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THE HOLARCTIC GENUS *ANISOCYRTA* FOERSTER (HYMENOPTERA: BRACONIDAE: ALYSIINAE)

by

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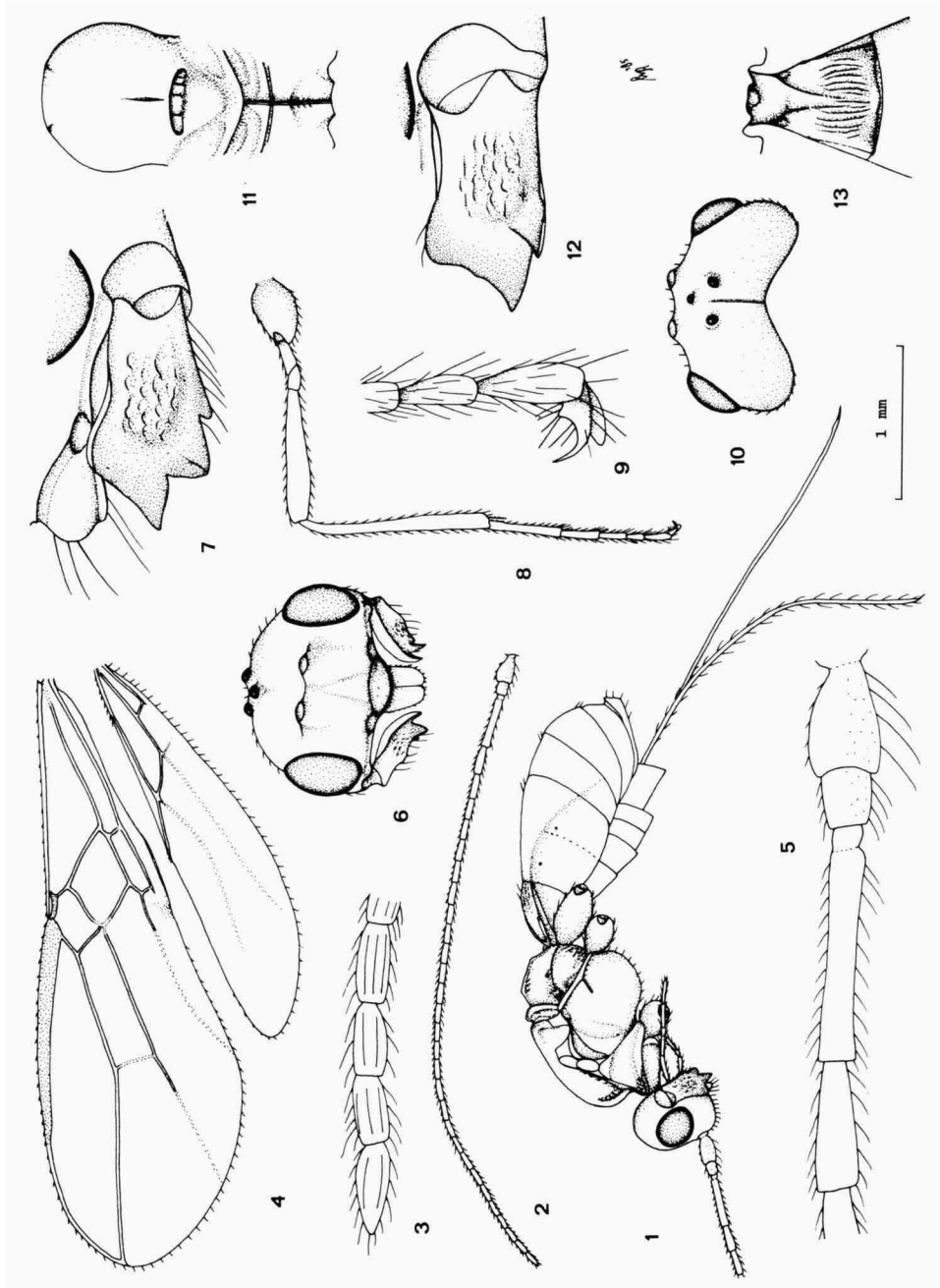
Key words: Braconidae; Alysiinae; Alysiini; *Anisocyrtia*; key; distribution; Holarctic.

The genus *Anisocyrtia* Foerster, 1862 (Braconidae; Alysiinae: Alysiini) is revised and three new species are described: *Anisocyrtia microchora* spec. nov. from Sweden, *A. alpinicola* spec. nov. from Central Europe, and *A. nearctica* spec. nov. from Canada and the U.S.A. *Anisocyrtia longicauda* Tobias, 1962 is a new junior synonym of *A. perdita* (Haliday, 1838). The species are keyed and partly illustrated.

