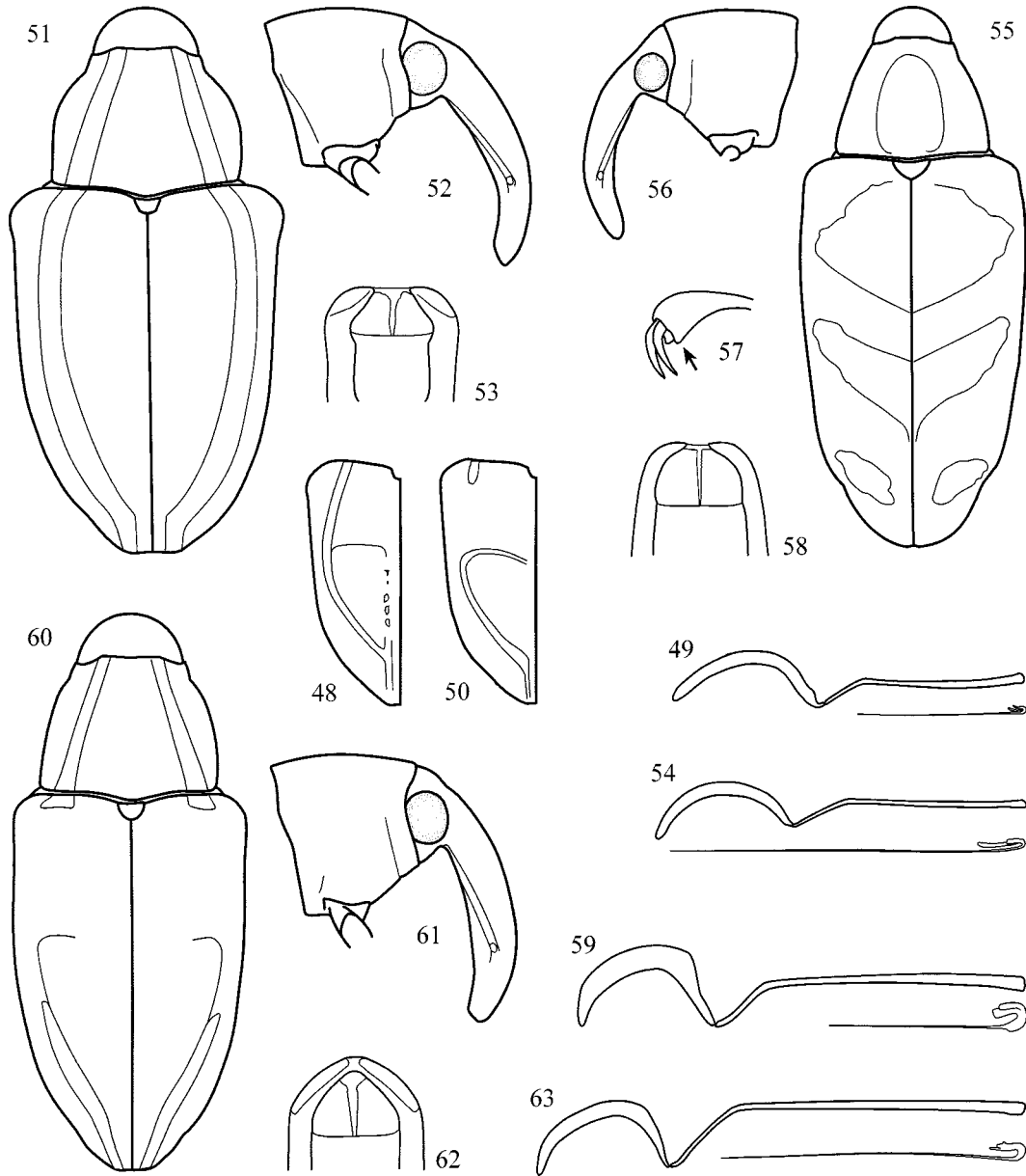
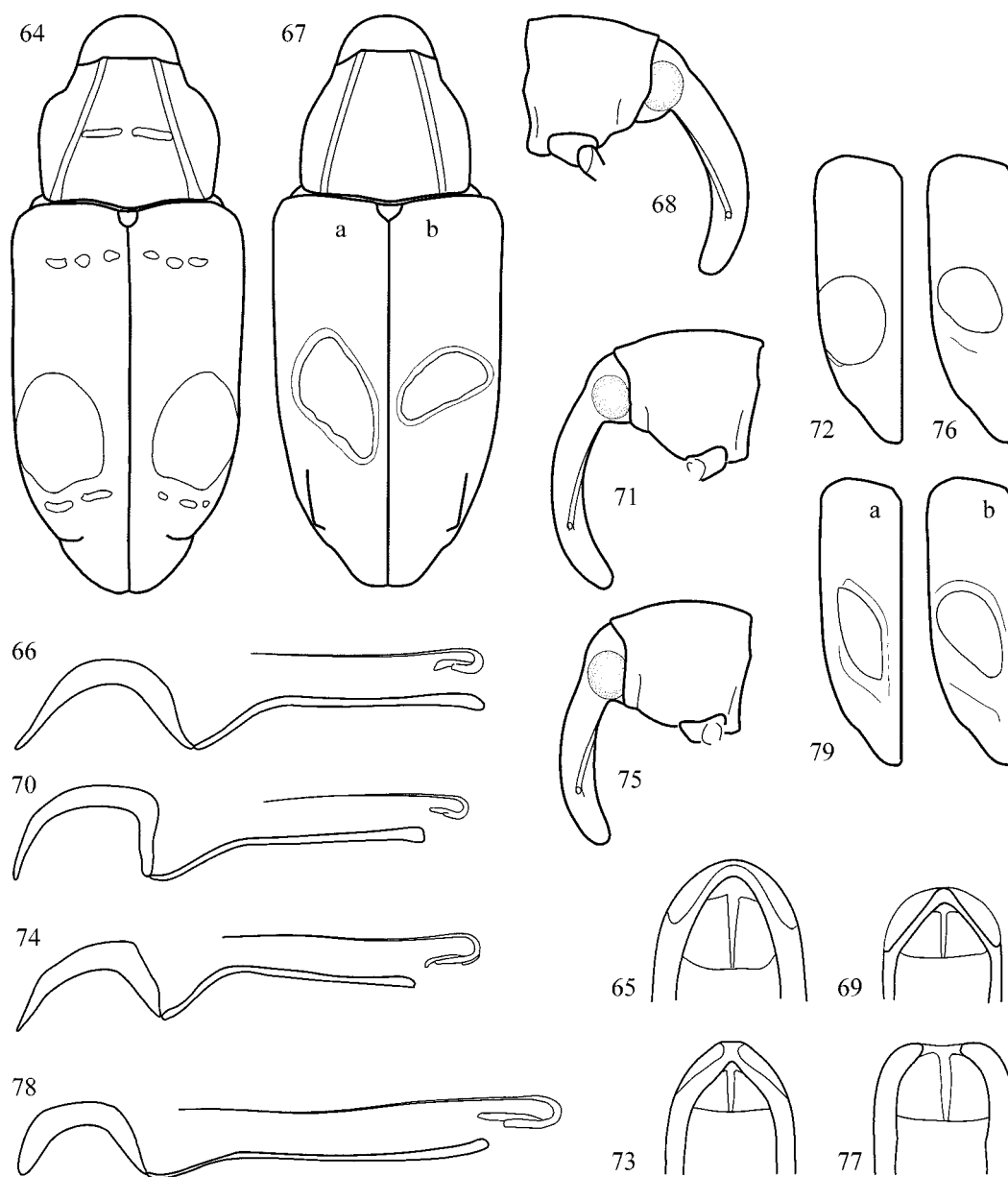


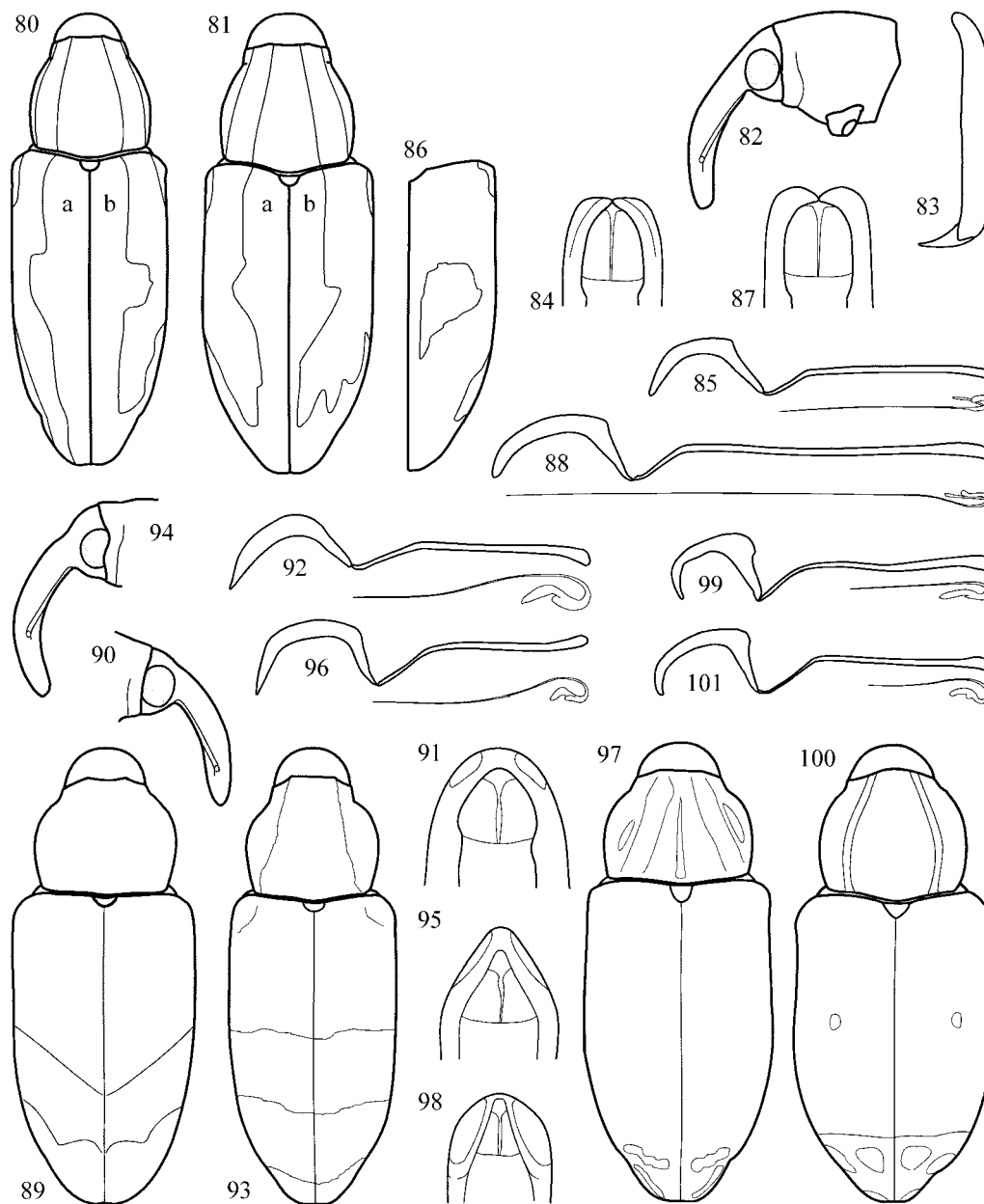
**FIGURES 34–47.** 34–36, *E. ornativentris*: 34, habitus and color-pattern, dorsal; 35, apex of aedeagus, dorsal; 36, aedeagus and flagellum, lateral. 37–39, *E. rugosus* (Costa Rica, Cerro Chucuyo): 37, habitus and color-pattern, dorsal; 38, apex of aedeagus, dorsal; 39, aedeagus and flagellum, lateral. 40, *E. solani* (Mexico, Teapa): habitus and color-pattern, dorsal. 41, *E. bisignatus*: habitus and color-pattern, dorsal. 42, *E. duplicatus*: left elytron with color-pattern. 43, *E. exclamationis*: habitus and color-pattern, dorsal. 44–47, *E. pauhans*: 44, habitus and color-pattern, dorsal; 45, head and prothorax, lateral; 46, apex of aedeagus, dorsal; 47, aedeagus and flagellum, lateral



