarius*, 9 — *L. pulmonariae*, 10 — *L. exsoletus*, 11 — *L. brunneus*, 12 — *L. rubellus*, 13 — *L. languidus* (Saratov reg.: Agarevka Vill.), 14 — *L. luridus*, 15 — *L. fulgens*, 16 — *L. minusculus*, 17 — *L. medvedevi* (S. Urals: Ilmensky Res.), 18 — *L. absynthii*, 19 — *L. jailensis*, 20 — *L. niger*. (after Warchalowski, 1995: 8, 12, 18; Warchalowski, 1996: 5).

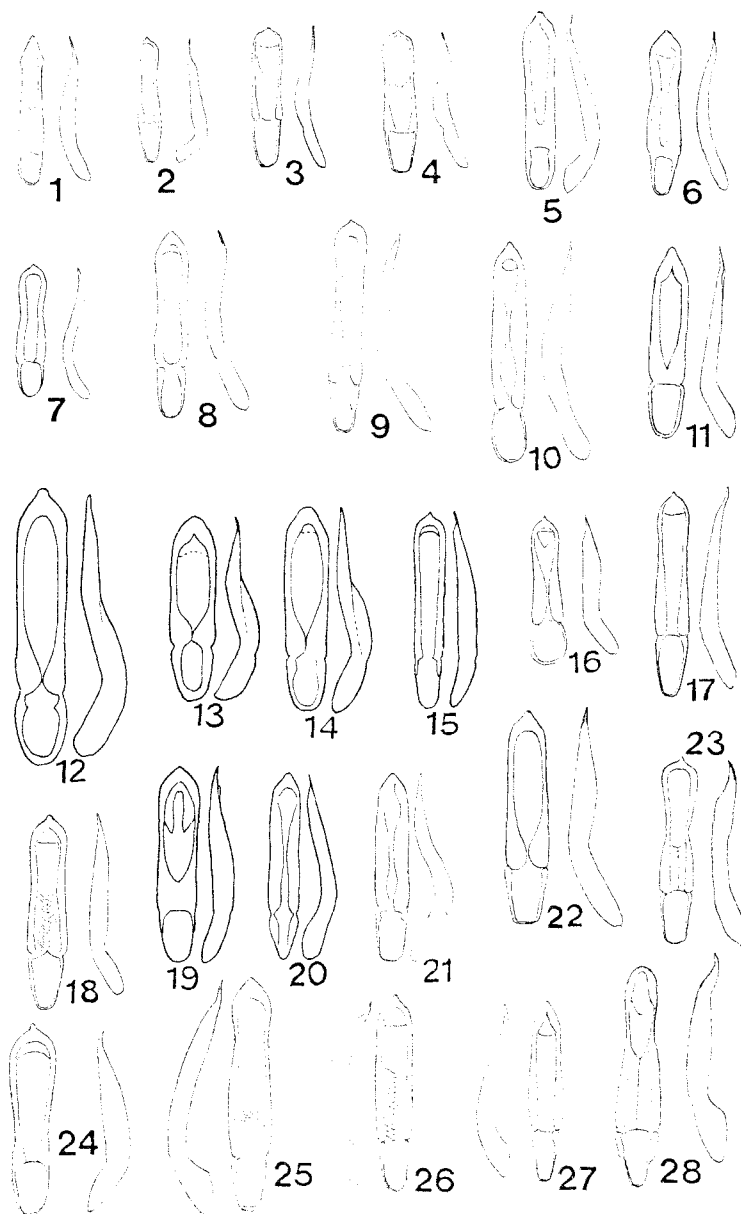


Figure 39: 1–28 — aedeagus: 1 — *Longitarsus rectilineatus*, 2 — *L. parvulus*, 3 — *L. violentus*, 4 — *L. weisei*, 5 — *L. minimus*, 6 — *L. pratensis*, 7 — *L. scutellaris*, 8 — *L. lewisii*, 9 — *L. apicalis*, 10 — *L. quadriguttatus*, 11 — *L. holsaticus*, 12 — *L. melanocephalus*, 13 — *L. plantagomaritimus*, 14 — *L. kutscherae*, 15 — *L. aeneicollis*, 16 — *L. nasturtii*, 17 — *L. atricillus*, 18 — *L. suturellus*, 19 — *L. gracilis*, 20 — *L. curtus*, 21 — *L. monticola*, 22 — *L. ganglbaueri*, 23 — *L. ochroleucus*, 24 — *L. alferii*, 25 — *L. flavicornis* (ER: Lipetsk reg.), 26 — *L. symphyti*, 27 — *L. rubiginosus*, 28 — *L. longipennis*. (after Warchałowski, 1995: 15, 19, 20; Bieńkowski, 1997: 12–14; others — orig.)