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INTRODUCTION

The genus *Anisocyrtia* Foerster, 1862 was erected for *Alysia perdita* Haliday, 1838 because the vein r of the fore wing arises from the extreme base of the pterostigma (fig. 4), combined with the elongated third antennal segment (fig. 5), an unique combination within the *Alysiini*. However, Wharton (1980: 29) showed that this character is not decisive for the recognition of the Nearctic species (figs. 19, 31). The presence of a fourth lamelliform protuberance on the mandible ventrally (which may be divided into two (fig. 16)), the third antennal segment being much longer than the fourth segment (figs. 5, 39), the absence of the precoxal sulcus (fig. 1), and the comparatively short vein 1-M of the hind wing (figs. 4, 14, 27), allow a correct identification. For the terminology used in this paper, see Van Achterberg, 1979: 242-249.



Anisocyrt Foerster

Anisocyrt Foerster, 1862: 268; Shenefelt, 1974: 955; Wharton, 1980: 27-28.
Type-species: *Alysia perdita* Haliday, 1838, by monotypy.

Diagnosis. — Length of fore wing 2.8-5.6 mm; antenna medium-sized to long (figs. 1, 2), with 25-42 segments; length of third segment 1.5-2.2 times fourth segment (figs. 5, 30); third antennal segment slightly narrower than fourth segment or of similar width; maxillary and labial palp with 6 and 4 segments, respectively; eyes glabrous, without subocular depression; anterior tentorial pits medium-sized (fig. 6); clypeus convex and ventral rim retracted (fig. 7); mandible with fourth lamelliform protuberance ventrally, the protuberance may be divided into two small teeth e.g. in *A. alpinicola* spec. nov. (fig. 16), and third tooth distinctly developed (fig. 7); pronope absent, pronotum only with transverse groove; precoxal sulcus absent (fig. 1); metanotum with medial carina which may be protruding (fig. 15); propodeal spiracle small; propodeum with complete medio-longitudinal carina (figs. 11, 18); antero-dorsal part of propodeum not differentiated from posterior part, except by the curve in the medial carina (figs. 1, 15); vein r of fore wing arising from base of pterostigma (figs. 4, 14, 27), except in *A. curticubita* Wharton and *A. masoni* Wharton (figs. 19, 31); vein r-m of fore wing present; wings macropterous; vein cu-a of hind wing present; vein 1-M of hind wing shorter than or equal to vein M + CU (figs. 4, 14, 27); vein m-cu of fore wing interstitial (fig. 4) to postfurcal (figs. 14, 27); first subdiscal cell of fore wing closed; vein CU1b of fore wing subequal to 3-CU1 or longer (figs. 4, 14, 19, 31); vein 3-SR of fore wing longer than vein 2-SR; pterostigma linear or nearly so, its length about 10 times its width (figs. 4, 19, 31); dorsope present; laterope absent; second metasomal tergite smooth; metasoma of ♀ often compressed apically; ovipositor sheath normally setose and with apical spine (fig. 1); length of ovipositor sheath 1.4-4 times length of hind tibia, usually 0.5-0.8 times fore wing (except *A. masoni* Wharton).

The genus contains six species: three Nearctic; two Palaearctic and one Holarctic, and belongs to the tribe Alysiini Stephens of the subfamily Alysiinae.

Biology: One species is known to parasitize larvae of Calyptratae flies in mushrooms.

Figs. 1-13. *Anisocyrt* *perdita* (Haliday), ♀, Norway, Kongsvoll. 1, habitus, lateral aspect; 2, antenna; 3, apex of antenna; 4, wings; 5, base of antenna, outer aspect; 6, head, frontal aspect; 7, mandible, full sight on third tooth; 8, hind leg; 9, hind claw; 10, head, dorsal aspect; 11, mesosoma, dorsal aspect; 12, mandible, full sight on first tooth; 13, first metasomal tergite, dorsal aspect. 1, 2, 4, 8: scale-line (= 1×); 3, 5, 7, 9, 12 : 5×; 6, 10, 11, 13: 2×.

Key to the Palaearctic species of the genus *Anisocyrtia* Foerster

1. Second submarginal cell of fore wing large (figs. 4, 14); length of vein SR1 of fore wing 1.4-1.9 times vein 3-SR (fig. 4); antennal segments of ♀ 31-40; palpi pale yellowish, and less robust (figs. 20, 23, 25); hind femur dorsally and at least apical half of hind coxa yellowish 2
 - Second submarginal cell of fore wing small (fig. 27); length of vein SR1 of fore wing about 3 times vein 3-SR (fig. 27); antennal segments of ♀ 25-27; palpi dark brown and robust (fig. 29); hind femur dorsally and complete hind coxa infuscated; (North Scandinavia) *microchora* spec. nov.
2. Propodeum extensively rugose medially (fig. 18); inner side of apex of hind tibia densely and whitish setose (fig. 24), hind tarsus with longer setae (fig. 26); ventral half of pronotal sides largely sculptured; length of 3rd antennal segment 1.8-2.2 times 4th segment; length of ovipositor sheath 3-3.6 mm, and about 0.7 times fore wing; metanotum protruding dorsally (fig. 15); (Central Europe) *alpinicola* spec. nov.
 - Propodeum largely smooth, at most with some rug(ul)ae (fig. 11); inner apex of hind tibia frequently less densely and yellowish or brownish setose (fig. 21), and hind tarsus with shorter setae (fig. 20); ventral half of pronotal sides at least medially largely smooth (fig. 1); length of 3rd antennal segment 1.5-2 times 4th segment (fig. 5); length of ovipositor sheath 1.7-2.7 mm, and 0.5-0.7 times fore wing; metanotum frequently weakly or not protruding dorsally; (North Europe) *perdita* (Haliday)