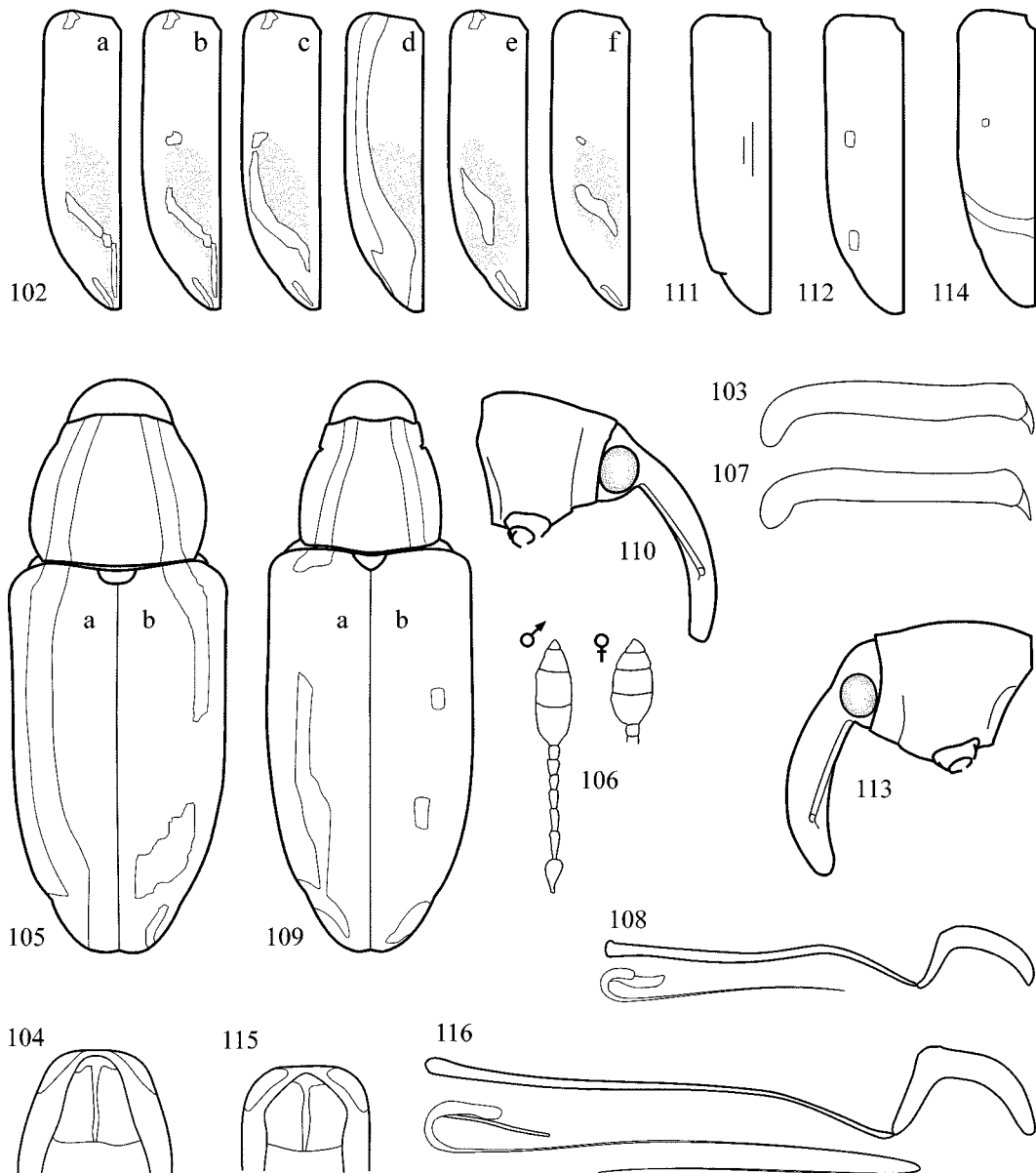
**FIGURES 48–63.** 48–49, *E. vestitus*: 48, left elytron with color-pattern; 49, aedeagus and flagellum, lateral. 50, *E. claveri*: left elytron with color-pattern. 51–54, *E. terrabanicus*: 51, habitus and color-pattern, dorsal; 52, head and prothorax, lateral; 53, apex of aedeagus, dorsal; 54, aedeagus and flagellum, lateral. 55–59, *E. scambus*: 55, habitus and color-pattern, dorsal; 56, head and prothorax, lateral; 57, tarsal segment 5; 58, apex of aedeagus, dorsal; 59, aedeagus and flagellum, lateral. 60–63, *E. griseolus* s. l. (Panama, Cerro Campana): 60, habitus and color-pattern, dorsal; 61, head and prothorax, lateral; 62, apex of aedeagus, dorsal; 63, aedeagus and flagellum, lateral



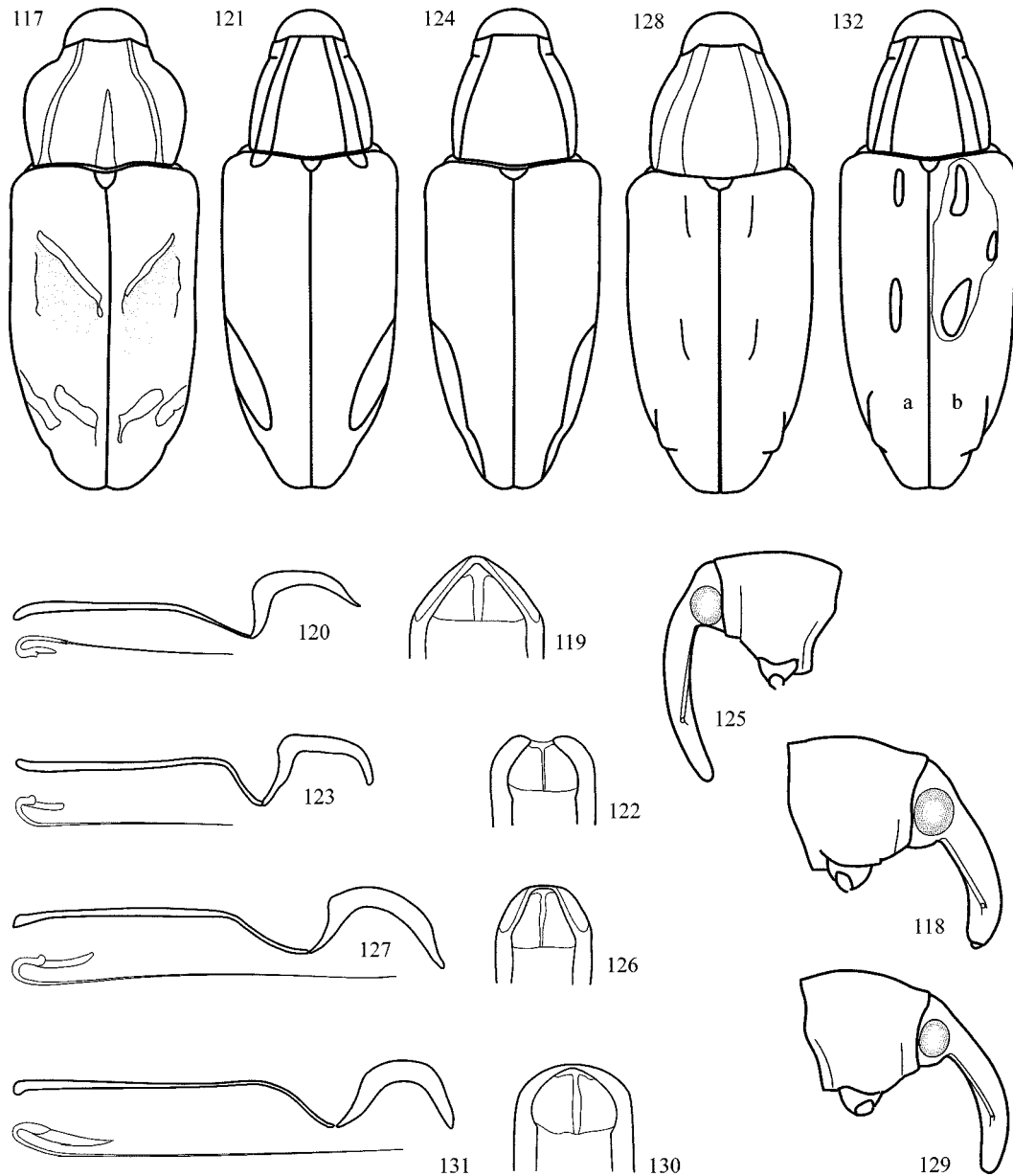
**FIGURES 64–79.** **64–66, *E. bicoctura*:** **64,** habitus and color-pattern, dorsal; **65,** apex of aedeagus, dorsal; **66,** aedeagus and flagellum, lateral. **67–70, *E. ocellatus*:** **67,** habitus and color-pattern, dorsal (**a,** nominal form: Mexico, Chiapas; **b,** aberrant form from Mexico, Oaxaca); **68,** head and prothorax, lateral; **69,** apex of aedeagus, dorsal; **70,** aedeagus and flagellum, lateral. **71–74, *E. biguttatus*:** **71,** head and prothorax, lateral; **72,** left elytron with color-pattern; **73,** apex of aedeagus, dorsal; **74,** aedeagus and flagellum, lateral. **75–78, *E. paucilimbatus*:** **75,** head and prothorax, lateral; **76,** left elytron with color-pattern; **77,** apex of aedeagus, dorsal; **78,** aedeagus and flagellum, lateral. **79, *E. nigronotatus*:** left elytron with color-pattern (**a,** nominal form; **b,** large-sized aberrant form)



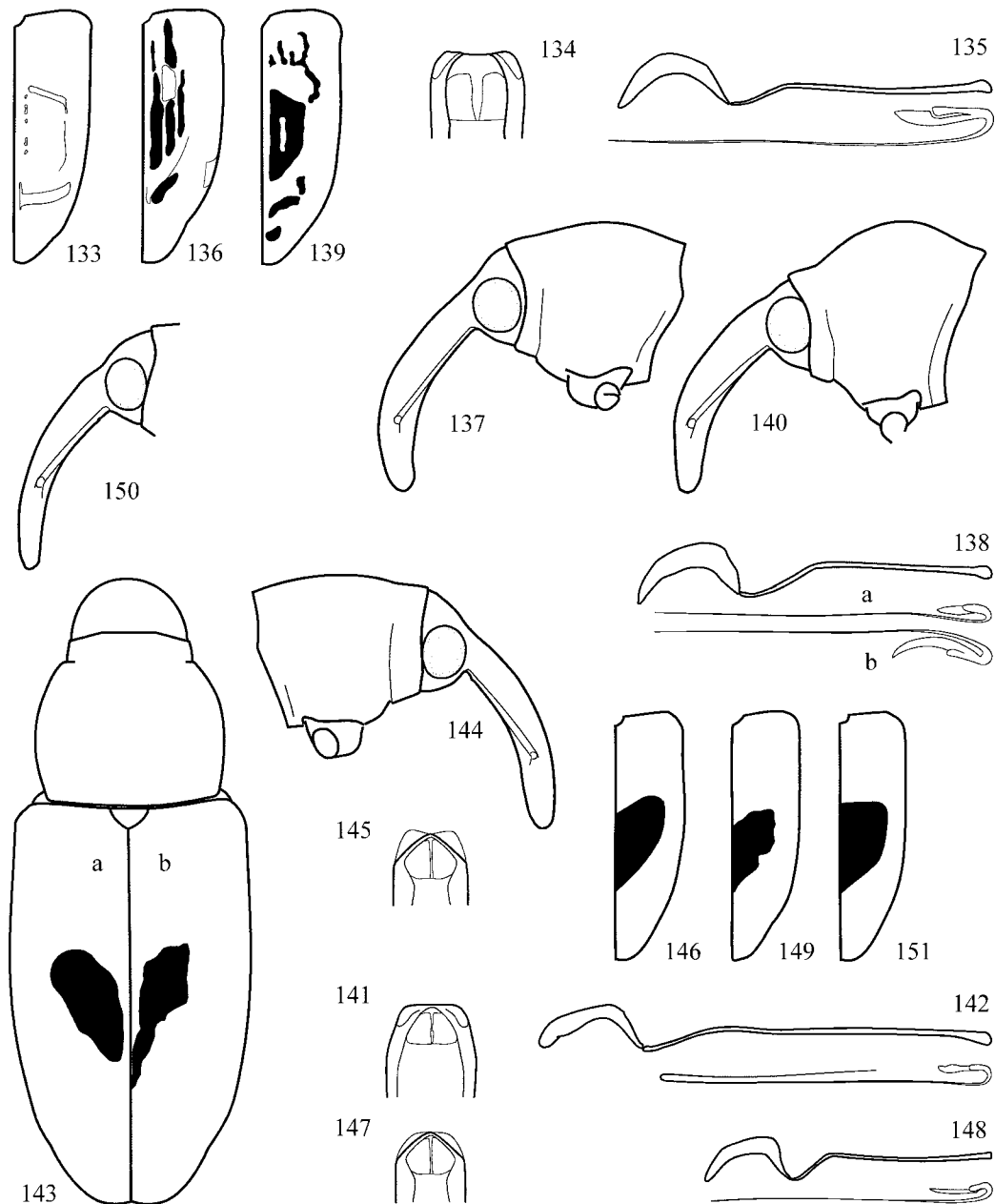
**FIGURES 80–101.** **80–85, *E. sinuatus*:** **80**, habitus and two color-patterns of high-elevation population (**a**, Puntarenas Prov., San Vito; **b**, Panama Prov., Cerro Campana), dorsal; **81**, habitus and two color-patterns of lowland population (**a**, Limón Prov., Cerro Cocorí; **b**, Heredia Prov., Est. La Selva), dorsal; **82**, head and prothorax, lateral; **83**, protibia; **84**, apex of aedeagus, dorsal; **85**, aedeagus and flagellum, lateral. **86–88, *E. tetrastigma*:** **86**, right elytron with color-pattern; **87**, apex of aedeagus, dorsal; **88**, aedeagus and flagellum, lateral. **89–92, *E. pseudobumbraticus*:** **89**, habitus and color-pattern, dorsal; **90**, head, male, lateral; **91**, apex of aedeagus, dorsal; **92**, aedeagus and flagellum, lateral. **93–96, *E. burgeri*:** **93**, habitus and color-pattern, dorsal; **94**, head, male, lateral; **95**, apex of aedeagus, dorsal; **96**, aedeagus and flagellum, lateral. **97–99, *E. thoracicus*:** **97**, habitus and color-pattern, dorsal; **98**, apex of aedeagus, dorsal; **99**, aedeagus and flagellum, lateral. **100–101, *E. apicalis*:** **100**, habitus and color-pattern, dorsal; **101**, aedeagus and flagellum, lateral