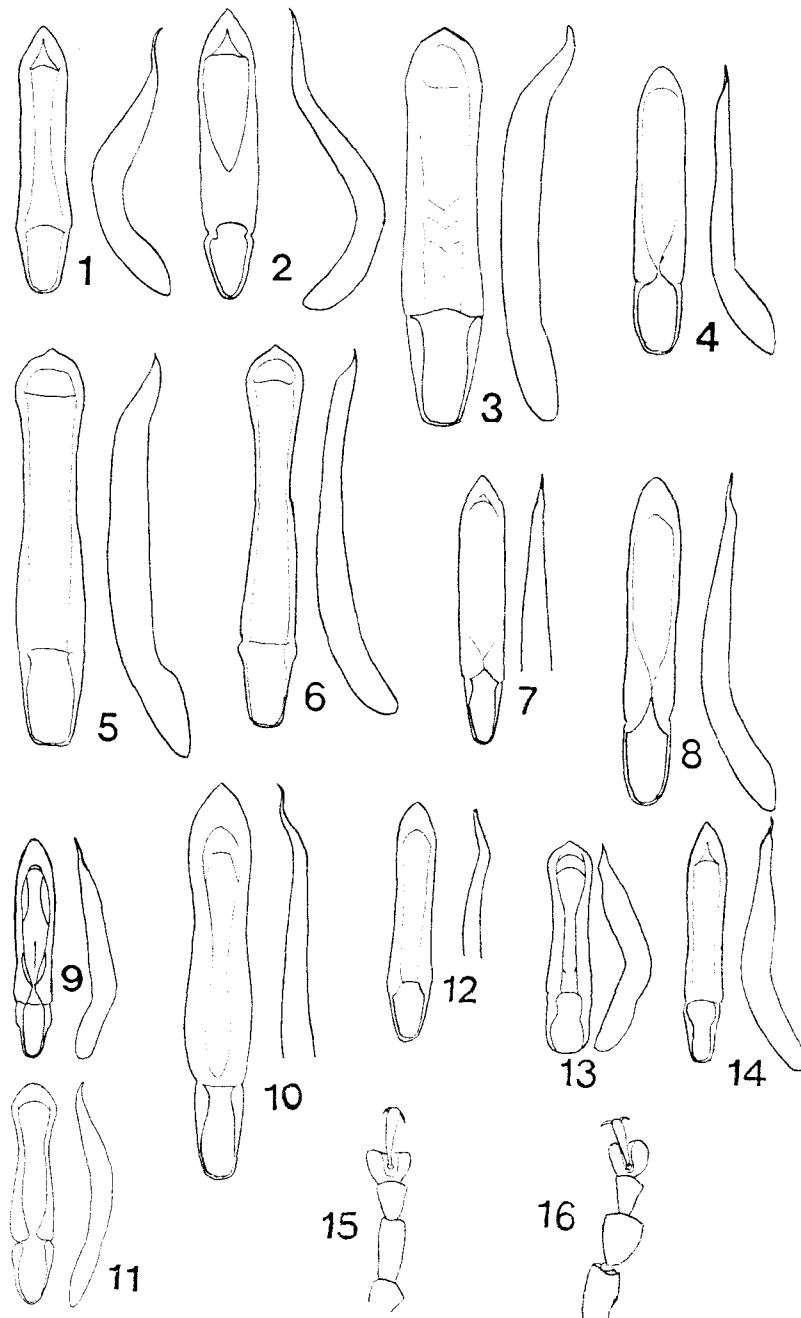


Figure 40: 1-14 — aedeagus: 1 — *Longitarsus albineus*, 2 — *L. karlheinzii*, 3 — *L. pellucidus*, 4 — *L. celticus*, 5 — *L. succineus*, 6 — *L. noricus*, 7 — *L. obliteratedus*, 8 — *L. salviae*, 9 — *L. eminus*, 10 — *L. ferrugineus*, 11 — *L. substriatus*, 12 — *L. nanus*, 13 — *L. membranaceus*, 14 — *L. lycopi*. 15-16 — fore-tarsus in male: 15 — *L. succineus*, 16 — *L. noricus*. (after Warchałowski, 1995: 9, 13; others — orig.)

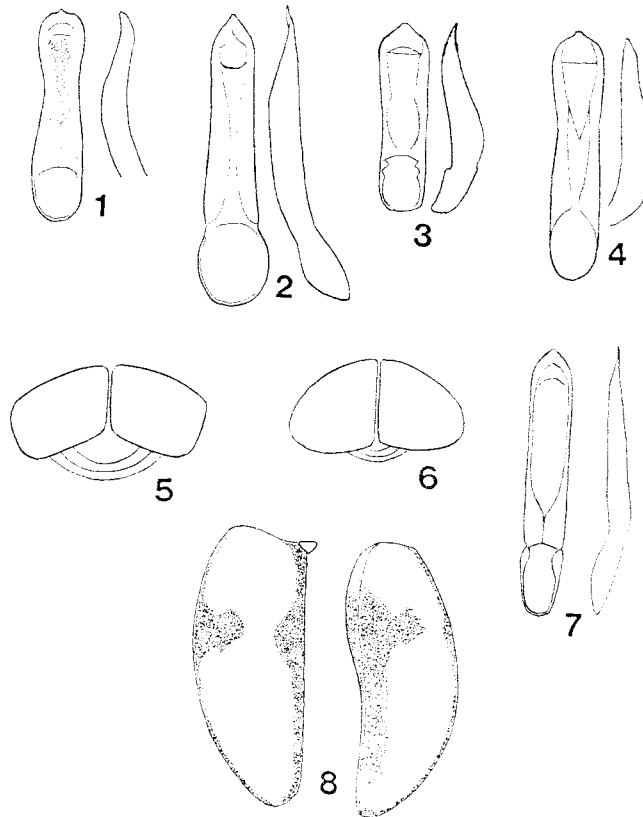


Figure 41: 1-4 — aedeagus: 1 — *Longitarsus fuscoaeneus*, 2 — *L. anchusae*, 3 — *L. pinguis*, 4 — *L. sp. aff. sogdianus* (Crimea, envir. Simferopol); 5-6 — elytra from behind: 5 — *L. (Testergus) anchusae*, 6 — *L. (s.str.) parvulus*. 7-8 — *L. lateripunctatus personatus*: 7 — aedeagus, 8 — left elytron, dorsal and lateral view. (Orig.)