Key to the Nearctic species of the genus *Anisocyrtia* Foerster

1. Length of vein SR1 of fore wing 1.5-2 times vein 3-SR (fig. 4, 19); vein 3-CU1 of fore wing oblique and about as long as vein CU1b (figs. 4, 19); hind coxa yellowish; vein 2-SR of fore wing shorter than vein r-m (figs. 4, 19); distance between base of pterostigma and base of vein r at most equal to length of vein r (fig. 19); antennal segments of ♀ 28-40, of ♂ 32-40 2
 - Length of vein SR1 of fore wing about 3 times vein 3-SR (fig. 31); vein 3-CU1 of fore wing subhorizontal and distinctly shorter than vein CU1b (fig. 31); hind coxa dark brown; vein 2-SR of fore wing longer than vein r-m (fig. 31); distance between base of pterostigma and base of vein r more than length of vein r (fig. 31); antennal segments of ♀ 26-30, of ♂ 30-35; (Canada) *curticubita* Wharton
2. Vein r of fore wing originates close to base of pterostigma (fig. 4); length

- of ovipositor sheath 1.4-2.3 times length of hind tibia; antennal segments of ♀ 28-39, of ♂ 32-40 3
- Vein r of fore wing distinctly removed from base of pterostigma (fig. 19), distance from base of pterostigma to vein r about equal to (or slightly less than) length of vein r; length of ovipositor sheath nearly 4 times length of hind tibia; antennal segments of ♀ 37-40, of ♂ about 42; (Canada, U.S.A.) *masoni* Wharton
3. Length of ovipositor sheath 1.5-2 mm, 1.4-1.5 times length of hind tibia, and 0.5-0.6 times fore wing; antennal segments of ♀ 28-33; length of fore wing of ♀ 2.9-3.8 mm; (Canada) *perdita* (Haliday)
- Length of ovipositor sheath 2.8-3.2 mm, 1.8-2.3 times length of hind tibia, and 0.7-0.8 times fore wing; antennal segments of ♀ 32-39; length of fore wing of ♀ 3.6-4.6 mm; (Canada, U.S.A.) *nearctica* spec. nov.

***Anisocyrta alpinicola* spec. nov.**

(figs. 14-18, 24-26)

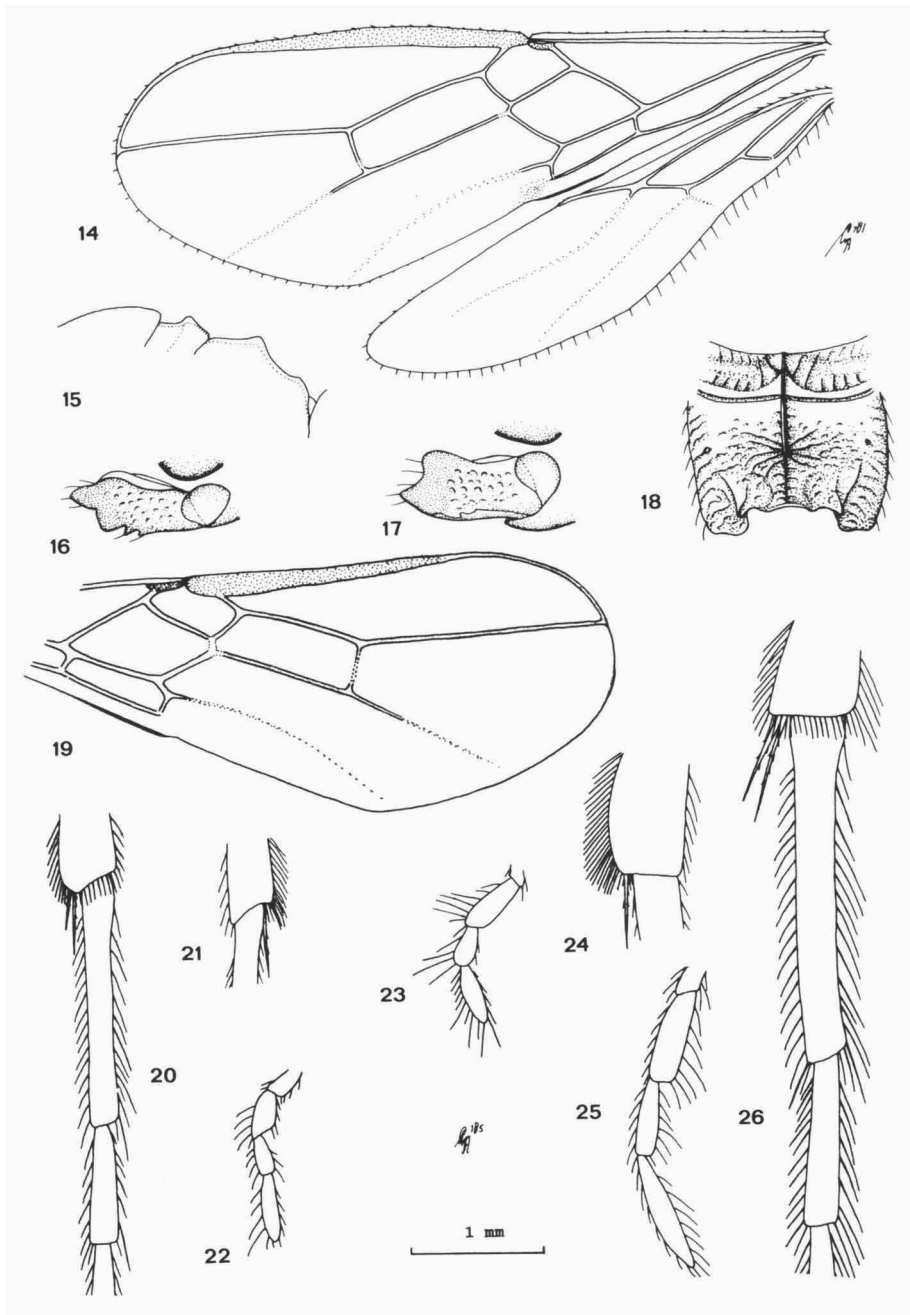
Anisocyrta perdita; Fischer, 1970: 8; Fischer, 1971: 61-64, figs. 16-18.