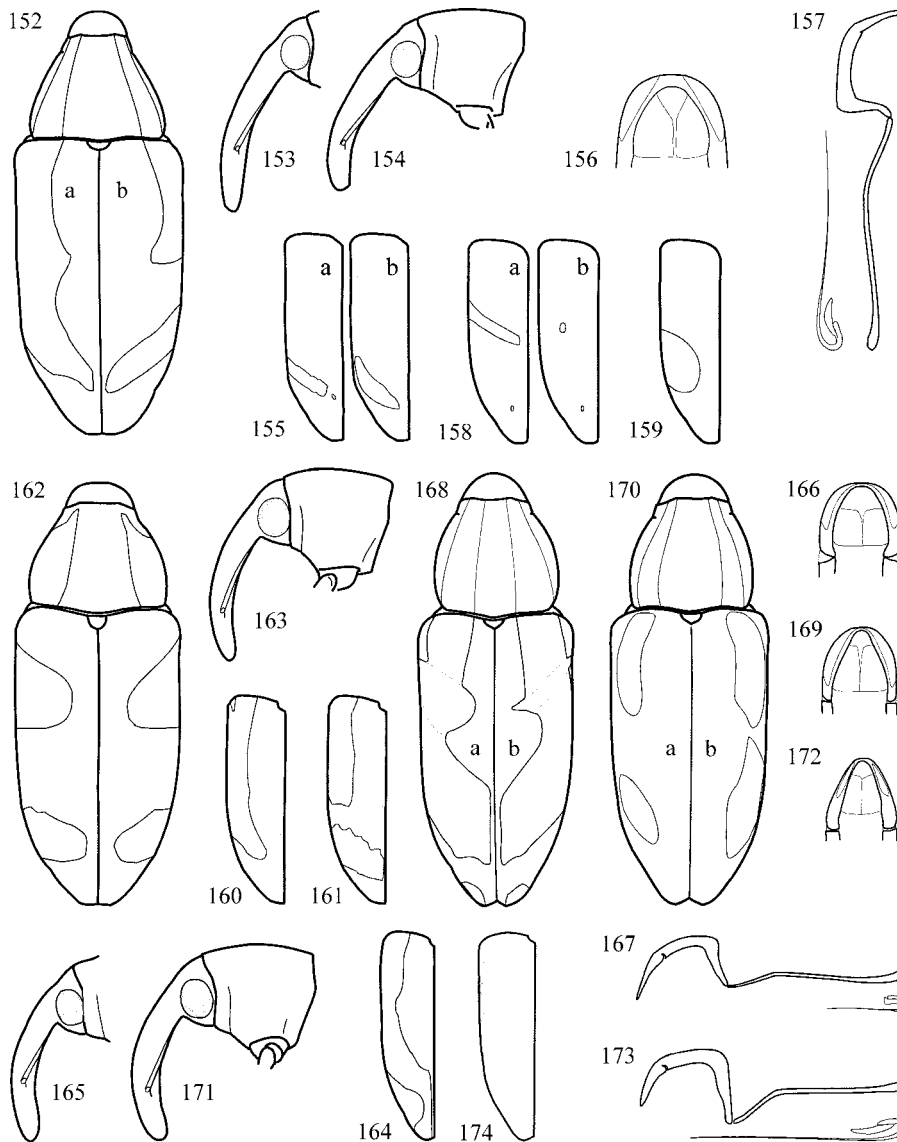
**FIGURES 102–116.** **102–104, *E. pictipennis*:** **102**, left elytron with regional color-patterns (**a**, Chiriquí Prov., Santa Clara; **b**, Puntarenas Prov., San Vito, two forms; **c**, Puntarenas Prov., Quepos; **d**, Puntarenas Prov., Monteverde; **e**, Heredia Prov., 10 km SE La Virgen); **103**, metatibia; **104**, apex of aedeagus, dorsal. **105–108, *E. discordabilis*:** **105**, habitus and two regional color-patterns (**a**, Heredia Prov., Est. La Selva; **b**, Limón Prov., Hitoy Cerere N.P.), dorsal; **106**, antennal club, male and female; **107**, metatibia; **108**, aedeagus and flagellum. **109–110, *E. euscheme*:** **109**, dorsal habitus and two regional color-pattern (**a**, Chiriquí Prov., La Fortuna Res.; **b**, Cartago Prov., Tapantí N.P.); **110**, head and prothorax, lateral. **111, *E. uniformis*:** left elytron with carination. **112–113, *E. gracilis*:** **112**, left elytron with color-pattern; **113**, head and prothorax, lateral. **114–116, *E. todillofasciatus*:** **114**, left elytron with color-pattern; **115**, apex of aedeagus, dorsal; **116**, aedeagus and flagellum, lateral



**FIGURES 117–132.** **117–120, *E. marchionis*:** **117**, habitus and color-pattern, dorsal; **118**, head and prothorax, male, lateral; **119**, apex of aedeagus, dorsal; **120**, aedeagus and flagellum, lateral. **121–123, *E. peperomiae*:** **121**, habitus and color-pattern, dorsal; **122**, apex of aedeagus, dorsal; **123**, aedeagus and flagellum, lateral. **124–127, *E. galbinus*:** **124**, habitus and color-pattern, dorsal; **125**, head and prothorax, male, lateral; **126**, apex of aedeagus, dorsal; **127**, aedeagus and flagellum, lateral. **128–132, *E. callifer*:** **128**, habitus and color-pattern, dorsal; **129**, head and prothorax, lateral; **130**, apex of aedeagus, dorsal; **131**, aedeagus and flagellum, lateral; **132**, habitus and two color-patterns of high-elevation populations (**a**, Boquete; **b**, Braulio Carrillo)

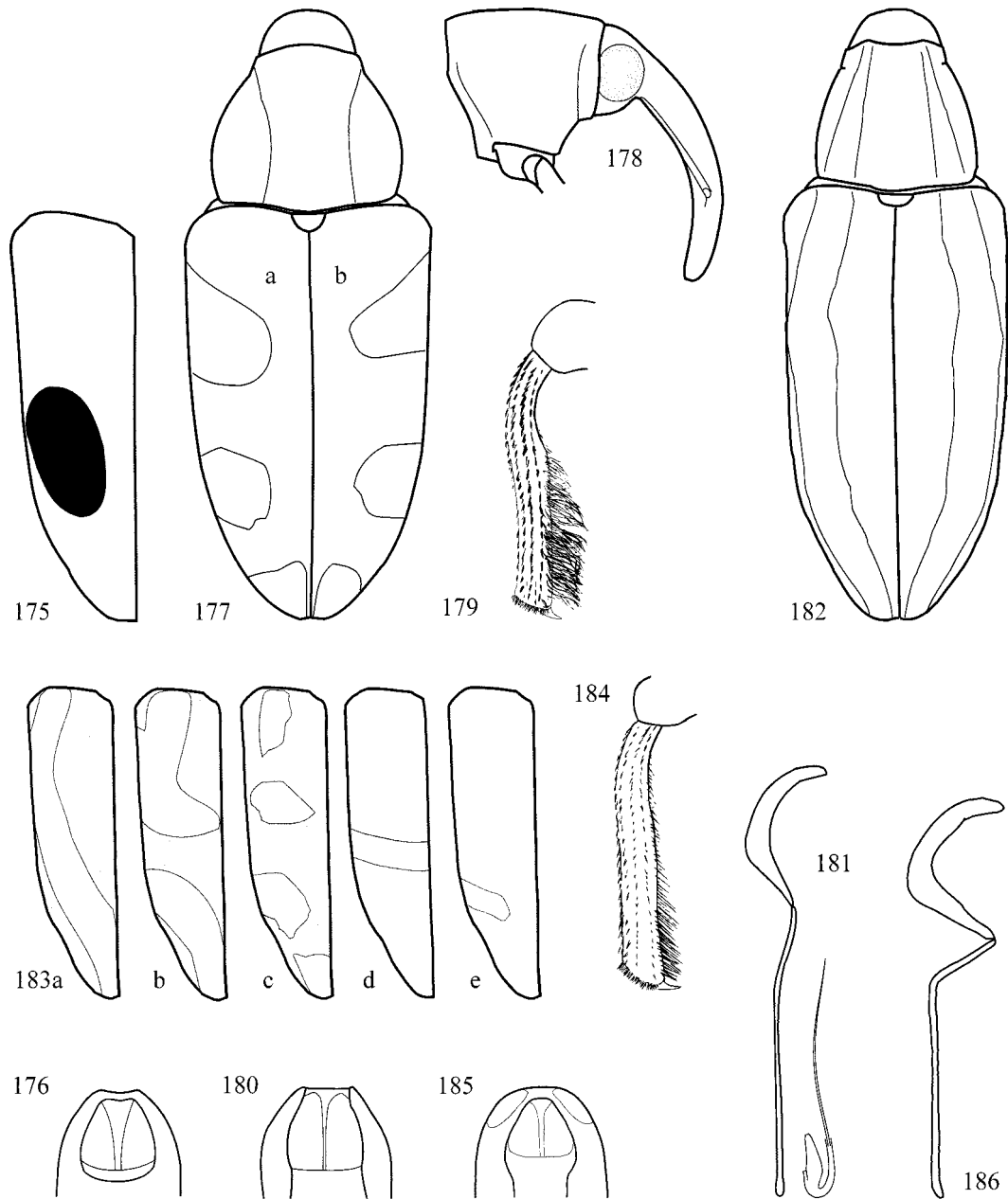


**FIGURES 133–151.** 133–135, *E. pullus*: 133, elytron with color-pattern; 134, apex of aedeagus, dorsal; 135, aedeagus and flagellum, lateral. 136–138, *E. chelys*: 136, elytron with color-pattern; 137, head and prothorax, male, lateral; 138, aedeagus and flagellum (a, Prov. Limón, Cerro Cocorí; b, Prov. Chiriquí, La Fortuna Res.), lateral. 139–142, *E. sagittifolicus*: 139, elytron with color-pattern; 140, head and prothorax, male, lateral; 141, apex of aedeagus, dorsal; 142, aedeagus and flagellum, lateral. 143–145, *E. euchasma*: 143, habitus with color-pattern (a, Prov. Heredia, 10 km SE La Virgen; b, Prov. Coclé, La Mesa); 144, head and prothorax, male, lateral; 145, apex of aedeagus, dorsal. 146–148, *E. cordiger*: 146, elytron with color-pattern; 147, apex of aedeagus, dorsal; 148, aedeagus and flagellum, lateral. 149–150, *E. subulirostris*: 149, elytron with color-pattern; 150, head, female, lateral. 151, *E. oculifer*: elytron with color-pattern

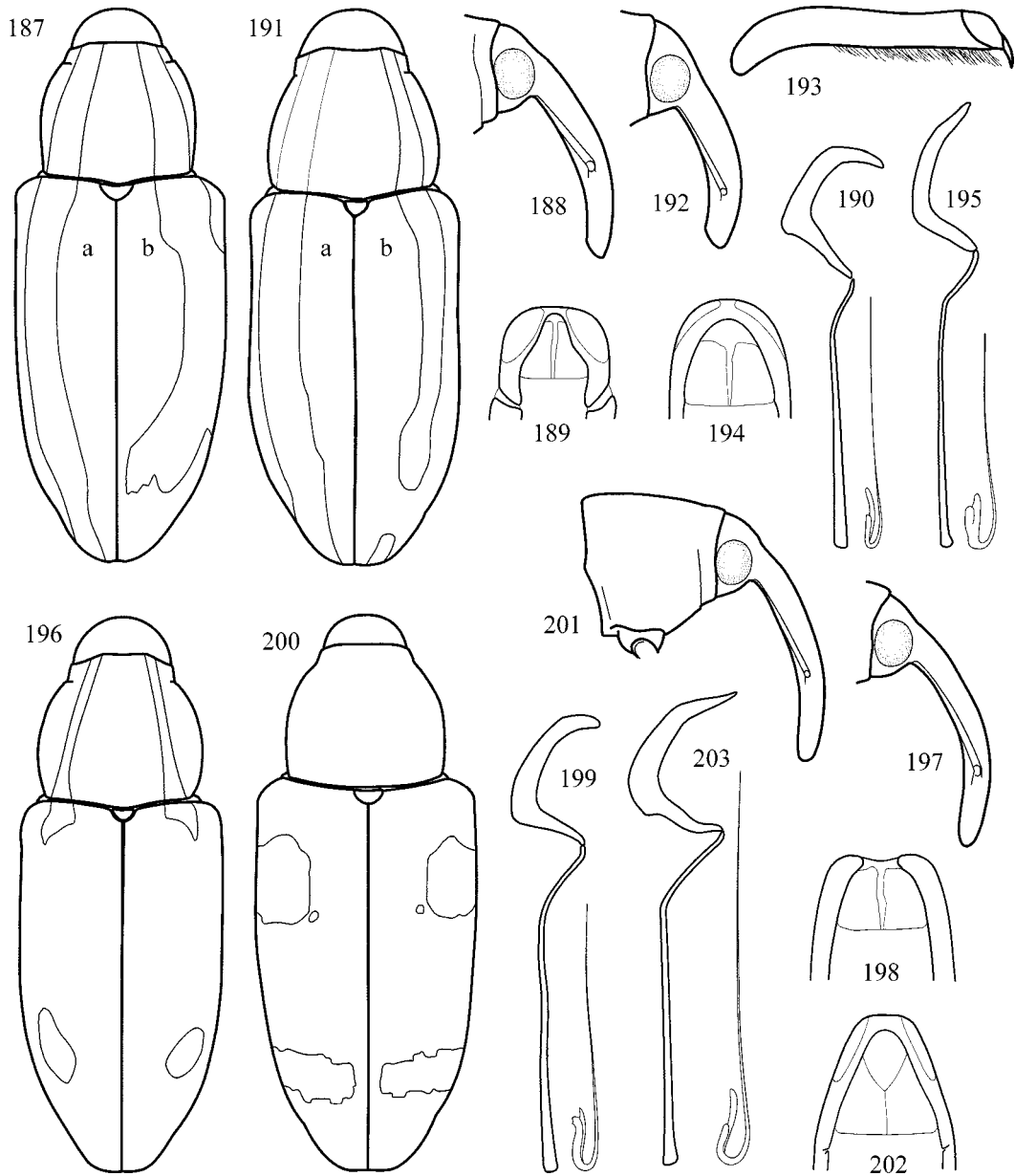


**FIGURES 152–174.** **152–154, *E. heilipoides*:** **152**, habitus and color-pattern (**a**, typical form; **b**, sensu lato), dorsal; **153**, head, female, lateral; **154**, head and prothorax, male, lateral. **155–157, *E. obliquus*:** **155**, elytron with color-patterns (**a**, Mexico, without site; **b**, Mexico, San Andrés Tuxtla); **156**, apex of aedeagus, dorsal; **157**, aedeagus and flagellum, lateral. **158–161, *E. fasciolatus*** (**a**, typical form; **b**, with fascia reduced); **159, *E. flavoplagiatus***; **160, *E. albovittatus***; **161, *E. discissus***. **162–163, *E. championi*:** **162**, habitus and color-pattern, dorsal; **163**, head and prothorax, male, lateral. **164–167, *E. justini*:** **164**, elytron with color-pattern; **165**, head, male, lateral; **166**, apex of aedeagus, dorsal; **167**, aedeagus and flagellum, lateral. **168–169, *E. rhombifer*:** **168**, habitus and two regional color-patterns (**a**, Chiriquí Prov., Las Lagunas; **b**, Puntarenas Prov., Las Mellizas; composite nature of color-pattern indicated by gray lines), dorsal; **169**, apex of aedeagus, dorsal. **170–173, *E. consimilis*:** **170**, habitus and two regional color-patterns (**a**, Panama Prov., Cerro Campana; **b**, Canal Area), dorsal; **171**, head and prothorax, male, lateral; **172**, apex of aedeagus, dorsal; **173**, aedeagus and flagellum, lateral. *E. rutilus*: **174**, elytron with color-pattern

