

**Revision of the Central European species
of *Aclista* (Diapriidae, Hymenoptera). Part II. *Aclista insolita*
Nixon, 1957 *Aclista dubia* Kieffer, 1909 and similar species**

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Abstract. The Central European species *Aclista insolita* Nixon, 1957, *Aclista dubia* Kieffer, 1909, *Aclista marginalis* Kieffer, 1909 and *Aclista longistilus* Kieffer, 1909 are revised and diagnosed and three new species are described: *Aclista vernalis* sp. nov. (Czech Republic, Slovakia), *Aclista elegantula* sp. nov. (Czech Republic, Slovakia, Austria) and *Aclista subtilis* sp. nov. (Czech Republic, Slovakia, Austria, Poland). The following new synonymies are proposed: *Aclista longistilus* (Kieffer, 1909) = *Xenotoma brachycera* Kieffer, 1910, syn. nov.; *Aclista marginalis* (Kieffer, 1909) = *Aclista mycale* Nixon, 1957, syn. nov.

Key words. Taxonomy, Hymenoptera, Diapriidae, *Aclista*, types, new species, synonymy, Central Europe.

Introduction

This is the second in a series of papers on the Central European species of *Aclista* Foerster, 1856, the purpose of which is to revise and diagnose all species based on the examination of types and comparison with other material. Genus *Aclista* is one of the most speciose and highly polymorphic genera of Diapriidae, containing 159 species worldwide (JOHNSON 1992). In the Palaearctic region, 104 species are recorded although the vast majority of them (98 species) come from Europe. Most species were described by KIEFFER (1909, 1910), however most of them are unrecognizable according to the descriptions alone. Due to the lack of recent revisions of the genus, species identification is difficult and relatively few species can be correctly identified using existing keys (NIXON 1957, WALL 1967, KOZLOV 1978). Since KIEFFER's (1916) monograph, the concept of the genus changed based on the designation of type species (MUESEBECK & WALKLEY 1956) and this new concept has been followed until recently (MACEK in press). The most important work on the subject is NIXON (1957) which, within the scope of the British species, provides a very useful paper based on the types preserved in BMNH, and adapted the nomenclature of species accordingly. This work revealed how badly a thorough reevaluation of previously described species is needed. My series of revisions of

single species and species groups aims to fill this gap. It is based only on morphological similarities, although it might not reflect their proper relationships.

Aclista insolita Nixon, 1957 is one of the most easily recognized species of the genus *Aclista* based on its short mandibles, long genae and, in females, both scape and median flagellomeres thickened. *Aclista dubia* (Kieffer, 1909) is still best diagnosed by a short malar keel extending between the eye and the base of the mandible. It differs from some species of the *Aclista scutellaris* (Thomson, 1859) species aggregate (MACEK in press) in the prominent malar keel, 15-segmented antennae in females and uniform pilosity of the fore tibia in males.

Material and methods

I have collected and identified all specimens, and these are now housed in the National Museum, Praha, Czech Republic (NMPC), unless stated otherwise. Most specimens were collected in the last three decades in flight intercept traps (treated with pyrethroid), in pan traps and by screen sweeping. Some specimens, including types, were borrowed or received from the following institutions:

BMNH	Natural History Museum, London, Great Britain (J. Noyes);
HNMH	Hungarian National History Museum, Budapest, Hungary (J. Papp);
MCSN	Museo Civico di Storia Naturale, Genova, Italy (W. Rainieri);
MNHN	Museum National d'Histoire Naturelle, Paris, France (J. C. Weulersse);
MZLU	Zoological Museum, Lund, Sweden (R. Danielsson);
NHMW	Naturhistorisches Museum, Wien, Austria (M. Fischer);
NHRS	Museum of Natural History, Stockholm, Sweden (I. Persson);
ZSMC	Zoologische Staatssammlung, München, Germany (H. Hilpert).

Other abbreviations used in the text:

F1-n	flagellomere 1-n
NR	nature reserve
OOL	distance between eye and posterior ocellus
POL	distance between hind ocelli

Map field codes for the Czech and Slovak localities are based on PRUNER & MÍKA (1996). Terminology of characters used here is adopted from MASNER (1991) and MACEK (1995) (see terms pygidium and prepygidium). Central Europe as understood here includes all countries surrounding the Czech Republic and Slovakia except the Ukraine.

Taxonomy

Aclista insolita Nixon, 1957

(Figs. 1, 8, 15, 22, 29, 36)

Aclista insolita Nixon, 1957: 66, 80, ♂, ♀.