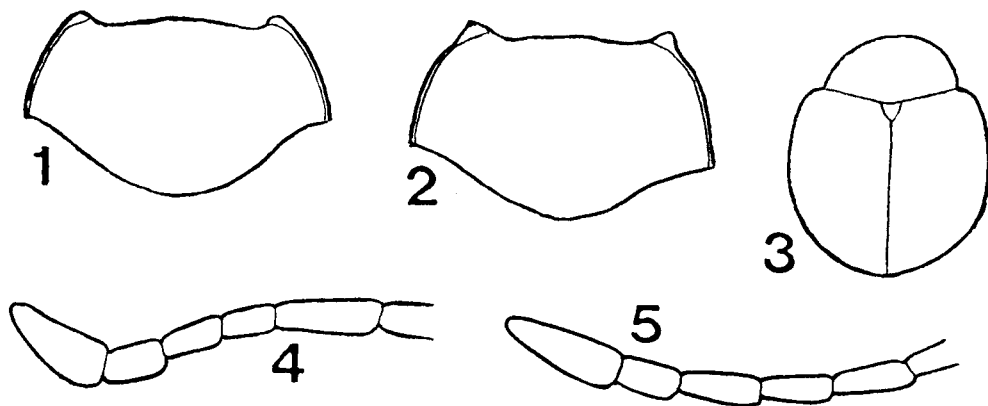


Figure 42: 1-2 — pronotum: 1 — *Sphaeroderma rubida*, 2 — *S. testacea*. 3 — *S. rubida*, general view from above. 4-5 — 1st-5th antennomeres: 4 — *Apteropeda splendida*, 5 — *A. orbiculata*. (Orig.)