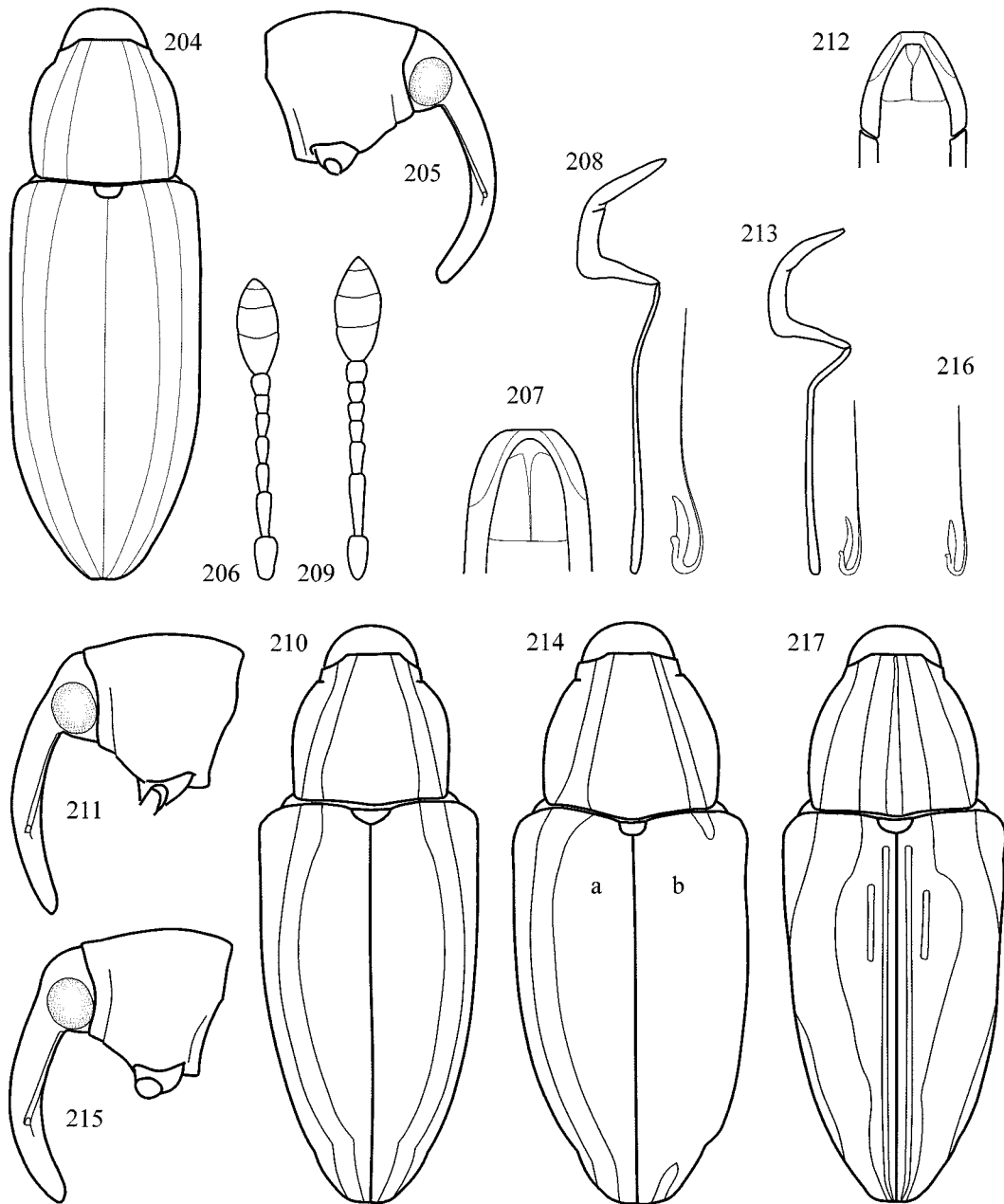




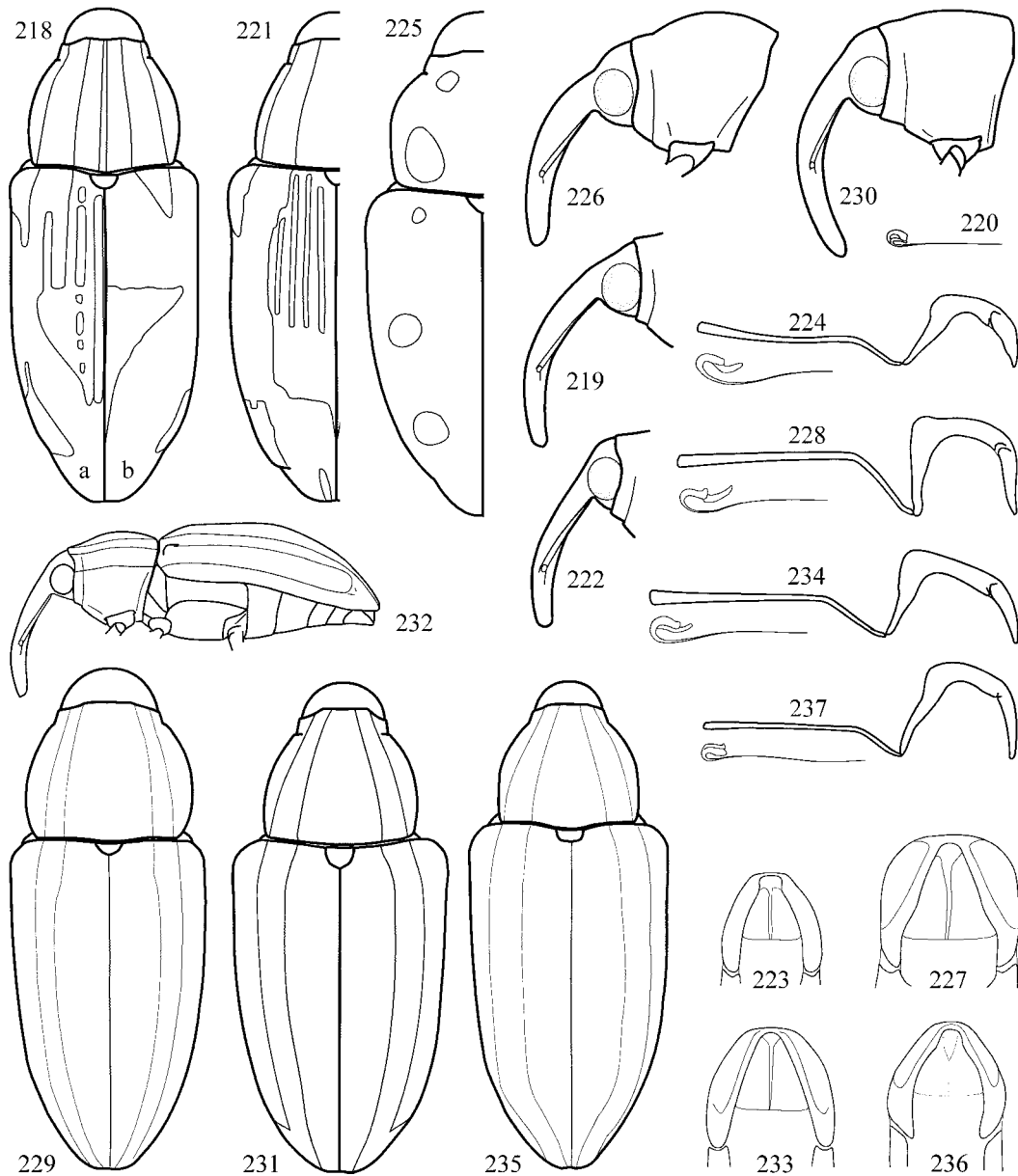
**FIGURES 175–186.** **175–176, *E. melanops*:** **175**, left elytron with color-pattern; **176**, apex of aedeagus, dorsal. **177–181, *E. cretifer*:** **177**, habitus and color-pattern (**a**, Chontales, Nicaragua; **b**, San Carlos, Costa Rica), dorsal; **178**, head and prothorax, male, lateral; **179**, metatibia, male, lateral; **180**, apex of aedeagus, dorsal; **181**, aedeagus and flagellum, lateral. **182–186, *E. polymorphus*:** **182**, habitus and color-pattern of ssp. *polymorphus*, dorsal; **183a–e**, left elytron with color-pattern of ssp. *altrimsecus*, *tabulensis*, *fortunensis*, *zeledonensis*, *dotensis*; **184**, metatibia, male, lateral; **185**, apex of aedeagus, dorsal; **186**, aedeagus, lateral



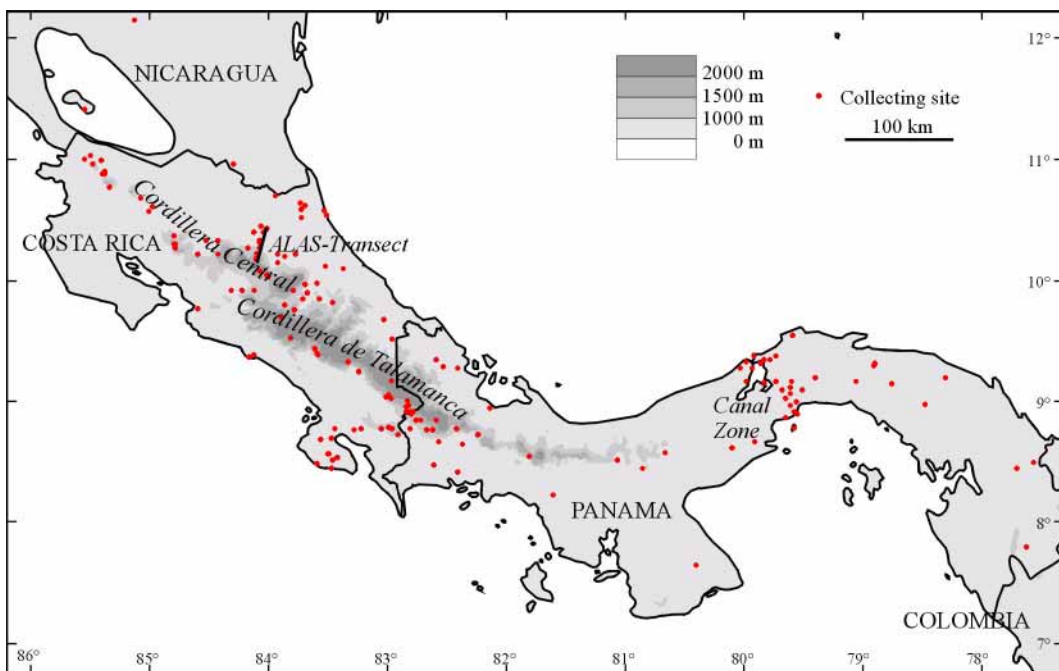
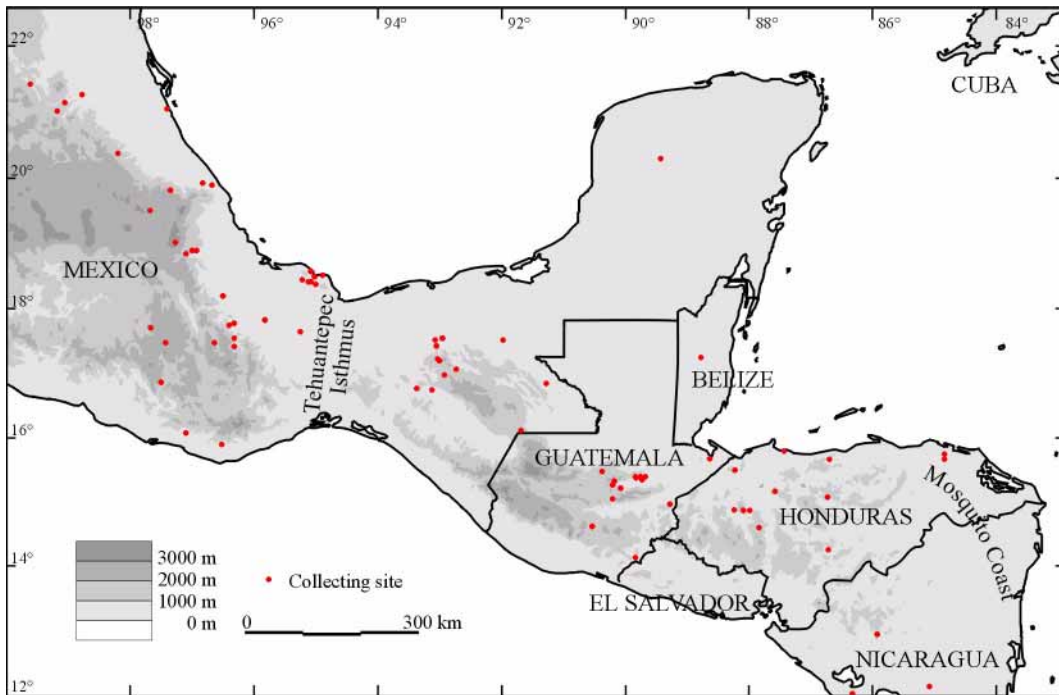
**FIGURES 187–203.** **187–190, *E. crinipes*:** **187**, habitus and color-pattern (**a**, Costa Rica, La Selva; **b**, Panama, Portobelo), dorsal; **188**, head, male, lateral; **189**, apex of aedeagus, dorsal; **190**, aedeagus and flagellum, lateral. **191–195, *E. latevittatus*:** **191**, habitus and color-pattern (**a**, Costa Rica, Las Mellizas; **b**, Costa Rica, La Selva), dorsal; **192**, head, male, lateral; **193**, metatibia, male, lateral; **194**, apex of aedeagus, dorsal; **195**, aedeagus and flagellum, lateral. **196–199, *E. kunicus*:** **196**, habitus and color-pattern, dorsal; **197**, head, male, lateral; **198**, apex of aedeagus, dorsal; **199**, aedeagus and flagellum, lateral. **200–203, *E. paludicola*:** **200**, habitus and color-pattern, dorsal; **201**, head and prothorax, male, lateral; **202**, apex of aedeagus, dorsal; **203**, aedeagus and flagellum, lateral