Material. — Holotype (Haeselbarth Collection, München): “Gampenjoch, Südtirol [= N. Italy], 1600 m, D, 3.9 [19]67, Haeselb.”, “*Anisocyrta perdita* Hal., ♀, det. Haeselbarth, 1972”. Paratypes (12♀ and 18♂): 8♀ + 15♂, all collected by Dr. E. Haeselbarth, in his collection unless otherwise stated, and all collected in mountainous forests of the montane and subalpine zones. 1♂, Austria, “Walleralm, Scheffan, Tirol, 1200 m, 9.9.69”. Rest of paratypes are from North Italy, South Tirol: 5♀ and 3♂: “St. Peter, Ahrntal, 1300 m”, (1♀, Cc and 1♂, Cd., both 31.7.66), id., 1600 m (2♀ and 2♂, Jc, 26.8.67, and 1♂ in Rijksmuseum van Natuurlijke Historie, Leiden), and 1800 m (2♀, Jb, 26.8.67); 1♀ and 2♂, “Campi, Riva s. Garda, 1400 m” (1♀ and 1♂, E, 7.9.67), and 1500 m (1♂, F, 7.9.67); 1♀ and 2♂, “Tremalza, Judik, Voralpen, 1300 m”, (1♀, B, 6.9.67), id., 1730 m (2♂ (1♂ in Rijksmuseum van Natuurlijke Historie, Leiden), Fg, 6.9.67); 1♀ and 6♂, “Gampenjoch, 1350 m”, (1♀ and 2♂, A, 23.7.66 and 3.9.67 (♂)), 1500 m (3♂, C, 23.7.66), and 1550 m (1♂, E, 23.7.66; 1♂, E, 23.7.66); 1♂, “Marling, 1200 m, A, 12.7.66”. For the explanation of the habitat-codes, see Königsmann (1972: 26-30). 3♀ + 2♂ (Canadian National Collection, Ottawa): “Austria, Raxalpe, 1500 m, Aug. 20, 1960, W.R.M. Mason.” 1♀ (Collection Lukáš, Trenčín): “Nové Mesto [= Czechoslovakia], N. Metuji obora, Lustinec”; 1♂ (Rijksmuseum van Natuurlijke Historie, Leiden): “Museum Leiden, Oostenrijk [= Austria], Damüls, 6.vii.1952, Exc. Leidse Biologen”. Fischer (1970: 8) reported this species (as *perdita*) from Steiermarken at an elevation of ca. 950 m.

Holotype, ♀, length of fore wing 5.5 mm, of body 5.1 mm.

Head. — Antennal segments 35, length of third antennal segment (including annellus) 2.1 times fourth segment; labial palp slender (fig. 25); face with microsculpture; fourth protuberance of mandible divided into two small teeth (fig. 16), but in several paratypes undivided; further as *perdita*.

Mesosoma. — Ventral half of pronotal side largely sculptured; metanotum



protruding dorsally (fig. 15); propodeum extensively rugose-medially (fig. 18).