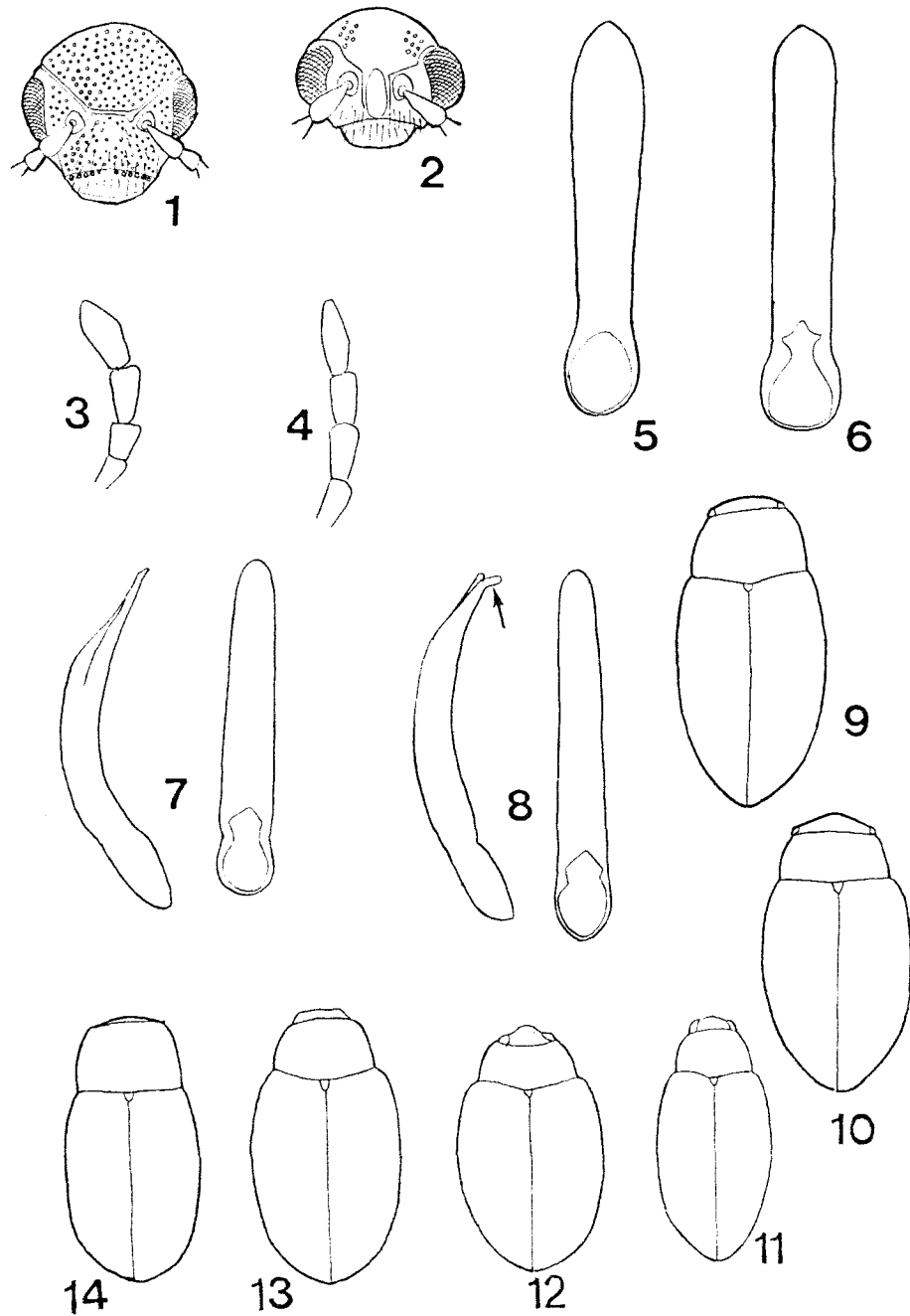


Figure 43: 1-2 — head: 1 — *Chaetocnema* (s.str.) *obesa*, 2 — *Chaetocnema* (*Tlanoma*) *semicoerulea*. 3-4 — 9th-11th antennomeres: 3 — *Ch. concinna*, 4 — *Ch. laevicollis*. 5-6 — aedeagus, ventral view: 5 — *Ch. concinna*, 6 — *Ch. laevicollis*. 7-8 — aedeagus, lateral and ventral view: 7 — *Ch. breviscula*, 8 — *Ch. tibialis*. 9-14 — general view from above: 9 — *Ch. aridula*, 10 — *Ch. arenacea*, 11 — *Ch. scheffleri*, 12 — *Ch. tibialis*, 13 — *Ch. aerosa*, 14 — *Ch. compressa*. (Orig.)

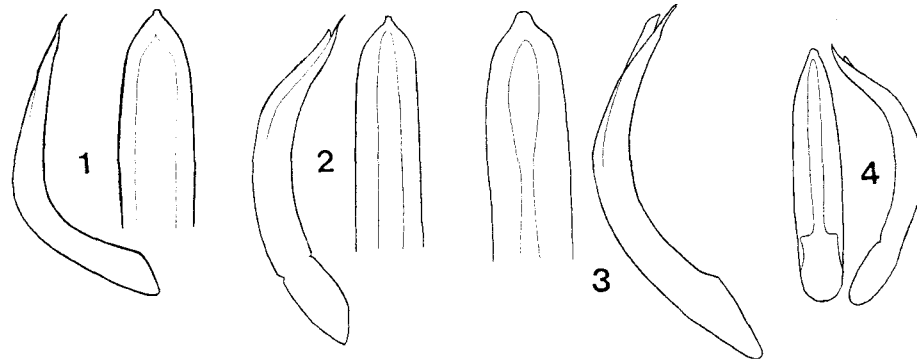


Figure 44: 1-4 — aedeagus, lateral and ventral view: 1 — *Chaetocnema montenegrina*, 2 — *Ch. hortensis*, 3 — *Ch. aridula*, 4 — *Ch. arenacea*. (after Biondi, 1989: 4; others orig.)

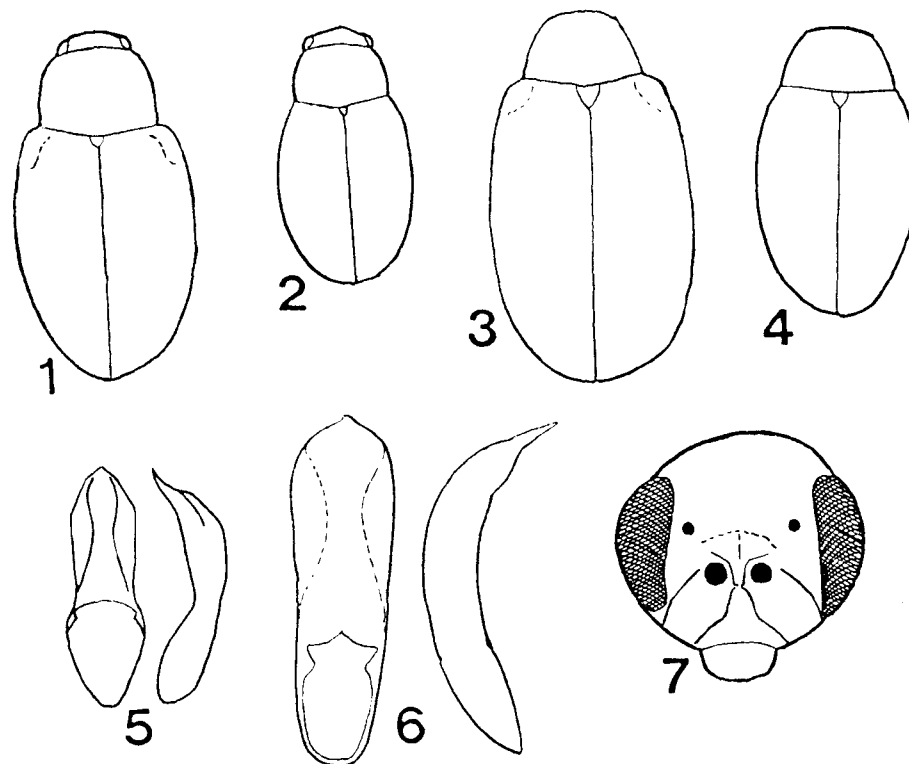


Figure 45: 1-4 — general view from above: 1 — *Chaetocnema mannerheimii*, 2 — *Ch. subcoerulea*, 3 — *Dibolia occultans*, 4 — *D. cryptocephala*. 5-6 — aedeagus, ventral and lateral view: 5 — *D. foersteri*, 6 — *D. depressiuscula*. 7 — *D. foersteri*, head. (after Mohr, 1981: 5; others — orig.)