Acoretus insolitus: HELLEN (1964): 20, 23.

Aclista insolita: WALL (1967): 157, 161.

Type locality. England, Somerset, Porlock district.

Type material. HOLOTYPE: ♀, 'England, Somerset, Porlock distr., 21.v.1934, Perkins lgt., G.E.J Nixon det.' (BMNH). PARATYPES: ♂♂ ♀♀, 'Sweden, Skåne' (BMNH).

Additional material examined. CZECH REPUBLIC: BOHEMIA bor., Kadaň (5645), 3.vi.1982, 12 spec.; BOHEMIA centr., Kublov (6049), 14.v.1993, 24 spec.; BOHEMIA mer., Olešník (6852), 11.vi.1982, 22 spec.; BOHEMIA occ., Zbiroh (6148), 3.vi.1985, 11 spec.; BOHEMIA or., Orlické hory Mts., NR Trčkov (5764), 25.v.1994, 43 spec., J. Ježek et J. Hájek lgt. MORAVIA mer., Tvrdonice (7267), 15.v.1984, 13 spec. SLOVAKIA mer.: Silica (7489), 15.v.1986, 14 spec.; Gombasek (7588), 17.v.1986, 11 spec. POLAND mer.: Ochotnica Gorna, 8.vi.1989, 1 spec; all J. Macek lgt. & det. unless stated otherwise.

Diagnosis. Head in front view triangular; mandibles short and feeble, shortly overlapping at tips; mouth aperture narrow; toruli separated by deep cleft; eyes shorter than genae; both scape and median flagellomeres thickened in middle; epomia strongly developed; notauli deep, diverging posteriorly; radial cell longer than marginalis; pygidium large, longer than prepygidium; prepygidium with narrow, partly telescoped segments; aedeagus narrowed apically.

Variability. Female specimens with extensive variation range in following characters: colour brown or black; appendages pale or dark; flagellomeres rectangular, quadrate or transverse; face smooth or finely rugose; subantennal suture distinct or indistinct, becoming confluent with subantennal rugosity; pronotal shoulders sharply prominent or angular; radial cell long or short and narrow or wide (both attributes combined); radial vein straight or arcuate; plicae of propodeum parallel or slightly converging and projecting or not projecting posteriorly (both attributes combined); petiole stout or slender and smoothly ribbed or finely rugose (both attributes combined); gaster stout or slender. Males without any such variation.

Differential diagnosis. *Aclista insolita* is easily recognised from other *Aclista* by having both the scape and the flagellum distinctly thickened in the middle (only in females), short and feeble mandibles, a deep cleft between the toruli and indistinctly foveate facial grooves confluent with the subantennal rugosity (the latter three characters in both sexes).

Bionomy. Hosts unknown; a vernal species with flight period from April to June.

Distribution. The species is known from England (NIXON 1957), Switzerland (WALL 1967), the Czech Republic (MACEK 1989), Finland (HELLÉN 1964), Sweden (NIXON 1957) and European Russia (KOZLOV 1978). New for Poland and Slovakia.

Aclista dubia (Kieffer, 1909)

(Figs. 3, 10, 17, 24, 31, 38)

Anectata (*Acoretus*) *dubia* Kieffer, 1909: 543, ♀.

Xenotoma (*Acoretus*) *dubia*: KIEFFER (1910): 32.

Xenotoma (*Zelotypa*) *dubia*: KIEFFER (1916): 543, 546.

Aclista dubia: NIXON (1957): 77, 81; KOZLOV (1978): 566, 569.

Acoretus dubius: HELLÉN (1964): 20, 24.

Type locality. France, Andréoz.

Type material. HOLOTYPE: ♀, 'Andréoz, France, de Gaulle lgt., J. Kieffer det.' (MNHN).

Additional material examined. CZECH REPUBLIC: BOHEMIA centr., Mořinka (6051), 29.vi.1985, 12 spec.; Třebotov (6051), 3.vii.1985, 35 spec.; BOHEMIA mer., Stráž nad Nežárkou

(6955), 10.vii.1985, 8 spec.; BOHEMIA or., Městec Králové (5757), 13.vii.1988, 6 spec. MORAVIA mer., Vranov nad Dyjí (7060), 12.viii.1997, 4 spec. **SLOVAKIA** centr.: Kremnické vrchy Mts., Veľký Son hill (7280), 6.viii.1985, 1 spec.; Nízke Tatry Mts., Kyslá valley (7186), 9.viii.1984, 1 spec. **POLAND** centr.: Warszawa, NR J. Sobieckiego, 26.viii.1980, J. Ekipa lgt., 2 spec.; POLAND bor.: Sliwice, 22.ix.1987, 1 spec.; all J. Macek lgt & det. unless stated otherwise.