Wings. — Fore wing: r basally at pterostigma (fig. 14); $r : 3\text{-SR} : \text{SR1} = 6 : 30 : 48$; $2\text{-SR} : 3\text{-SR} : r\text{-m} = 8 : 30 : 9$, $1\text{-CU1} : 2\text{-CU1} = 1 : 8$. Hind wing: m-cu postfurcal (fig. 14).

Legs. — Inner side of apex of hind tibia densely and whitish setose (fig. 24); hind tarsus with comparatively long setae (fig. 26), further similar to *perdita*.

Metasoma. — Length of ovipositor sheath 3.5 mm, 0.64 times fore wing; further as *perdita*.

Colour. — Similar to *perdita*.

Variation. — Length of fore wing of ♀ 3.2-5.6 mm, of ♂ 4-5.5 mm; length of body of ♀ 2.8-5.1 mm, of ♂ 3.2-5.6 mm; antennal segments of ♀ 30 (1), 31 (1), 33 (3), 34 (1), 35 (5) and 36 (1), of ♂ 36 (1), 37 (2), 38 (2), 39 (5), 40 (1), 41 (2) and 42 (1); length of third antennal segment 1.8-2.2 times fourth segment; mandible of both sexes with fourth protuberance frequently divided into two small teeth (fig. 16); length of ovipositor sheath 3-3.6 mm, and 0.64-0.7 times fore wing.

Anisocyrtia curticubita Wharton
(fig. 31)

Anisocyrtia curticubita Wharton, 1980: 28-29, fig. 27.

Only known from Canada (British Columbia, Alberta, Labrador, Yukon Territory) and similar to *A. microchora* spec. nov. from Sweden. Easily to separate by the different wing venation (figs. 27, 31).

Anisocyrtia masoni Wharton
(fig. 19)

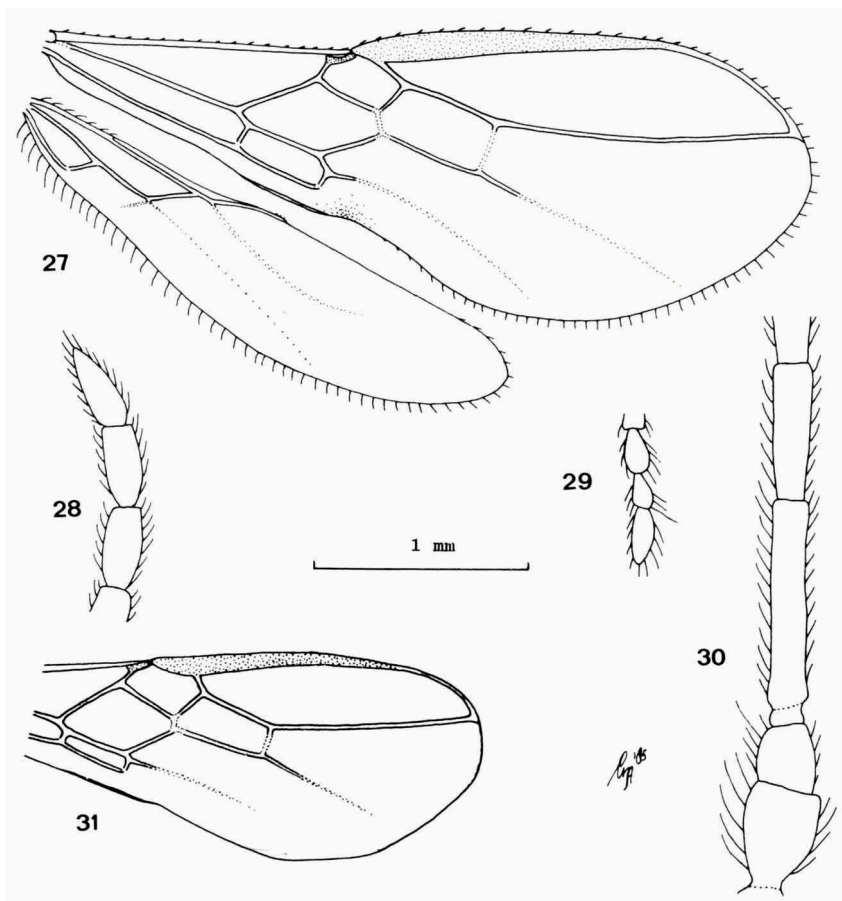
Anisocyrtia masoni Wharton, 1980: 29-30, fig. 26.

Figs. 14-18, 24-26. *Anisocyrtia alpinicola* spec. nov., ♀; 14-18 of holotype, 24-26 of paratype, Italy, St. Peter. 14, wings; 15, profile of metanotum and propodeum, lateral aspect; 16, mandible, full sight on third tooth; 17, full sight on first tooth; 18, metanotum and propodeum, dorsal aspect. Fig. 19. *Anisocyrtia masoni* Wharton, fore wing (after Wharton, 1980). Figs. 20-23. *Anisocyrtia perdita* (Haliday), ♀; 20-22, Norway, Kongsvoll; 23, Sweden, Abisko ("form A"). 20, 26, apex of hind tibia and basal half of hind tarsus, inner aspect; 21, 24, apex of hind tibia, dorsal aspect; 22, 23, 25, labial palp. 14, 19: scale-line (= 1×); 15-18: 2×; 20, 21, 24, 26: 3.5×; 22, 23, 25 : 5×.