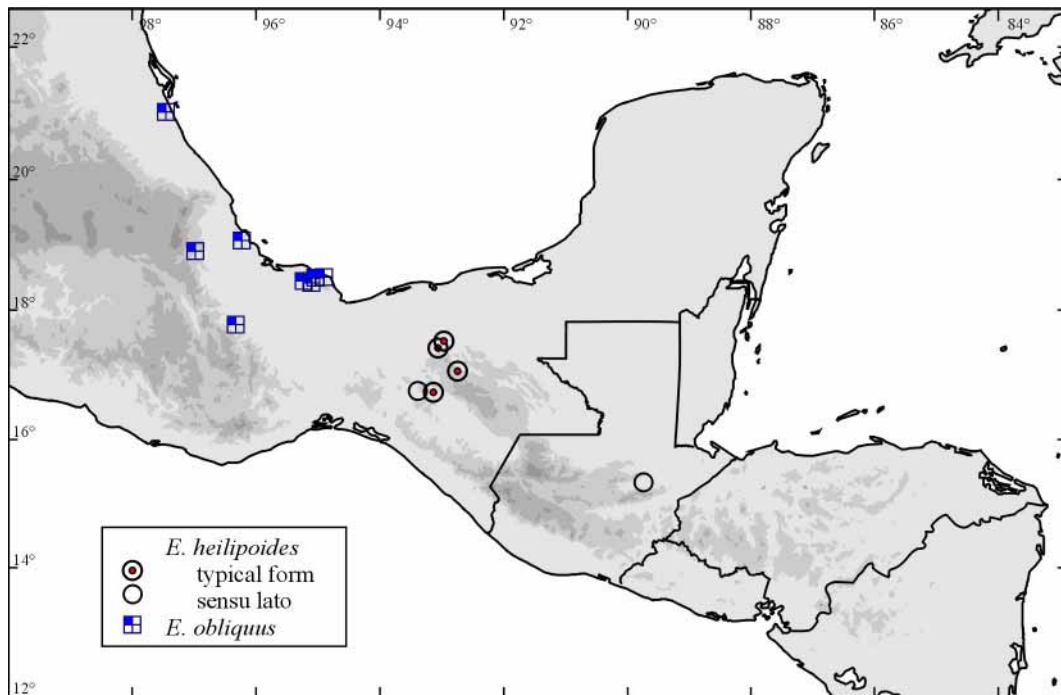
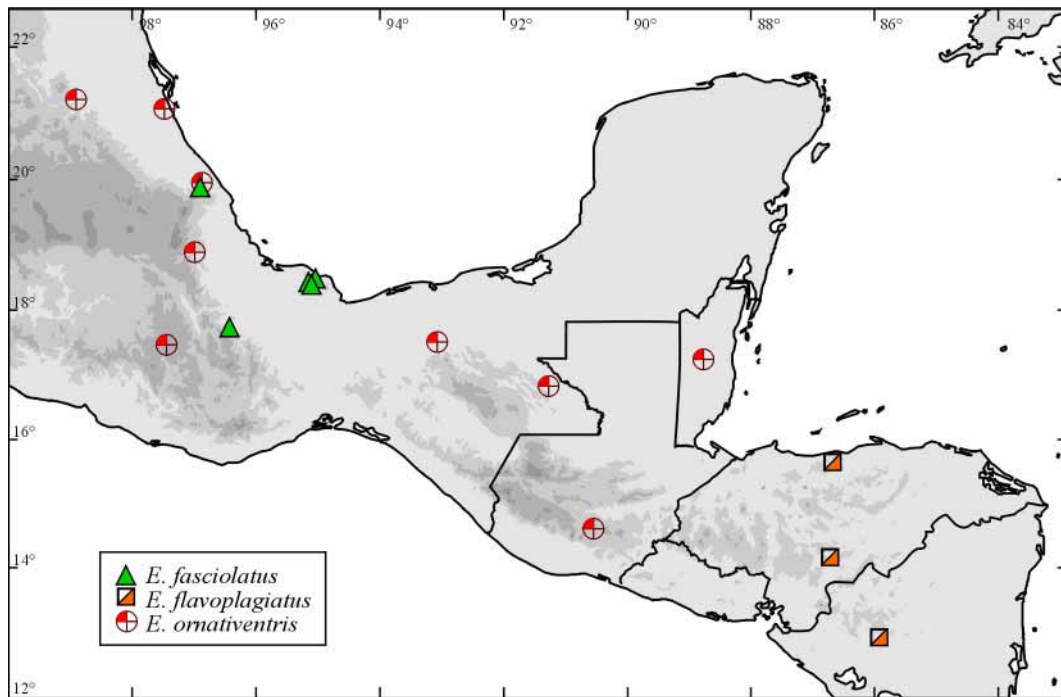
**FIGURES 204–217.** **204–208,** *E. aliquantulus*: **204,** habitus and color-pattern, dorsal; **205,** head and prothorax, male, lateral; **206,** funicle, male; **207,** apex of aedeagus, dorsal; **208,** aedeagus and flagellum, lateral. **209,** *E. aequiperabilis*: funicle, male. **210–213,** *E. leucopleura leucopleura* (Fortuna, Panama): **210,** habitus and color-pattern, dorsal; **211,** head and prothorax, male, lateral; **212,** apex of aedeagus, dorsal; **213,** aedeagus and flagellum, lateral. **214–216,** *E. leucopleura discolor*: **214,** habitus and color-pattern (**a,** Costa Rica, 16 km W Guápiles; **b,** Costa Rica, 10 km SE La Virgen), dorsal; **215,** head and prothorax, male, lateral; **216,** flagellum, lateral. **217,** *E. intermedius*: habitus and color-pattern, dorsal



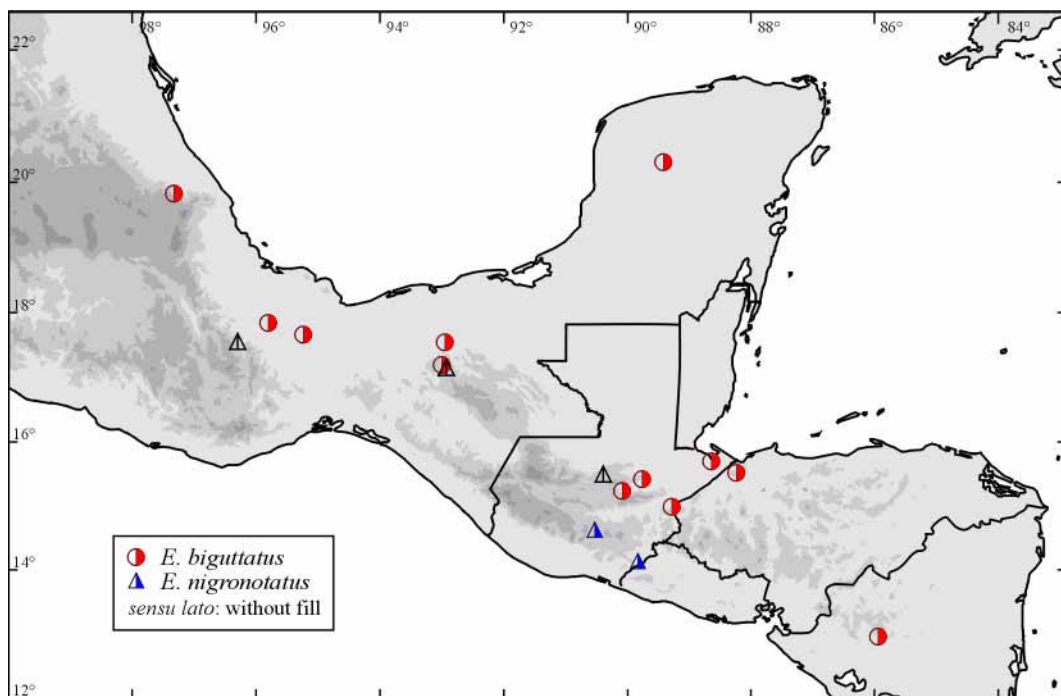
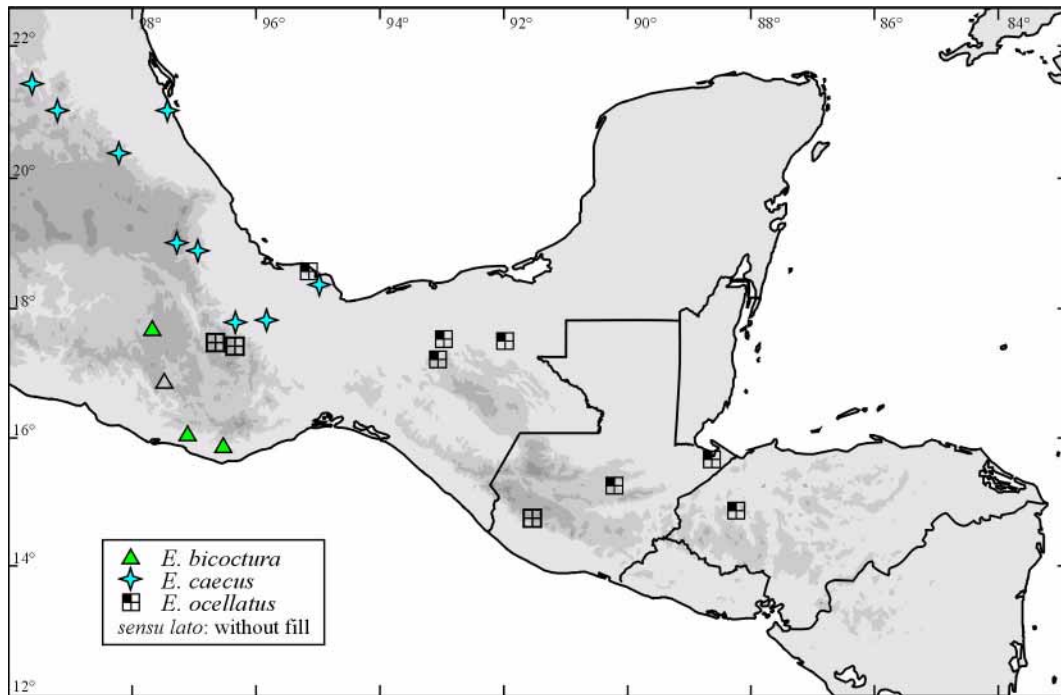
**FIGURES 218–237.** **218–220, *E. belti*:** **218**, habitus and color-pattern (**a**, Costa Rica, La Selva; **b**, Costa Rica, San Vito), dorsal; **219**, head, male, lateral; **220**, flagellum. **221–224, *E. politus*:** **221**, habitus and color-pattern, dorsal; **222**, head, male, lateral; **223**, apex of aedeagus, dorsal; **224**, aedeagus and flagellum, lateral. **225–228, *E. maculifer*:** **225**, habitus and color-pattern, dorsal; **226**, head and prothorax, male, lateral; **227**, aedeagus and flagellum, lateral; **228**, apex of aedeagus, dorsal. **229–230, *E. clandestinus*:** **229**, habitus and color-pattern, dorsal; **230**, head and prothorax, female, lateral. **231–234, *E. flavolimbatus*:** **231**, habitus and color-pattern, dorsal; **232**, habitus and color-pattern, male, lateral; **233**, apex of aedeagus, dorsal; **234**, aedeagus and flagellum, lateral. **235–237, *E. gilvopictus*:** **235**, habitus and color-pattern, dorsal; **236**, apex of aedeagus, dorsal; **237**, aedeagus and flagellum, lateral



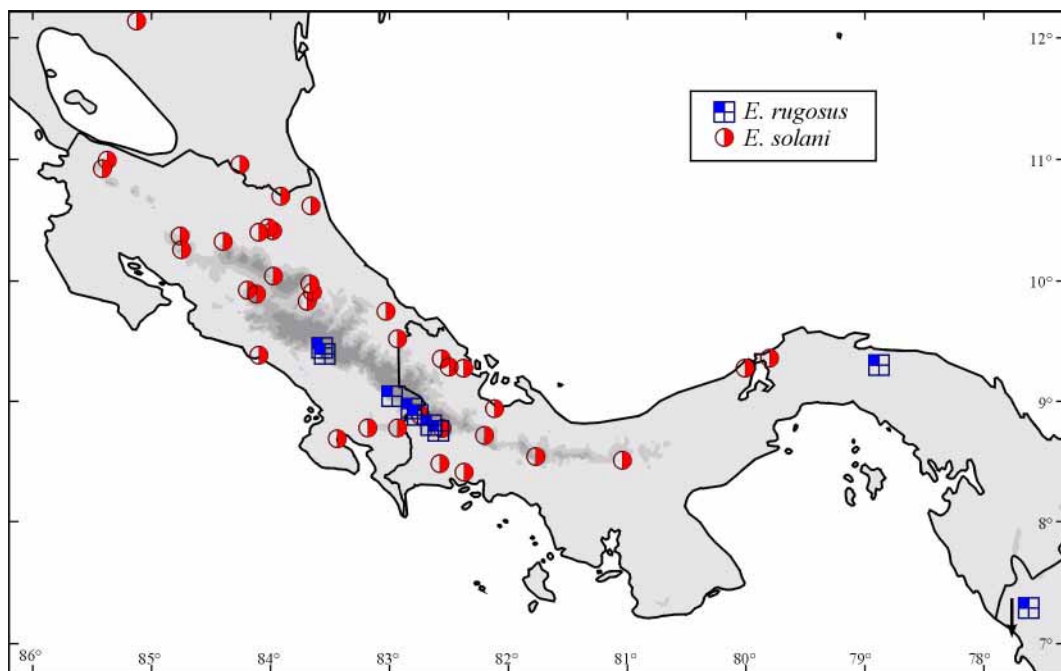
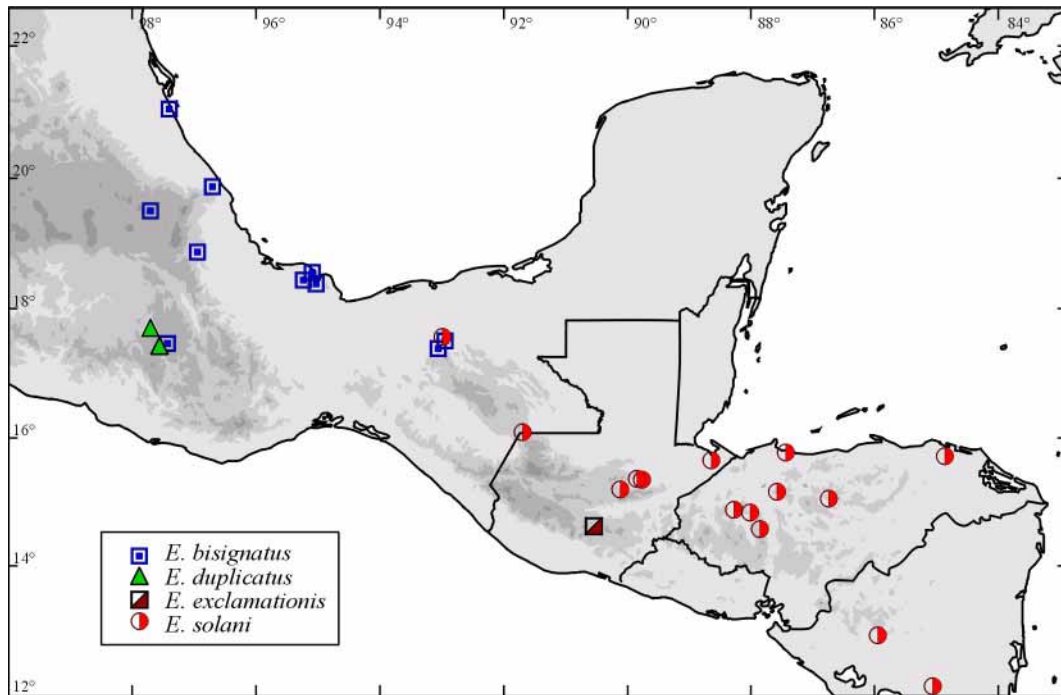
**FIGURES 238–239.** Map of northern and southern Middle America showing topographic relief, border lines, geographic names used in the text and collecting sites of species of *Embates*