Diagnosis. Head transverse; toruli with deep cleft between; malar space with short keel extending from posterior basal corner of mandible about halfway towards eye; antenna gradually becoming darker in distal half; scape bowed, twice as long as flagellomere 1; basal flagellomeres cylindrical, distal ones moniliform; mandibles sickle-shaped, prominent; toruli finely rugose below; subantennal sutures indistinct, very short; lateral keel of pronotum sharply developed; notauli continuous, diverging posteriorly; inner plicae of propodeum converging and sharply pointed posteriorly; radial cell narrow, relatively short, one and half time as long as marginal vein; petiole with irregular longitudinal rugosity; gaster fusiform, with dense semidecumbent pubescence at sides of its distal half; base of macrotergite with medial furrow and dense striation.

Variability. The examined material shows no apparent variation.

Differential diagnosis. The species differs easily from all other *Aclista* by the combination of the following two characters: malar keel extending from the base of mandibles as far as the middle of malar area and a deep cleft between antennal toruli.

Bionomy. Hosts unknown; flight period from June to September.

Distribution. England (NIXON 1957), France (KIEFFER 1916), Germany (NIXON 1957), Sweden (NIXON 1957), Finland (HELLÉN 1964), European Russia (KOZLOV 1978) and Czech Republic (MACEK 1989). New for Poland and Slovakia

Aclista longistilus (Kieffer, 1909)

(Figs. 4, 11, 18, 25, 32, 39)

Anectata (*Anectata*) *longistilus* Kieffer, 1909: 533, ♀.

Xenotoma brachycera Kieffer, 1910: 607, ♂, **syn. nov.**

Xenotoma (*Xenotoma*) *brachycera*: KIEFFER (1910): 32.

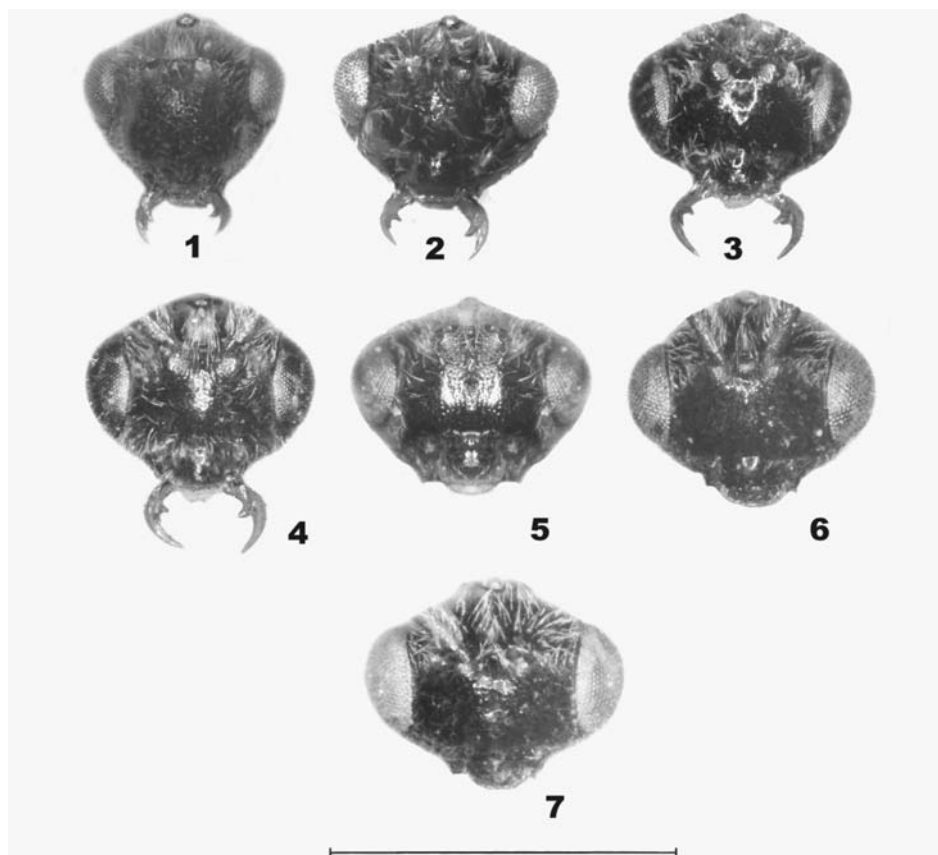
Anectata longistilus: KIEFFER (1916): 508, 511.