Known from Canada (British Columbia, Yukon Territory, Manitoba) and U.S.A. (Colorado). Easily to separate from all known species by the long ovipositor sheath.

***Anisocyrtia microchora* spec. nov.**
(figs. 27-30)

Material. — Holotype: ♀, "Abisko, Lpl [= Lapland], Sweden, 25.VI.1951, J.R. Vockeroth" (Canadian National Collection, Ottawa); paratype, 1♀, same data (Rijksmuseum van Natuurlijke Historie, Leiden).



Figs. 27-30. *Anisocyrtia microchora* spec. nov., ♀, holotype. 27, wings; 28, apex of antenna; 29, labial palp; 30, base of antenna. Fig. 31. *Anisocyrtia curticubita* Wharton, fore wing (after Wharton, 1980). 27: scale-line (= 1×); 28-30: 3.8×; 31: 0.8×.

Holotype, ♀, length of fore wing 3.0 mm, of body 2.8 mm.

Head. — Antennal segments 27, length of third antennal segment 1.6 times fourth segment (fig. 30); length of third, fourth and penultimate segments 6.0, 3.5 and 2.3 times, respectively; segments of labial palp robust (fig. 29); length of maxillary palp 0.9 times height of head; face strongly shiny and largely microsculptured, and with distinct elevation medio-dorsally; length of eye in dorsal view 0.8 times temple; further as *perdita*.

Mesosoma. — Pronotal side finely crenulate postero-ventrally; episternal scrobe deep and wide; medio-posterior depression of mesoscutum shallow, narrow and short, but medially with additional shallow medio-longitudinal groove (in paratype as a continuous groove); scutellum microsculptured medio-posteriorly; metanotum hardly protruding; propodeum with irregular, strong medio-longitudinal carina, its surface smooth anteriorly, posteriorly microsculptured and shiny, with several rugae near medial carina; further as *perdita*.

Wings. — Fore wing: r basally at pterostigma (fig. 27); $r : 3\text{-SR} : \text{SR1} = 5 : 18 : 54$; $2\text{-SR} : 3\text{-SR} : r\text{-m} = 6 : 18 : 9$; $1\text{-CU1} : 2\text{-CU1} = 5 : 27$; m-cu distinctly postfurcal (fig. 27), and parallel to 1-M; CU1b subequal to 3-CU1 (fig. 27).

Legs. — Hind coxa smooth; claws as *perdita*; length of femur, tibia and basitarsus of hind leg 5.3, 9.6 and 6 times their width, respectively; spurs of hind tibia both 0.3 times hind basitarsus; inner side of apex of hind tibia long whitish setose apically; hind tarsus nearly as long setose as of *alpinicola* (fig. 26).

Metasoma. — Length of first tergite 1.1 times its apical width, its dorsal carinae united halfway along tergite, finely striate latero-posteriorly, remainder smooth; dorsope slightly larger than figured for *perdita* (fig. 13); remainder of metasoma as in *perdita*; length of ovipositor sheath 1.9 mm, and 0.65 times fore wing.

Colour. — Black; antenna (but scapus and pedicellus brown ventrally), tarsi, palpi, femora dorsally (partly), pterostigma and veins dark brown; tegulae and remainder of legs yellowish brown.

Paratype: Antennal segments 25; length of fore wing 2.8 mm; length of vein SR1 of fore wing 3 times vein 3-SR; length of ovipositor sheath 1.8 mm, and 0.64 times fore wing. Very similar to holotype, has episternal scrobe more elongate and mesoscutum with long and shallow medio-longitudinal groove.

Anisocyrtia nearctica spec. nov.

Material. — Holotype: ♀, "Doolittle Ranch, 9800' [= ft], Mt. Evans, Colo., 9.VIII, S.M. Clark 1961." Paratypes: 2♀, same label data; 3♀ + 6♂, topotypic, 3.VIII.1962, S.M. Clark or W.R.M. Mason; 3♀ + 1♂, topotypic, 10.VIII, B.H. Poole; 1♂, topotypic, 17.VII.1961, W.R.M. Mason; 2♀, "Hebron, Lab., 17.VII.1954, J.F. McAlpine" and id., but 5.VIII.1954, at mushroom; 1♀, "Mutak, Lab., 24.VII.1954, J.F. McAlpine", 1♀, "Hixon, B.C., 11.VIII.1965, E.D.A. Dyer"; 1♀, "Summit Lake, B.C., Mi 392 Alaska Hwy, 19-21.VIII.1959, 4200' [= ft], R.F. Leech"; 1♀, "Umita, Alaska, 1.VIII.1959, J.E.M. Martin". Non-types: 1♂, "Bathurst Inl., N.W.T., Baychimo Harb., 16.VIII.1966, G.E. Shewell"; 1♂, "58 mi. E. Dawson, Y.T. Gravel Lk., 2050' [= ft], 10.VIII.1962, R.E. Leech". Holotype and 16 paratypes in the Canadian National Collection at Ottawa; 6 paratypes in the Rijksmuseum van Natuurlijke Historie at Leiden.