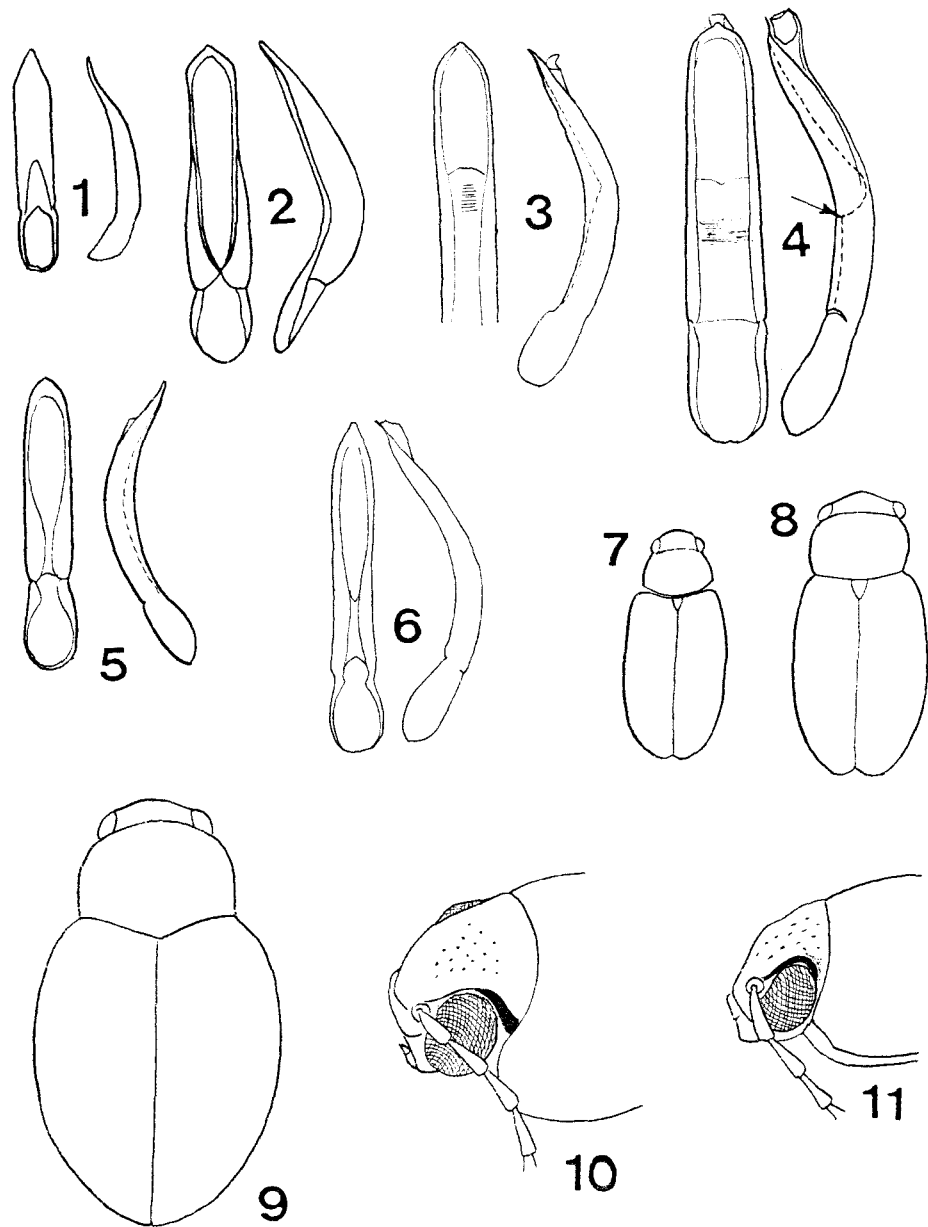


Figure 46: 1-6 — aedeagus, ventral and lateral view: 1 — *Psylliodes macellus agropyri*, 2 — *P. reitteri parallelus*, 3 — *P. wrasei*, 4 — *P. thlaspis*, 5 — *P. cupreus*, 6 — *P. isatidis*. 7-9 — general view from above: 7 — *P. reitteri parallelus*, 8 — *P. macellus agropyri*, 9 — *P. glaber*. 10-11 — head: 10 — *P. instabilis*, 11 — *P. cupreatus*. (after: Lopatin, 1977a: 2; Leonardi, Arnold, 1995: 4; Doguet, 1994: 6; others — orig.)