Aclista longistilus: JOHNSON (1992): 36.

Type locality. France, Maisson-Laffite.

Type material. *Anectata longistilus*: HOLOTYPE: ♀, 'Vittoria, Italy, Mantero lgt., J. Kieffer det.' (MCSN). *Xenotoma brachycera*: HOLOTYPE: ♂, 'Maisson-Laffite, France, de Gaulle lgt., J. Kieffer det.' (MNHN).

Additional material examined. **CZECH REPUBLIC:** BOHEMIA centr., Dobřichovice env., Karlík (6051), 28.viii.1984, 18 spec.; Praha-Krč (5952), 13.ix.1984, 6 spec.; Praha-Chuchle (6052), 14.ix.1984, 2 spec.; Gryblá hill (6153), 1.vii.1982, 1 spec.; Beroun dist., Vůznice brook (5950), 30.vi.1985, 2 spec.; Medník hill (6152), 16.vi.1985, 2 spec. **MORAVIA** mer.: Podyjí NP, Čížov (7161), 21.vii.1997, 1 spec.; Kobyly (7067), 13.viii.1984, 1 spec.



Figs. 1-7. Head, frontal view (female). 1 – *Aclista insolita* Nixon, 1957; 2 – *A. vernalis* sp. nov.; 3 – *A. dubia* Kieffer, 1909; 4 – *A. longistilus* Kieffer, 1909; 5 – *A. marginalis* Kieffer, 1909; 6 – *A. elegantula* sp. nov.; 7 – *A. subtilis* sp. nov. Scale = 1 mm.

SLOVAKIA bor.: Turzovka (6577), 18.vii.1938, 1 spec., F. Gregor lgt.; all J. Macek lgt. & det. unless stated otherwise.

Diagnosis. Head in frontal view suboval, mandibles long, sickle-shaped, widely overlapping; mouth aperture narrow, toruli separated by shallow cleft; eyes large, its longest diameter slightly longer than malar space; antennae in female 15-segmented, with apical flagellomeres transverse and loosely articulated (submoniliform); antennae in males 14-segmented, fili-form, flagellomere 1 not emarginated at base; scape cylindrical, curved; epomia strongly developed; notauli deep, slightly diverging posteriorly, radial cell short, slightly longer than marginal vein, propodeum transverse with strongly converging plicae; petiole cylindrical, longitudinally ribbed; gaster subovoid, pygidium as long as prepygidium; segments of prepy-

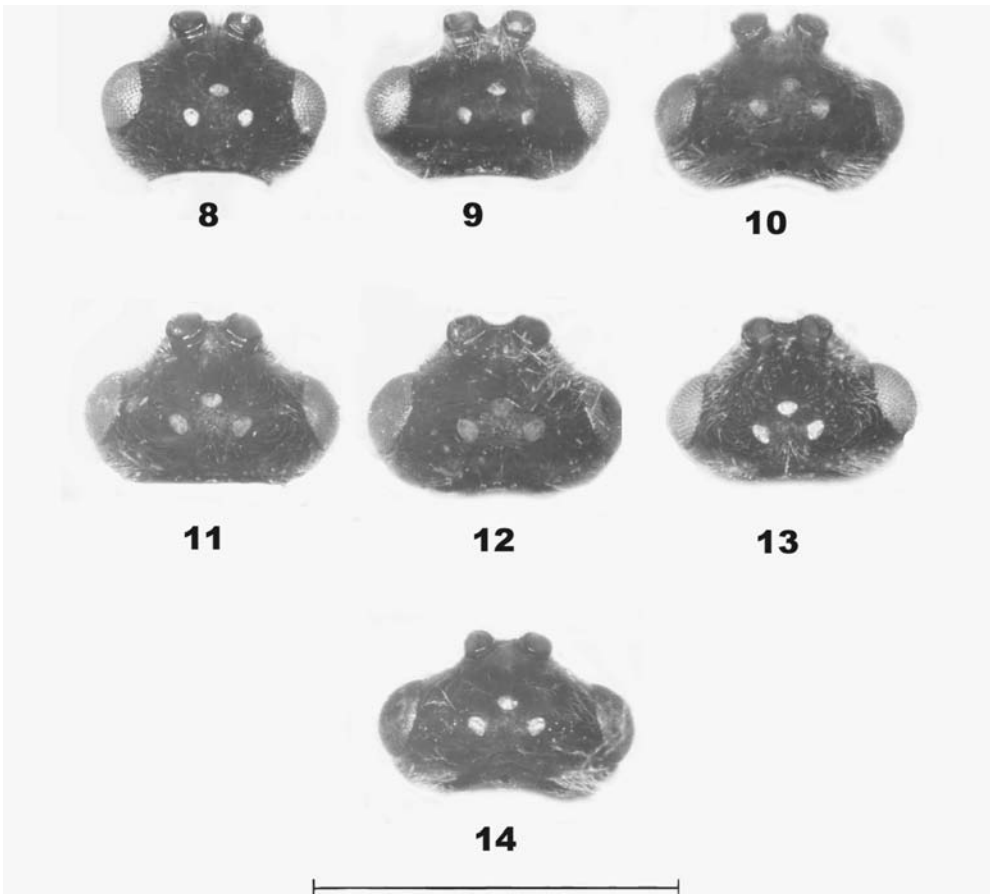
gidium ring-like, loosely articulated; basal striation of macrotergite even, with indistinct medial furrow.