**FIGURES 240–241.** Maps showing collecting sites of species of *Embates* in northern Middle America. **240**, *E. fasciolatus*, *E. flavoplagiatus* and *E. ornativentris*; **241**, *E. heilipoides* and *E. obliquus*

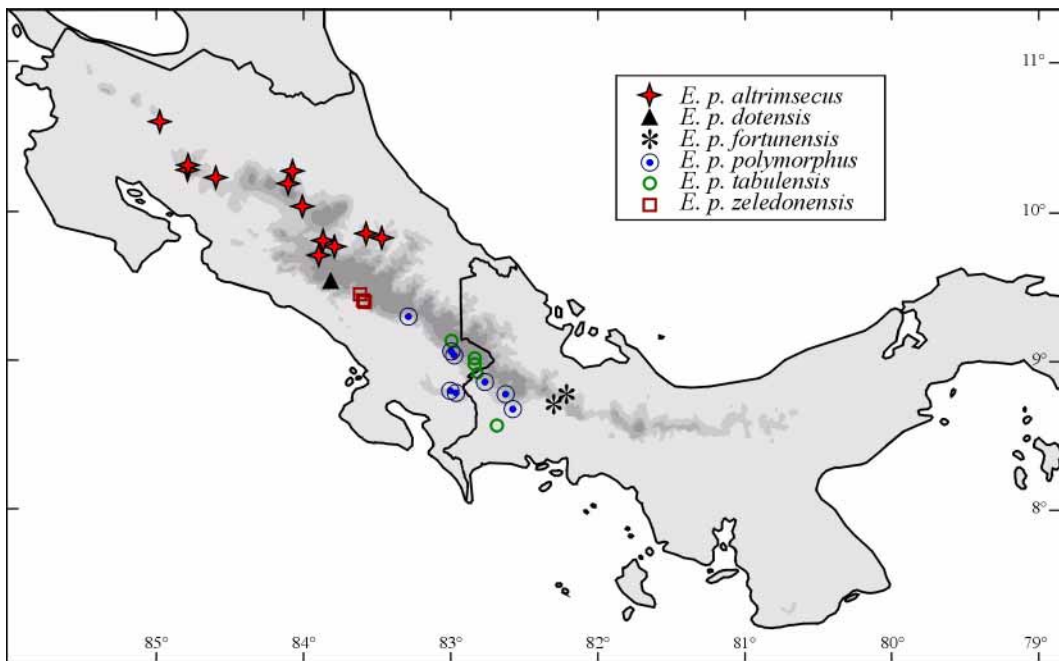
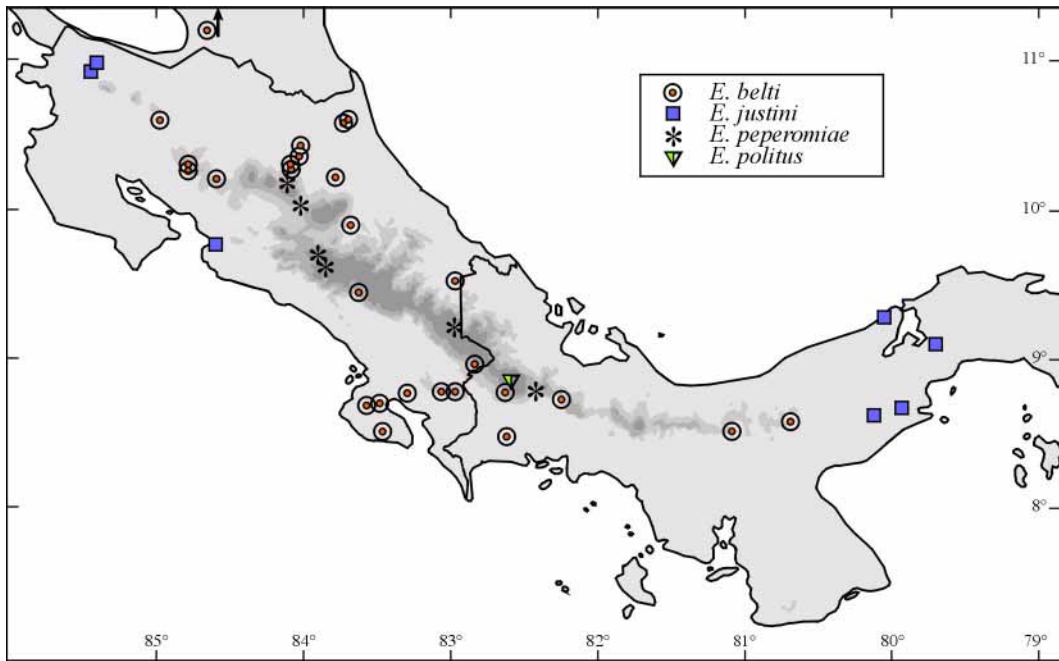


**FIGURES 242–243.** Maps showing collecting sites of species of *Embates* in northern Middle America. **242**, *E. bicoctura*, *E. caecus* and *E. ocellatus*; **243**, *E. biguttatus* and *E. nigronotatus*.

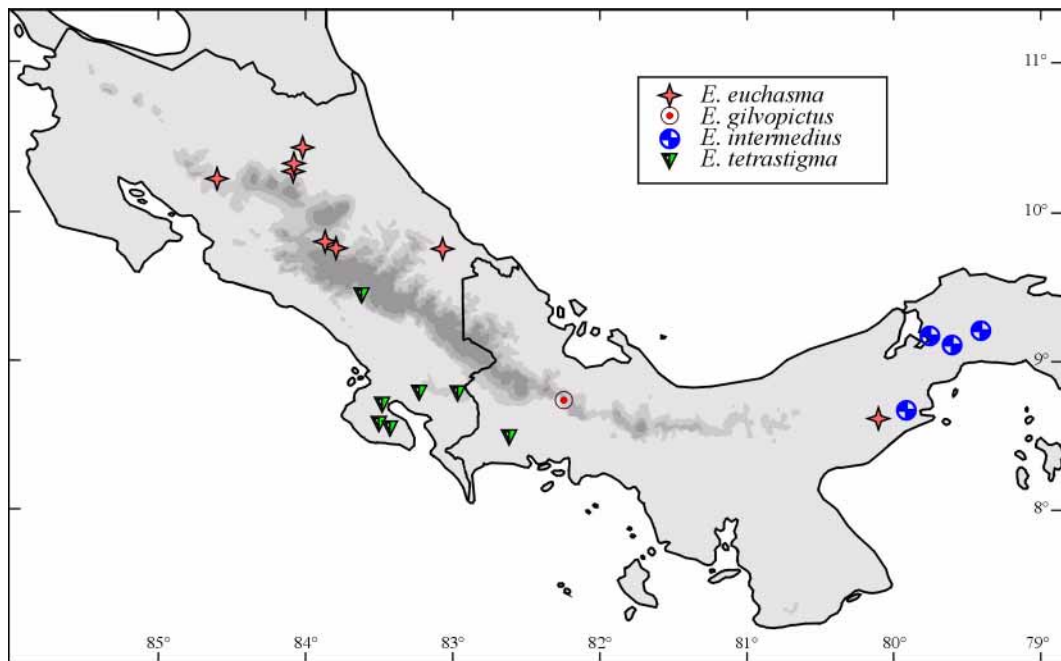
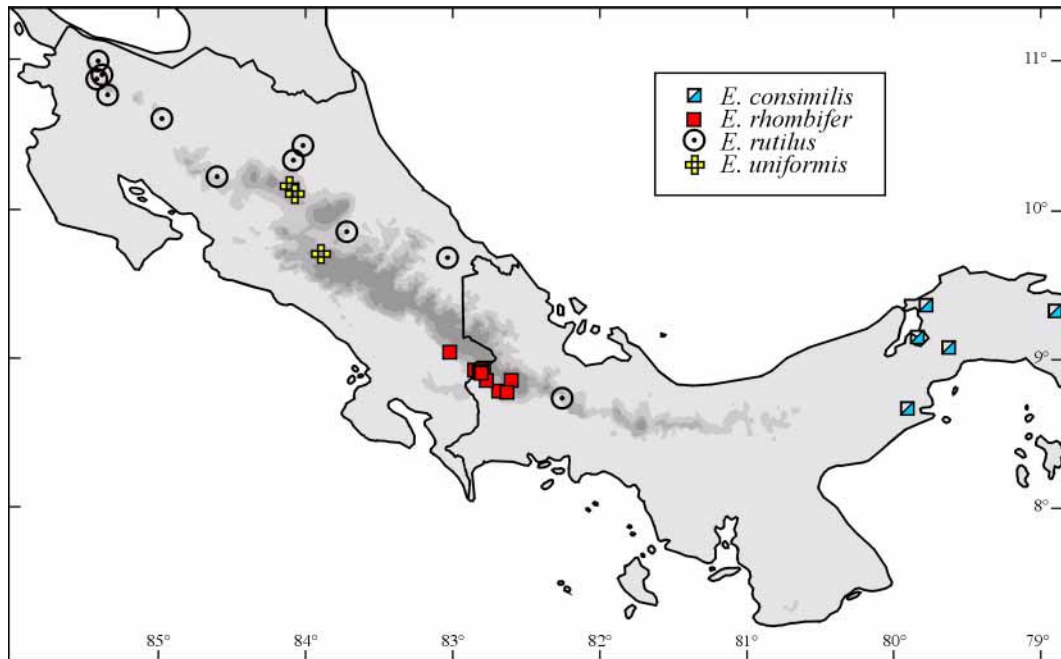


**FIGURES 244–245.** Maps showing collecting sites of species of *Embates* in northern and southern Middle America. **244**, *E. bisignatus*, *E. duplicatus*, *E. exclamatoris* and *E. solani* (northern part); **245**, *E. rugosus* and *E. solani*

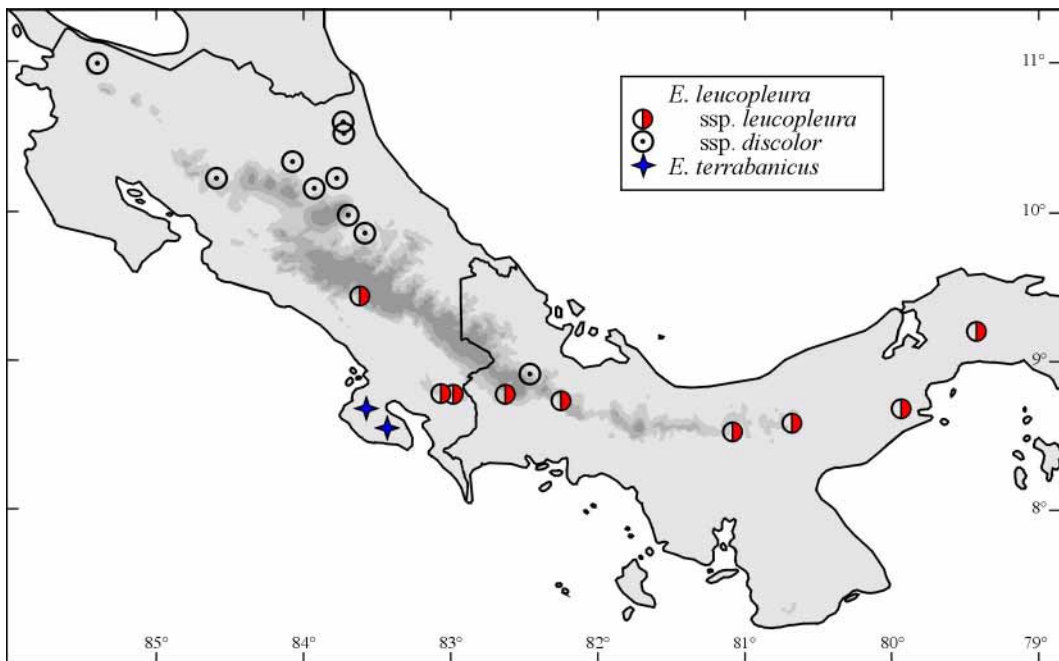
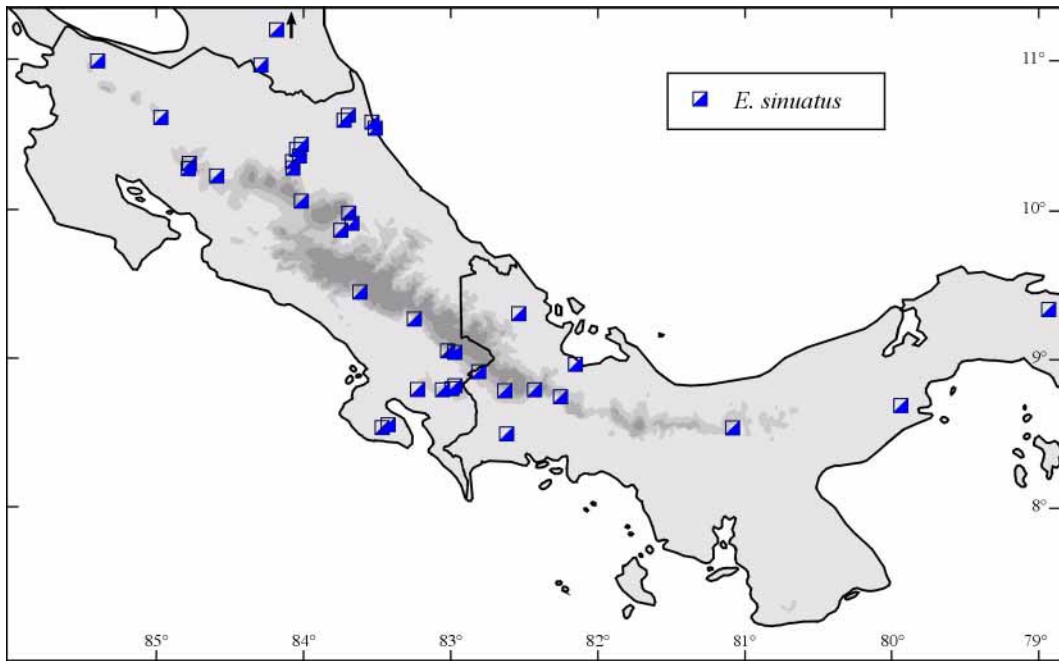