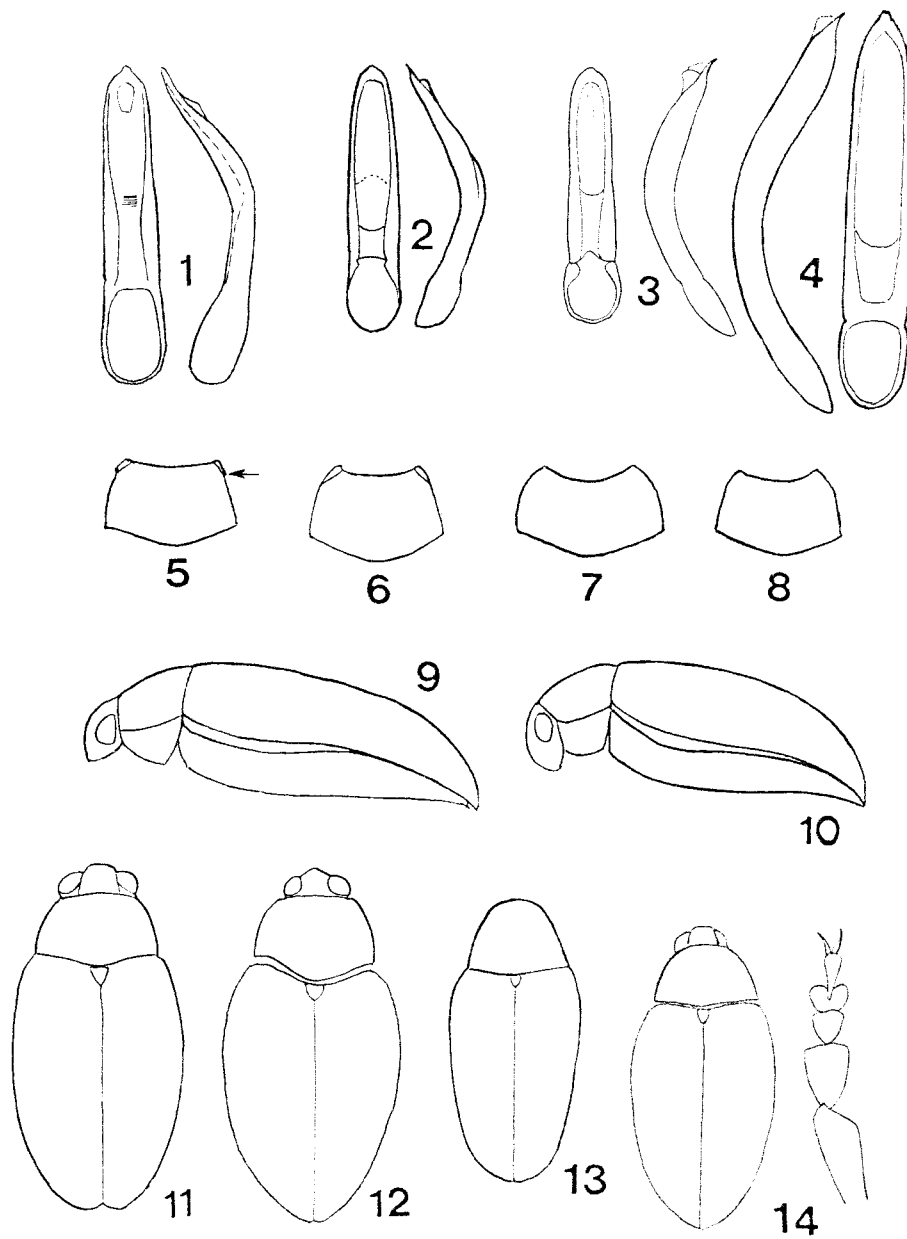


Figure 47: 1-4 — aedeagus, ventral and lateral view: 1 — *Psylliodes deplanatus*, 2 — *P. brisouti*, 3 — *P. napi*, 4 — *P. vindobonensis*. 5-8 — pronotum: 5 — *P. tricolor*, 6 — *P. chrysocephalus*, 7 — *P. chalcomerus*, 8 — *P. hyoscyami*. 9-10 — lateral view: 9 — *P. deplanatus*, 10 — *P. wrasei*. 11-13 — general view from above: 11 — *P. cupreus*, 12 — *P. napi*, 13 — *P. cucullatus*. 14 — *P. vindobonensis*, male, general view from above and fore-tarsus. (after Leonardi, 1971: 2; others — orig.)