Variability. The examined material shows no apparent variation.

Differential diagnosis. The species is similar to *A. marginalis* but differs from it in the following characters: (i) antennae in females shorter with three preapical flagellomeres transverse and submoniliform; (ii) genal carina absent; (iii) antennal sockets prominent with a shallow cleft; (iv) frons smooth; (v) propodeum with sharp projections posteriorly; (vi) radial cell wide; (vii) longer petiole with distinct longitudinal ribs; and (viii) gaster covered with long semidecumbent hairs.

Bionomy. Hosts unknown; flight period June to September.

Distribution. France (KIEFFER 1916), Italy (KIEFFER 1916). New for Slovakia and the Czech Republic.



Figs. 8-13. Head, dorsal view (female). 8 – *Aclista insolita* Nixon, 1957; 9 – *A. vernalis* sp. nov.; 10 – *A. dubia* Kieffer, 1909; 11 – *A. longistilus* Kieffer, 1909; 12 – *A. marginalis* Kieffer, 1909; 13 – *A. elegantula* sp. nov.; 14 – *A. subtilis* sp. nov. Scale = 1 mm.

Comment. The above synonymy is based on the comparison of types with other material available.

***Aclista marginalis* (Kieffer, 1909)**

(Figs. 5, 12, 19, 26, 33, 40)

Anectata (*Anectata*) *marginalis* Kieffer, 1909: 534, ♀.

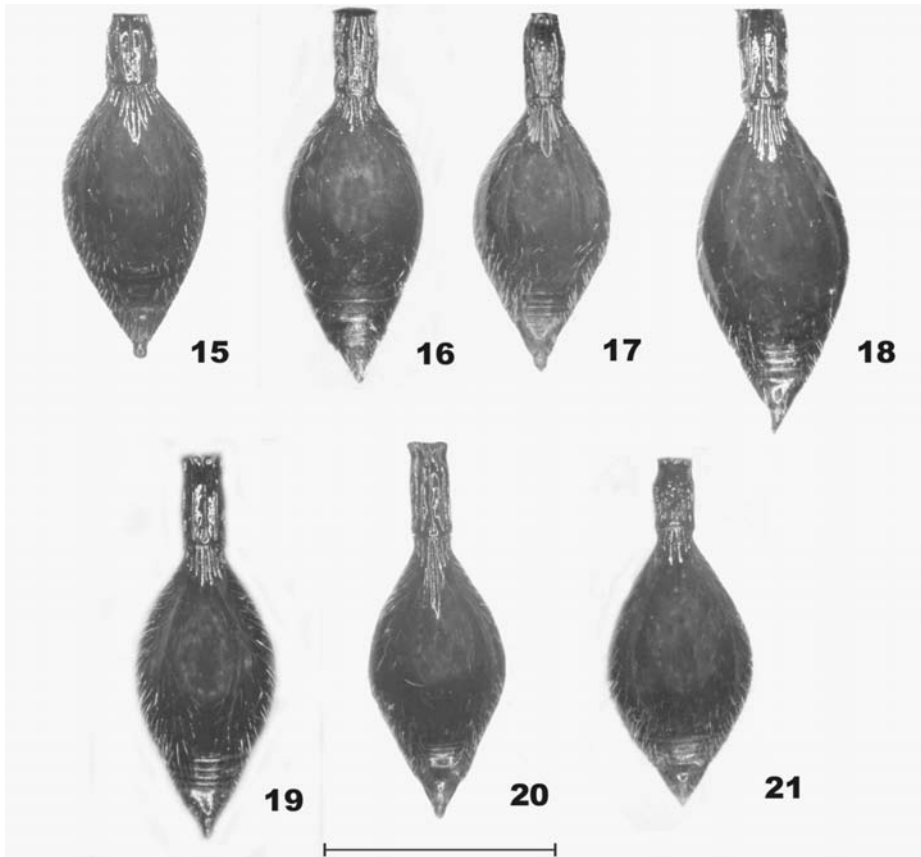
Anectata marginalis: KIEFFER (1916): 508, 512.