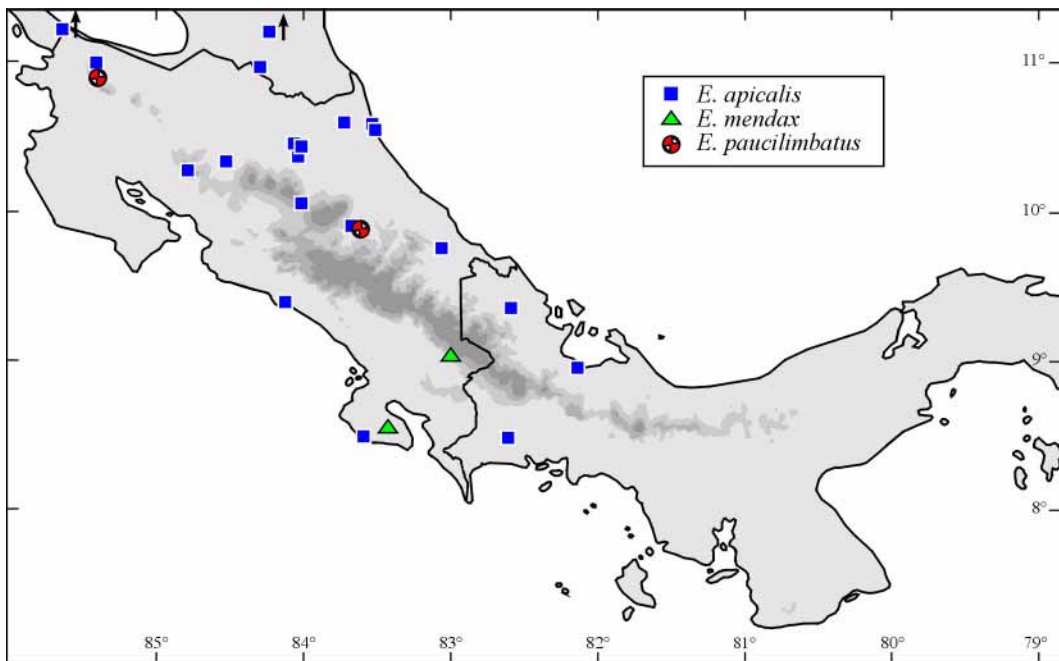
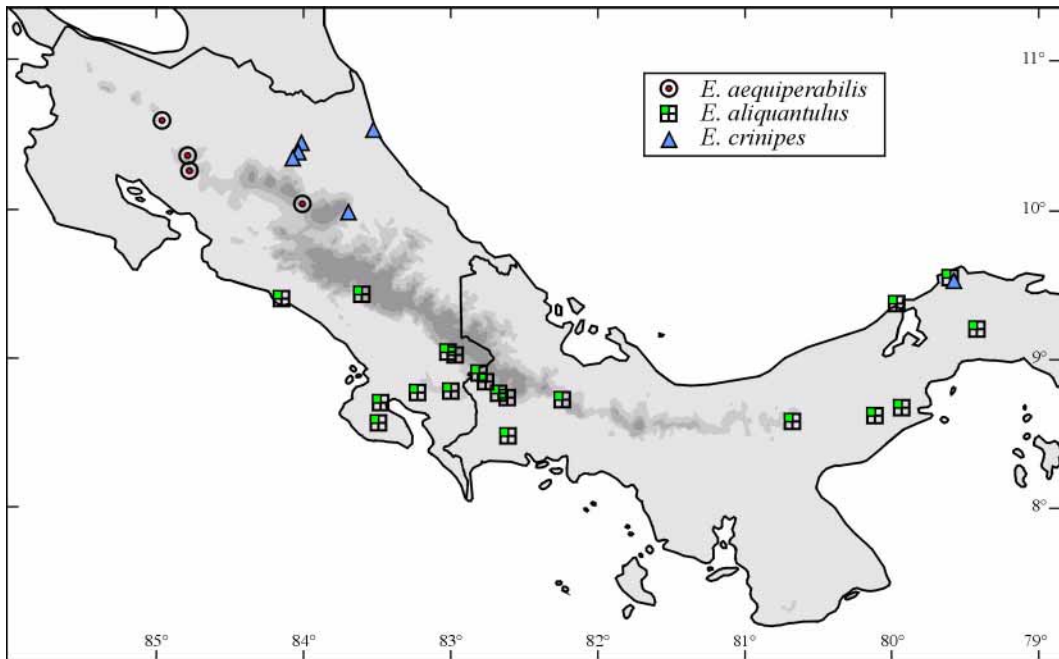
**FIGURES 246–247.** Maps showing collecting sites of species of *Embates* in Costa Rica and western Panama. **246**, *E. belti*, *E. justini*, *E. peperomiaae* and *E. politus*; **247**, *E. polymorphus* with six subspecies



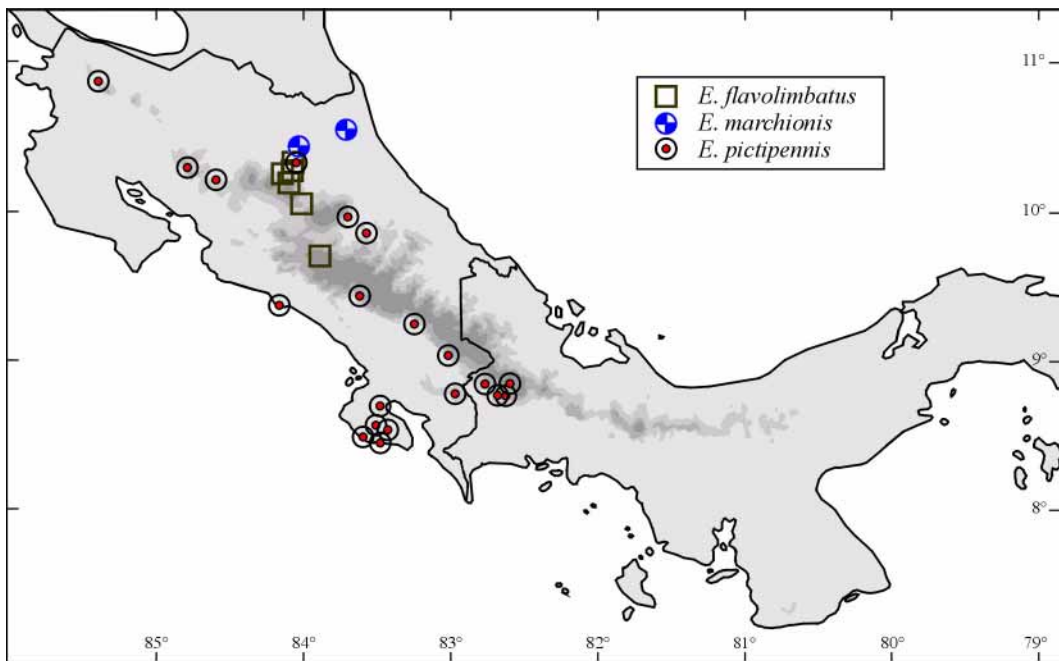
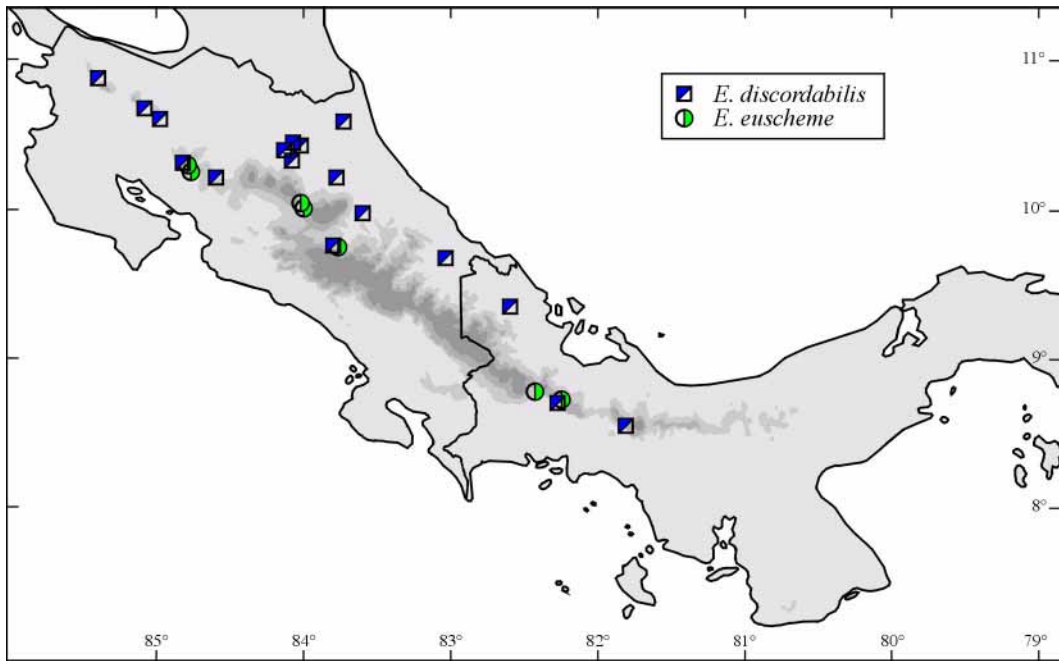
**FIGURES 248–249.** Maps showing collecting sites of species of *Embates* in Costa Rica and western Panama. **248**, *E. consimilis*, *E. rhombifer*, *E. rutilus* and *E. uniformis*; **249**, *E. euchasma*, *E. gilvopictus*, *E. intermedius* and *E. tetrastigma*



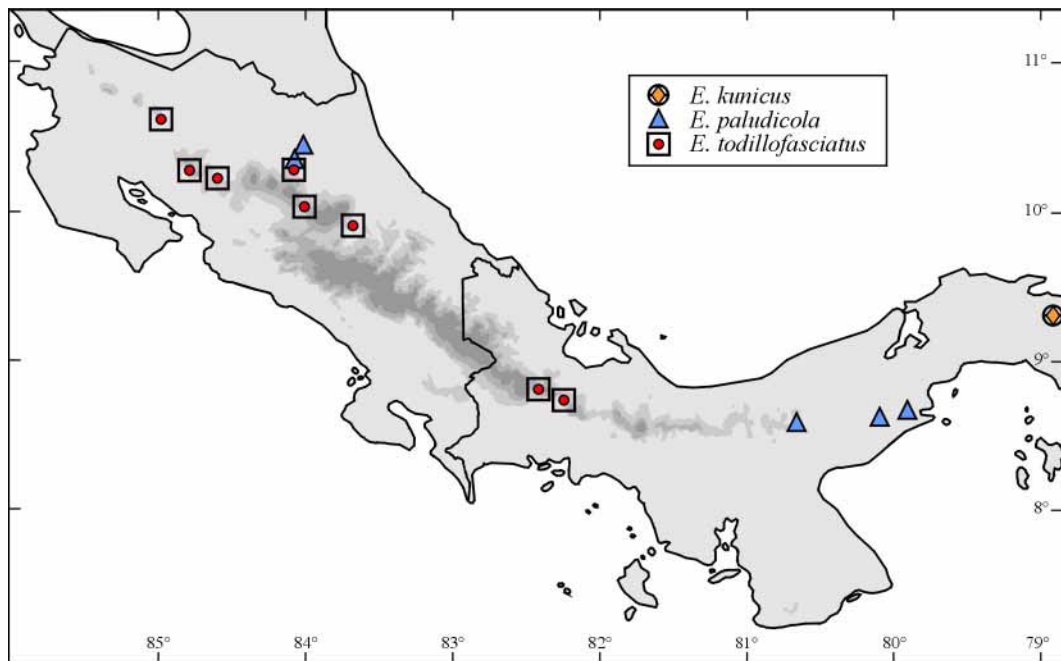
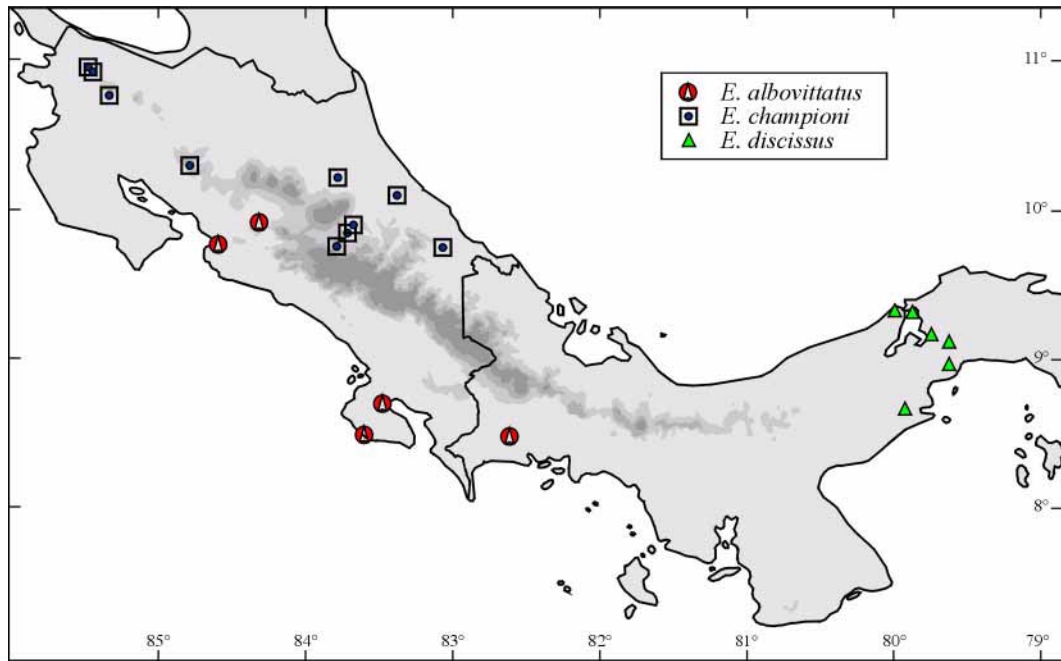
**FIGURES 250–251.** Maps showing collecting sites of species of *Embates* in Costa Rica and western Panama. **250**, *E. sinuatus*; **251**, *E. leucopleura* (with ssp. *discolor*) and *E. terrabanicus*