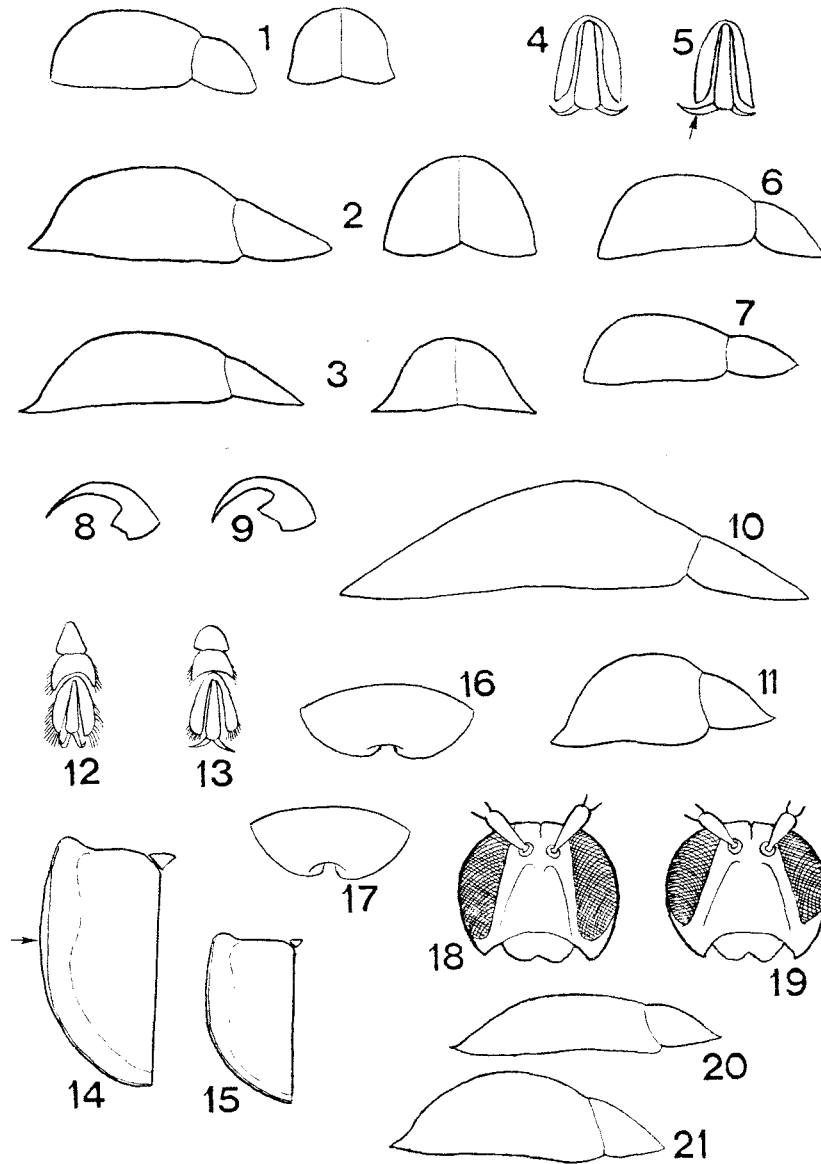


Figure 48: 1-3 — pronotum and elytra from lateral side and from behind: 1 — *Ischyronota desertorum*, 2 — *Cassida (Cassidulella) nobilis*, 3 — *Cassida (s.str.) flaveola*. 4-5 — 3rd-4th tarsomeres: 4 — *Ischyronota elevata*, 5 — *I. desertorum*. 6-7 — pronotum and elytra from lateral side: 6 — *I. elevata*, 7 — *I. spaethi*. 8-9 — claw: 8 — *Cassida canaliculata*, 9 — *C. viridis*. 10-11 — general view from lateral side: 10 — *C. viridis*, 11 — *C. hemisphaerica*. 12-13 — tarsus: 12 — *C. (Mionycha) subreticulata*, 13 — *C. (s.str.) berlinensis*. 14-15: left elytron, dorsal view: 14 — *C. nebulosa*, 15 — *C. flaveola*; 16-17 — labrum: 16 — *C. sanguinosa*, 17 — *C. denticollis*. 18-19 — head: 18 — *C. palaestina*, 19 — *C. sareptana*. 20-21 — pronotum and elytra from lateral side: 20 — *C. inquinata*, 21 — *C. sanguinosa*. (Orig.)