Aclista mycale Nixon, 1957: 77, ♀, **syn. nov.**

Aclista marginalis: JOHNSON (1992): 37.

Type locality. France, Amiens.

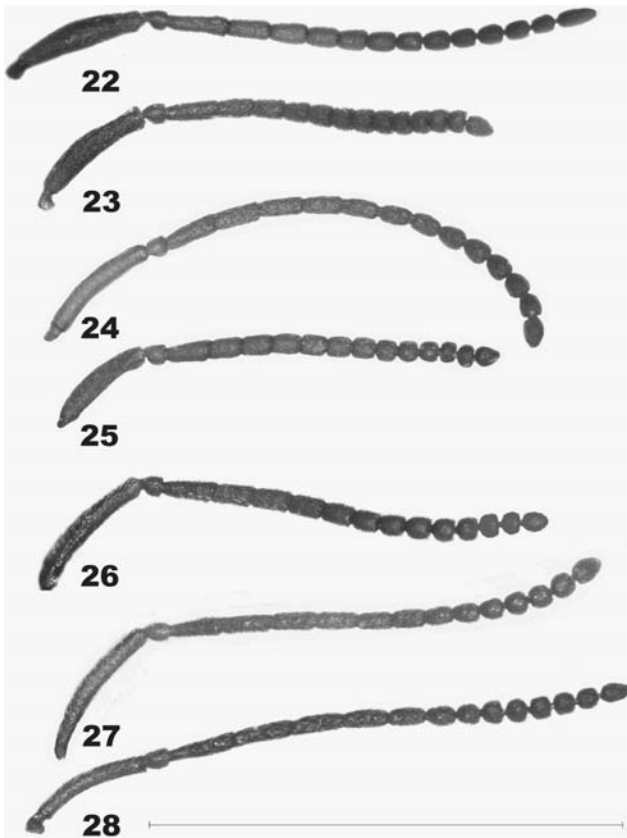
Type material. *Anectata* (*Anectata*) *marginalis*: HOLOTYPE: ♀, 'Amiens, France, Carpentier lgt., J. J. Kieffer det.' (MNHN). *Aclista mycale*: HOLOTYPE: ♀, 'Skåne, Röstänga, 6.vii.1938, J.F.Perkins lgt., G.E.J.Nixon det.' (BMNH).



Figs. 15-21. Metasoma, dorsal view (female). 15 – *Aclista insolita* Nixon, 1957; 16 – *A. vernalis* sp. nov.; 17 – *A. dubia* Kieffer, 1909; 18 – *A. longistilus* Kieffer, 1909; 19 – *A. marginalis* Kieffer, 1909; 20 – *A. elegantula* sp. nov.; 21 – *A. subtilis* sp. nov. Scale = 2 mm.

Additional material examined. CZECH REPUBLIC: BOHEMIA centr., Praha-Radotín, (6052), 3.vii.1985, 1 spec.; Karlštejn (6051), 29.vi.1985, 1 spec.; Nižbor (5950), 26.vi.1982, 1 spec.; Beroun distr., Velíz (6049), 6.vi.1981, 1 spec.; BOHEMIA mer., Tábor distr., NR Černická obora (6553), 1.vi.1983, 1 spec.; Purkarec (6852), 16.vi.1984, 1 spec.; BOHEMIA bor., České Středohoří Mts., Ronov hill (5352), 23.vii.1984, 1 spec.; BOHEMIA or., NR Králický Sněžník, Mlýnský potok brook (5866), 17.vii.2001, 2 spec.; Orlické hory Mts., Zvonkové údolí valley (5764), 21.vii.2003, 1 spec.; Orlické hory Mts., NR Kačerov (5764), 28.vi.1994, 1 spec.; Železné hory Mts., NR Polom (6160), 23.v.1996, 2 spec. MORAVIA mer.: Bulhary (7166), 1.ix.1986, 1 spec.; all J. Macek lgt. & det.