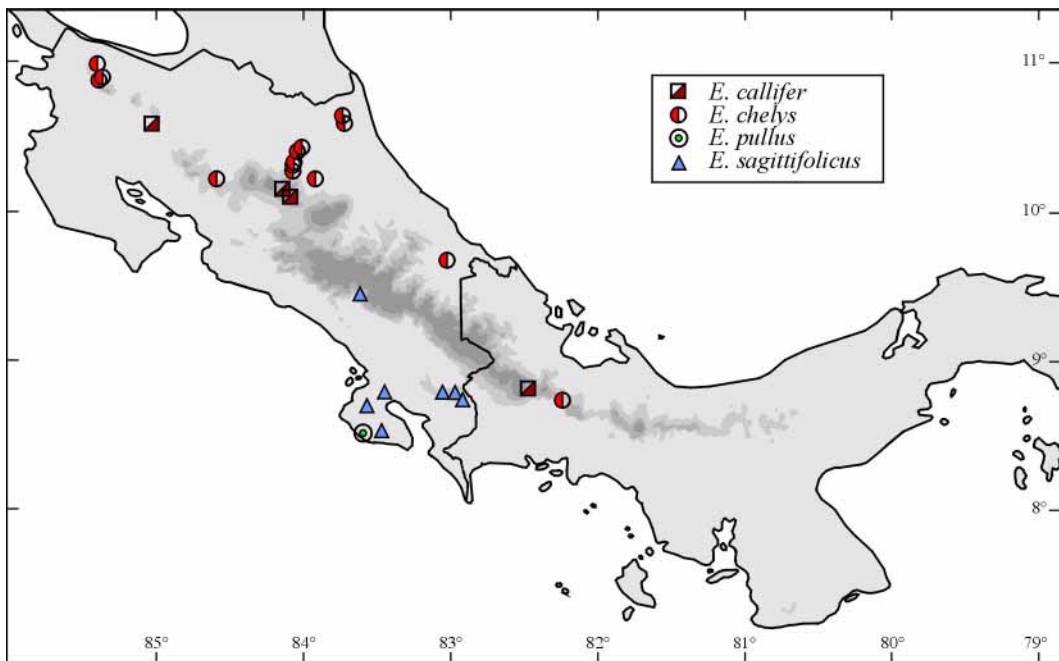
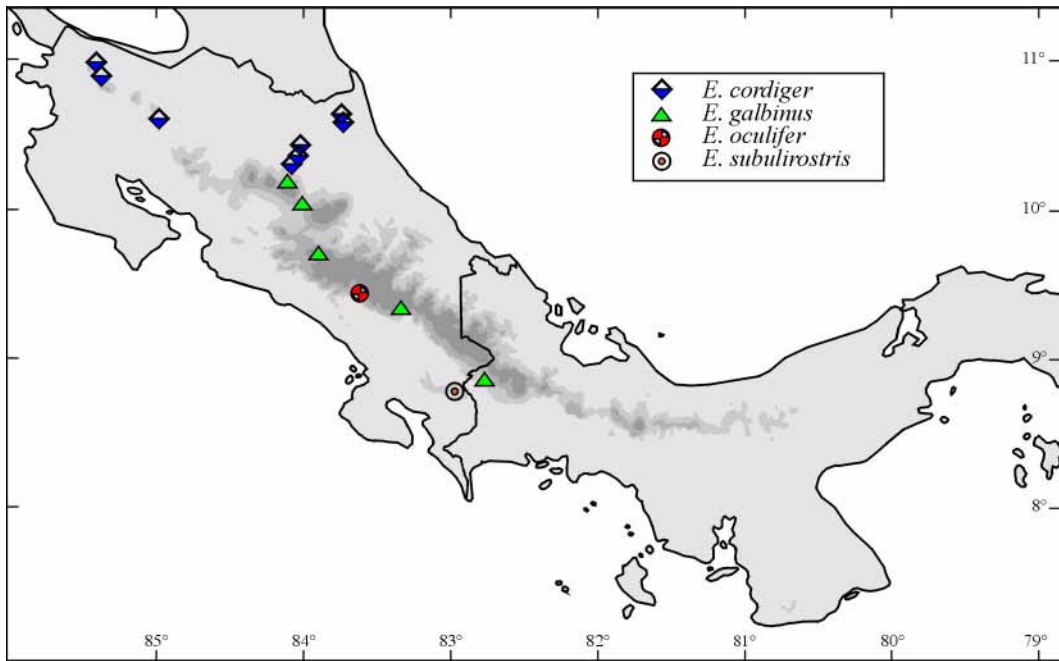
**FIGURES 252–253.** Maps showing collecting sites of species of *Embates* in Costa Rica and western Panama. **252**, *E. aequiperabilis*, *E. aliquantulus* and *E. crinipes*; **253**, *E. apicalis*, *E. mendax* and *E. paucilimbatus*



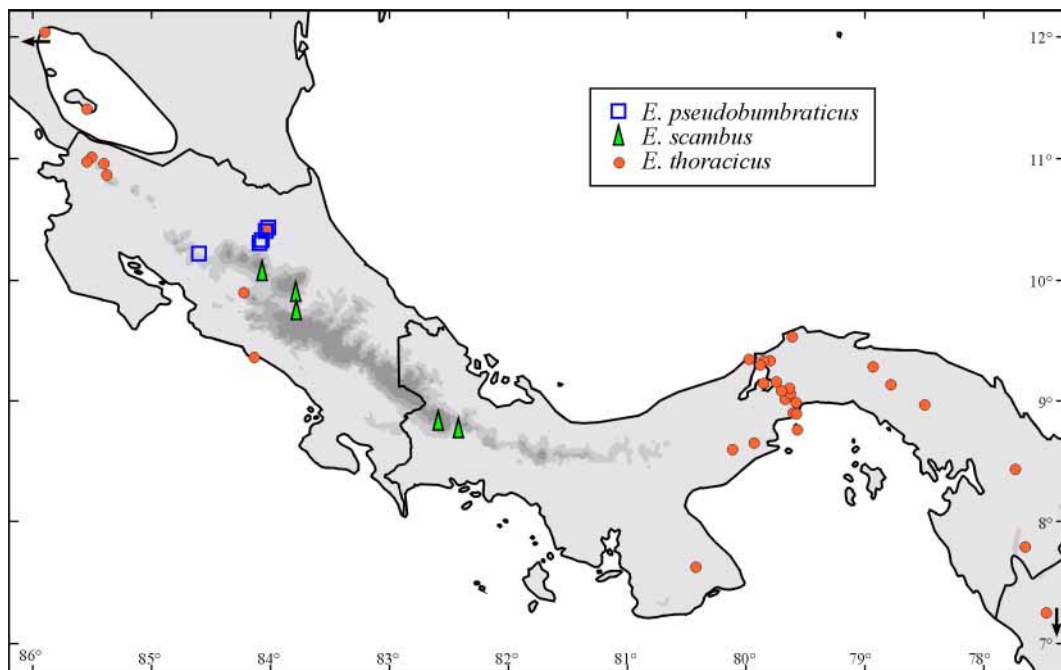
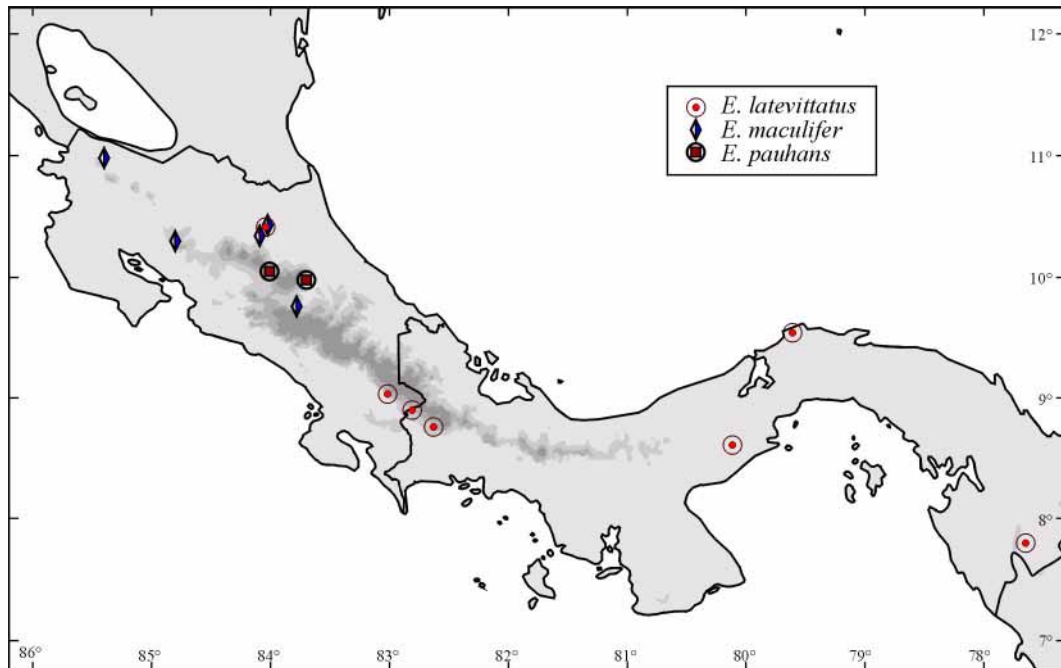
**FIGURES 254–255.** Maps showing collecting sites of species of *Embates* in Costa Rica and western Panama. **254**, *E. discordabilis* and *E. euscheme*; **255**, *E. flavolimbatus*, *E. marchionis* and *E. pictipennis*



**FIGURES 256–257.** Maps showing collecting sites of species of *Embates* in Costa Rica and western Panama. **256**, *E. albovittatus*, *E. championi* and *E. discissus*; **257**, *E. kunicus*, *E. paludicola* and *E. todillofasciatus*

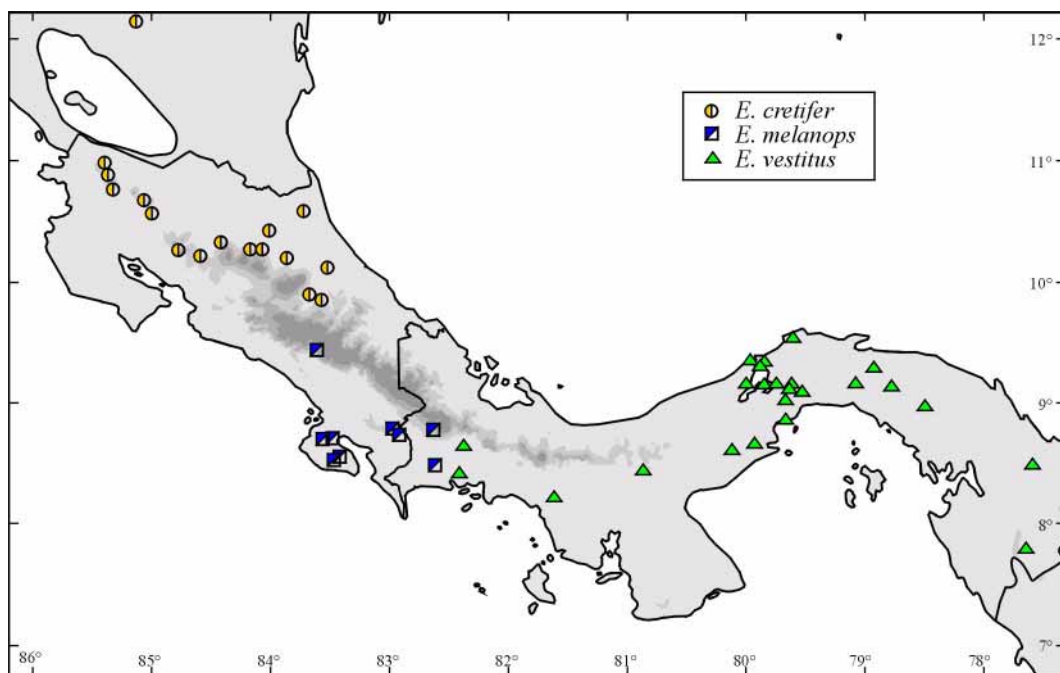


**FIGURES 258–259.** Maps showing collecting sites of species of *Embates* in Costa Rica and western Panama. **258**, *E. cordiger*, *E. galbinus*, *E. oculifer* and *E. subulirostris*; **259**, *E. callifer*, *E. chelys*, *E. pullus* and *E. sagittifolicus*



**FIGURES 260–261.** Maps showing collecting sites of species of *Embates* in Costa Rica and Panama. **260**, *E. latevittatus*, *E. maculifer* and *E. pauhans*; **261**, *E. pseudobumbraticus*, *E. scambus* and *E. thoracicus*





**FIGURE 262.** Map showing Costa Rica and Panama with collecting sites of *E. cretifer*, *E. melanops* and *E. vestitus*