An extensive description of the new species would be useless because of its extreme similarity with *A. perdita* (Haliday). Therefore the holotype is briefly described and the differences with *A. perdita* are summarized. Length of fore wing 4.6 mm, of body 3.7 mm; antennal segments 39, length of third segment 2.3 times fourth segment, length of third and fourth segment 6.2 and 2.8 times their width, respectively; third and fourth segments of labial palp slender; pronotal sides largely smooth; venation as of *perdita*, length of vein SR1 1.5 times vein 3-SR; hind tarsus moderately long, rather adpressed and whitish setose; metanotum distinctly protruding dorsally; propodeum largely smooth, only near complete medio-longitudinal carina weakly rugose; length of first metasomal tergite 1.2 times its apical width, its dorsal carinae united posteriorly and with some distinct rugae; length of ovipositor sheath 3.2 mm, 2.0 times length hind tibia, and 0.69 times fore wing. Colour as *perdita*, but scapus ventrally brown.

Variation. — Length of fore wing of ♀ 3.6-4.6 mm; length of third antennal segment 1.8-2.3 times fourth segment; antennal segments of ♀ 31 (1), 32 (2), 33 (1), 35 (1), 37 (2), 39 (1), of ♂ 32 (1), 34 (1), 36 (1), and 40 (2); length of ovipositor sheath 2.8-3.2 mm, 1.8-2.3 times length hind tibia, and 0.69-0.81 times fore wing.

The differences between *perdita* and *nearctica* are likely to be partly size-dependent. However, the overlap in size and number of antennal segments (both known to be positively related to some degree) allows one to conclude that this cannot be the only cause of the variation. The relative and absolute length of the ovipositor sheath are clearly different in *nearctica* and *perdita*, in specimens of similar size. Therefore it seems justified to describe the specimens with long ovipositor as a new species.

Note. — Wharton (1984: 10) gives the only known reference to the biology of an *Anisocyrtia* species. His Nearctic *A. perdita* (Haliday) concerns *A. nearctica* spec. nov. and it is a parasite of Calypttratae larvae in mushrooms.

Anisocyrtia perdita (Haliday)

(figs. 1-13, 20-23)

Alysia perdita Haliday, 1838a: 241; Thomson, 1895: 2298-2299.*Anisocyrtia perdita*; Marshall, 1895: 368-369; Shenefelt, 1974: 956.*Anisocyrtia longicauda* Tobias, 1962: 96 (syn. nov.); Fischer, 1971: 60-61 (redescription); Shenefelt, 1974: 955.

Material. — 1 ♂ (Museum Dublin), lectotype of *perdita* here designated: "hero" (small yellow label), "British Haliday 20.2.82/Box 10, AWS", "Alysia perdita Hal., Type!, ♂ A.W.S. 1.3.1934". The original description of *perdita* is based on this male from the Hebrides, caught in August. Later Haliday (1838b: 519) mentioned also a ♀ from Norway (Finnmark, July 1836, F. Walker; Museum Dublin, specimen examined), but this is not a type-specimen, since it was not mentioned in the original description. 2 ♀ (Thomson Collection, Lund): "Lpl" (= Lapland, mountainous part of North Sweden), "perdita" and "Norl" (= Norrland, North Sweden including coastal provinces); 4 ♀ (Rijksmuseum van Natuurlijke Historie, Leiden): 1 ♀, "Flätervålen, Dolarna, Sverige, 2-12.VIII.1982, G. van Rossem"; 2 ♀, "Sweden, Ly, Lpm, Fjällberg, Kroksjö, 8.III.1981, L. Huggert, Urwald"; 1 ♀, "Norway, Oppdal, Kongsvoll, Vestbekken, 9.VIII.1978, J.O. Solem". 12 ♀ + 10 ♂ (Canadian National Collection, Ottawa and Rijksmuseum van Natuurlijke Historie, Leiden): 2 ♀, 7 ♂, "Sweden, 1960, Aug. 5, N. side Torneträsk, W.R.M. Mason"; 1 ♀, "Sweden, Umlid, Ekshärad, July 23, 1960, W.R.M. Mason"; 1 ♀, 2 ♂, "Sweden, Lpld, Abisko, 400 m, July 28-31 1960, W.R.M. Mason"; 1 ♂, id., but Riksgränsen, Aug. 2 1960, 500 m; 3 ♀, "Abisko, Lpl, Sweden, 23. VIII.1951, J.R. Vockeroth"; 1 ♀, "Nr. Beechey L., N.W.T. [= Canada, North West Territories], 65°14'N 106°50'W, 14.VII.1966, G.E. Shewell"; 3 ♀, "Cowichan L., B.C. [= Canada, British Columbia], 18-28 Sept. 1966, J.A. Chapman"; 1 ♀, "Mt. Thornhill, nr. Terrace, B.C., 8.VIII.1960, B. Heming".