Diagnosis. Head in frontal view suboval, mandibles long, sickle-shaped, widely overlapping; mouth aperture narrow, toruli separated by shallow cleft; eyes large, its longest diameter



Figs. 22-28. Antennae, lateral view (female). 22 – *Aclista insolita* Nixon, 1957; 23 – *A. vernalis* sp. nov.; 24 – *A. dubia* Kieffer, 1909; 25 – *A. longistilus* Kieffer, 1909; 26 – *A. marginalis* Kieffer, 1909; 27 – *A. elegantula* sp. nov.; 28 – *A. subtilis* sp. nov. Scale = 2 mm.

slightly longer than malar space; antennae in females 15-segmented, subfiliform, with submoniliform apical flagellomeres; antennae in males filiform, flagellomere 1 not emarginate at base; scape cylindrical, bowed; epomia distinct; notauli deep, diverging posteriorly, radial cell short, slightly longer than marginalis, propodeum transverse with strongly converging plicae and with large and prominent spiracles; petiole cylindrical, ribbed longitudinally; gaster subovoid, pygidium as long as prepygium; segments of prepygidium ring-like, loosely articulated, basal striation of macrotergite with distinct medial furrow.

Variability. The examined material shows no apparent variation.

Differential diagnosis. *Aclista marginalis* is similar to *A. longistilus* from which it differs in the following characters: (i) propodeum with strong lamellate inner plicae; (ii) propodeal spiracle large and prominent; (iii) antennae including scape fuscous with submoniliform preapical flagellomeres (females) and (iv) legs dark.

Bionomy. Hosts unknown; flight period from May to September

Distribution. France (KIEFFER 1916), Sweden (NIXON 1957). New for the Czech Republic

Comments. The above synonymy is based on the comparison of types with other material available.

***Aclista vernalis* sp. nov.**

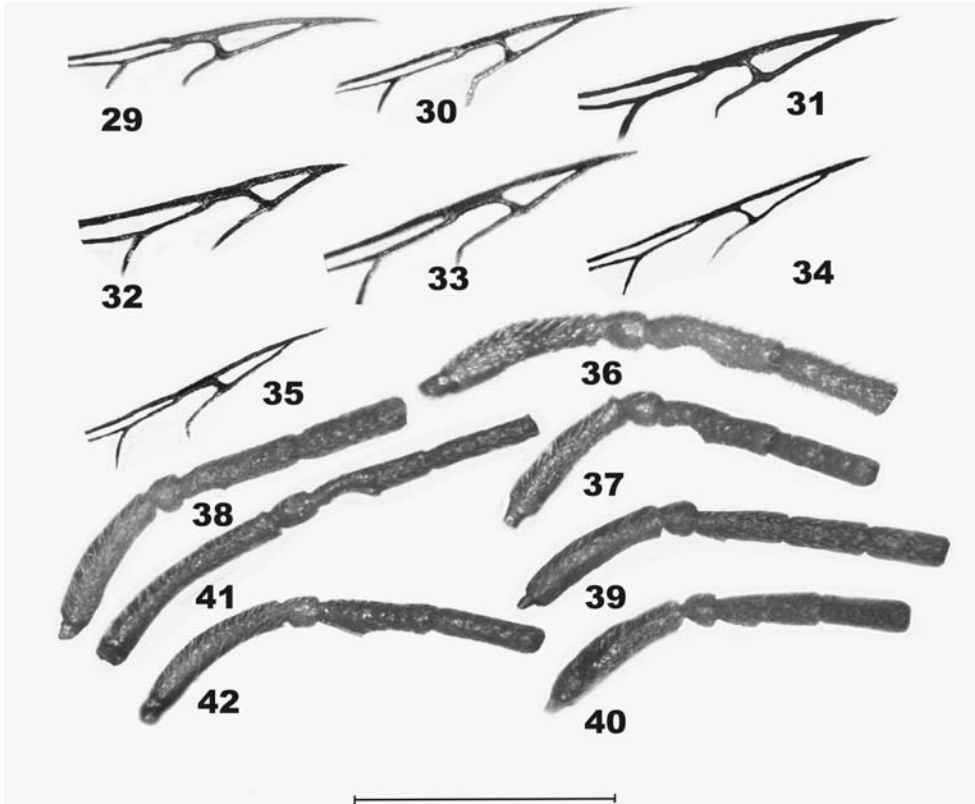
(Figs. 2, 9, 16, 23, 30, 37)

Type locality. Czech Republic, Čelákovice env., NR Lipovka.