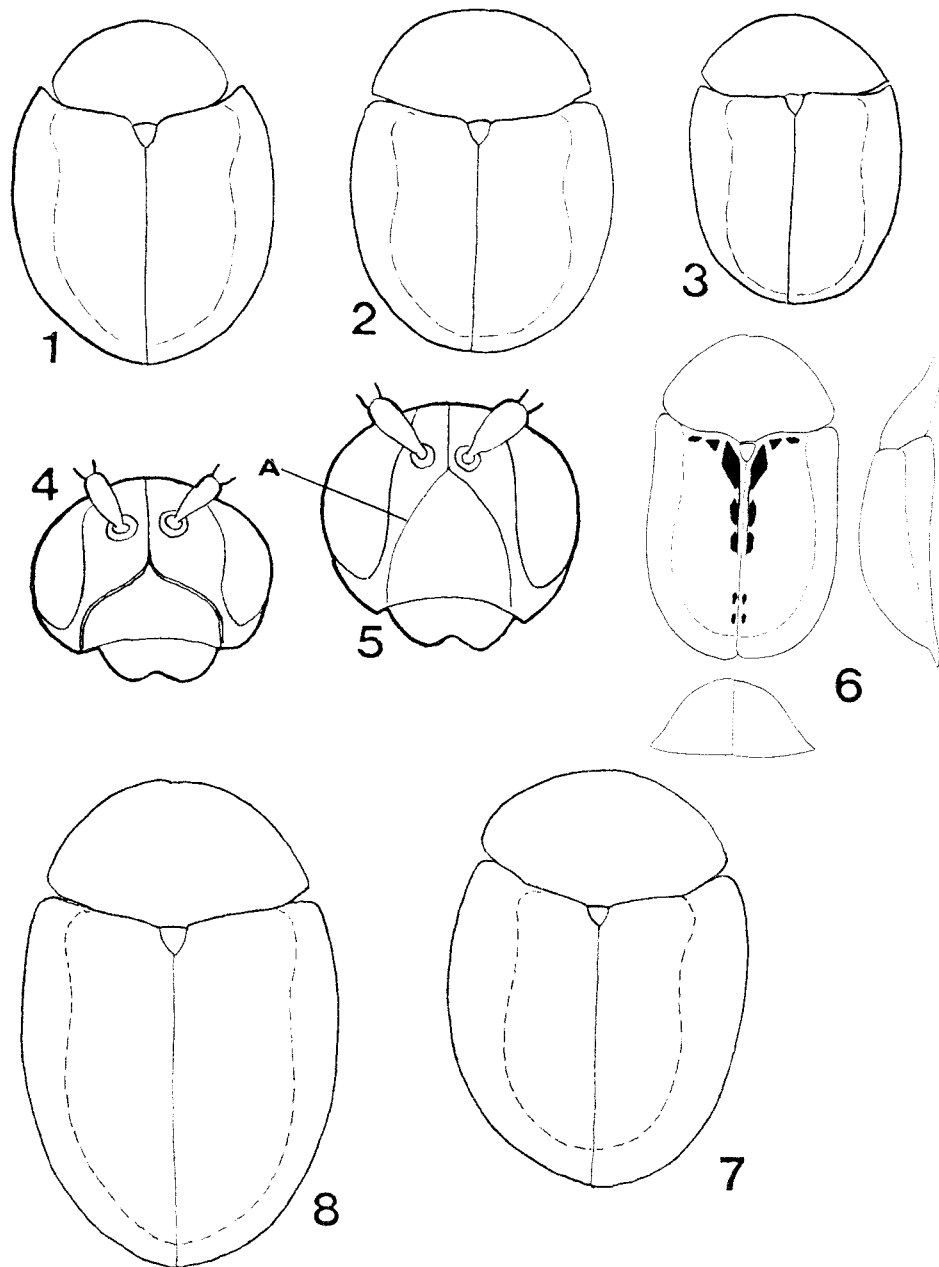


Figure 49: 1-3 — general view from above: 1 — *Cassida stigmatica*, 2 — *C. sanguinosa*, 3 — *C. rufovirens*. 4-5 — head: 4 — *C. nobilis*, 5 — *C. vittata* (A — frontal suture). 6 — *C. elongata* (Volgograd), general view from above, lateral side, and behind. 7-8 — general view from above: 7 — *C. vibex*, 8 — *C. pannonica*. (Orig.)

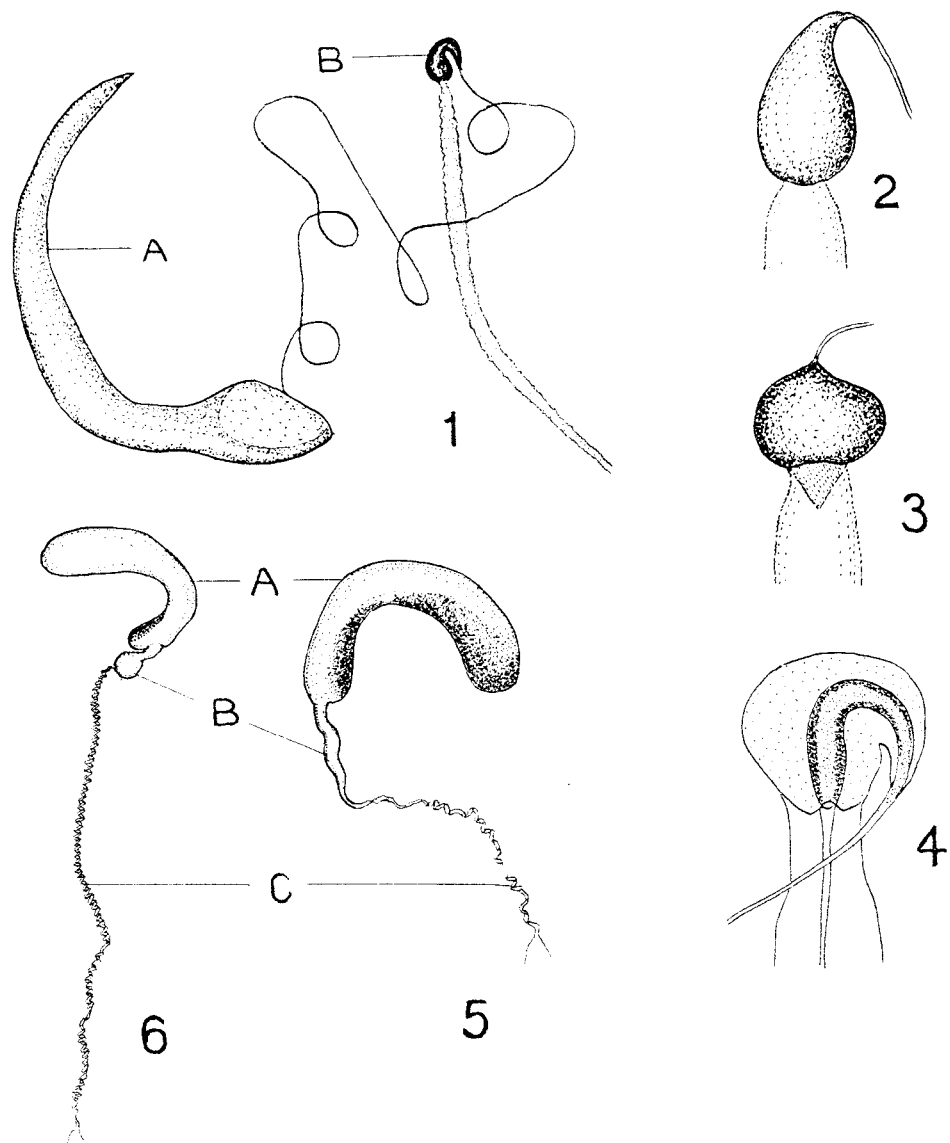


Figure 50: 1 — *Cassida sanguinolenta*, male genitalia (A — aedeagus, B — apodema). 2–4 — male genitalia, apodema: 2 — *C. sanguinolenta*, 3 — *C. prasina*, 4 — *C. denticollis*. 5–6 — female genitalia (A — spermatheca, B — ampulla, C — duct): 5 — *C. denticollis*, 6 — *C. prasina*. (after Bordy, 1997: 4; others orig.)