Redescription of figured ♀ from Oppdal, Norway, compared with lectotype of *perdita*. Length of fore wing 3.9 mm, of body 3.8 mm.

Head. — Antennal segments 31, length of third antennal segment 1.9 times fourth segment (fig. 5), length of third, fourth and penultimate segments 6.5, 3.7, and 2.1 times their width, respectively; segments of labial palp rather slender (fig. 22), but less in specimens from Abisko, Sweden (fig. 23, "form A"); length of maxillary palp 1.2 times height of head; face smooth and shiny; length of eyes in dorsal view 0.9 times temple: temple nearly parallel-sided behind eyes (fig. 10); POL : diameter of ocellus : OOL = 12 : 4 : 19; frons flat and smooth; clypeus strongly convex, with ventral margin differentiated and retracted in respect to rest of clypeus (fig. 7); malar space without suture, and its length 0.1 times basal width of mandible; mandible with fourth tooth ventrally and with incision between second and third tooth (fig. 7), its medial length 1.5 times its maximum width.

Mesosoma. — Length of mesosoma 1.3 times its height; pronope and antescutal depression absent; side of pronotum largely smooth (fig. 1); mesopleuron smooth; episternal scrobe deep and narrow (fig. 1); metapleural flange minute and acute apically; metapleuron smooth dorsally, ventrally with rugae; notauli only anteriorly impressed (fig. 1), absent on disk of

mesoscutum (fig. 11); mesoscutum smooth and glabrous, except some setae near imaginary notaulic courses; medio-posterior depression deep, narrow and rather long (fig. 11); scutellar sulcus deep and rather wide (fig. 11), with four carinae; scutellum smooth, also laterally; metanotum largely smooth (but in other specimens frequently sculptured) with complete medio-longitudinal carina and weakly protruding (fig. 1); surface of propodeum smooth, except for some short rugae near carina (fig. 11); medial carina of propodeum complete and areola absent; propodeal spiracle small, round and submedially situated (fig. 1).

Wings. — Fore wing: r near base of pterostigma (fig. 4); 2-SR of both wings unpigmented, but sclerotized; r : 3-SR : SR1 = 9 : 51 : 82; 2-SR : 3-SR : r-m = 14 : 51 : 17; 1-CU1 : 2-CU1 = 1 : 7; m-cu shortly postfurcal and parallel to 1-M (fig. 4); CU1b about as long as 3-CU1 (fig. 4).

Legs. — Hind coxa smooth; tarsal claws rather slender (fig. 9); length of femur, tibia and basitarsus of hind leg 5.2, 10.6 and 7.2 times their width, respectively; length of hind tibial spurs 0.2 and 0.3 times hind basitarsus; inner side of apex of hind tibia rather adpressed and normally brownish setose (fig. 19, 21); hind tarsus rather long setose (fig. 20).

Metasoma. — Length of first tergite 1.2 times its apical width, posterior half of surface rugulose, rest smooth (fig. 13); its dorsal carinae converging and distinct in basal half; dorsope medium-sized, rather shallow (fig. 13); length of ovipositor sheath 2.7 mm, 0.71 times fore wing, and 2.2 times hind tibia; hypopygium truncate apically.

Colour. — Black(ish); palpi, annellus, mandible, upper posterior corner of propleuron, tegulae and legs brownish-yellow; apex of hind tibia, hind tarsus and base of hind coxa narrowly infuscated; metasoma (except first tergite) dark brown; pterostigma, parastigma and veins brown; wing membrane subhyaline.

Variation. — Palaearctic specimens: length of fore wing 3.3-4.5 mm, of body 2.6-4 mm; length of third antennal segment 1.5-2 times fourth segment; antennal segments of ♀ 30 (3), 31 (2), 32 (1), 33 (3), 34 (1), of ♂ 32 (1), 33 (1), 34 (1), 35 (2), and 36 (3); labial palp moderately slender (fig. 22) to rather robust (fig. 23, "form A"); length of ovipositor sheath 1.7-2.7 mm, and 0.5-0.72 times fore wing. Nearctic specimens: length of fore wing 2.9-3.8 mm; length of third antennal segment 1.8-1.9 times fourth segment; antennal segments 28 (1), 29 (2), and 33 (1); length of ovipositor sheath 1.5-2 mm, 1.4-1.5 times hind tibia, and 0.5-0.57 times fore wing.

Note. — The interpretation of *A. longicauda* is based on the redescription by Dr. M. Fischer.

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