Type material. HOLOTYPE: ♀, 'CZ, Bohemia centr., Čelákovice env., Lipovka res., (5854), 4.-19.v.1993, Macek lgt. et det.' (NMPC). ALLOTYPE: ♂, same label data as holotype (NMPC). PARATYPES: **CZECH REPUBLIC:** BOHEMIA centr., Čelákovice env., NR Lipovka (5854), 4.-19.v.1993, 8 ♀♀ 3 ♂♂; Praha-Kunratice, Nový Hrádek ruin (5952), 18.-25.v.1992, 3 ♀♀ 10 ♂♂; Kunratice park (5952), 5.-18.v.1992, 3 ♀♀ 4 ♂♂; Krčský les forest (5952), 4.v.1993, 1 ♀ 1 ♂; 6.v.1980, 1 ♂; NR Křivoklátsko, Jestřábec forest (6049), 4.vi.1984, 1 ♂. **MORAVIA** mer., Lanžhot (7267), 15.v.1984, 1 ♀ 1 ♂, all J. Macek lgt. et det. (NMPC). **SLOVAKIA** centr.: Cerová vrchovina Mts., Pohanský vrch hill (7785), 14.v.1985, 1 ♀ 2 ♂; Obručná hill (7785), 14.v.1985, 2 ♂♂; Ragáč hill (7785), 15.v.1985, 2 ♂♂; **SLOVAKIA** occ.: Zobor hill (7674), 23.v.1987, 3 ♀♀ 3 ♂♂, all J. Macek lgt. & det. (NMPC).

Description. Female (holotype). Length 3.8 mm; colour black; antennae, legs, mandibles and palpi brownish.

Head in dorsal view strongly transverse, in frontal view subtriangular with smooth face, prominent antennal sockets, toruli separated by deep cleft; vertex convex; temples converging posteriorly; ocelli large, OOL > POL; longest eye diameter slightly shorter than malar space; eyes pubescent; head in lateral view higher than long; antennal sockets slightly rugose below; subantennal furrows short, indistinct, confluent with fine subantennal rugosity; tentorial pits placed in deep hollows; mouth aperture shorter than malar space; clypeus convex, smooth; mandibles overlapping slightly; antennae incrassate, 15-segmented with very short, dense pubescence; scape narrowed towards apex, slightly curved, about twice as long as flagellomere 1; flagellomeres becoming shorter and more transverse towards apex.



Figs. 29-42. 29-35 – fore wing venation (female). 29 – *Aclista insolita* Nixon, 1957; 30 – *A. vernalis* sp. nov.; 31 – *A. dubia* Kieffer, 1909; 32 – *A. longistilus* Kieffer, 1909; 33 – *A. marginalis* Kieffer, 1909; 34 – *A. elegantula* sp. nov.; 35 – *A. subtilis* sp. nov. 36-42 – proximal part of antenna, lateral view (male). 36 – *A. insolita*; 37 – *A. vernalis* sp. nov.; 38 – *A. dubia*; 39 – *A. longistilus*; 40 – *A. marginalis*; 41 – *A. elegantula* sp. nov.; 42 – *A. subtilis* sp. nov. Scale = 1 mm (Figs. 29-35) and 0.7 mm (Figs. 36-42).

Mesosoma convex, as wide as head; pronotal shoulders sharply prominent; epomia strong; lateral pronotum strongly impressed, smooth and very shiny, not visible from above; the pronotal shoulder connected with tegula by distinct upper rim lining the sulcus; mesoscutum convex; notauli continuous diverging posteriorly; scutellum convex, smooth, with large subquadrate anterior fovea; lateral foveae smooth, with a very fine tuft of pubescence; mesopleura smooth, with large scrobe in middle; dorsellum with conical tubercle in middle; lateral sides of metanotum smooth with irregular puncturation; propodeum slightly transverse, its dorsal surface quadrate, sparsely pubescent; posterior rim of propodeum with raised ledge; medial keel of propodeum simple; outer plicae turned outwards posteriorly, sharply pointed posteriorly, inner plicae not prominent posteriorly.

Wings slightly infumate; marginal vein slightly shorter than parastigma; radial cell closed, 1.5 times as long as marginalis; postmarginal vein longer than marginal vein; stigmal vein slightly oblique to marginal vein, shorter than marginal vein.

Petiole subcylindrical and smooth with irregular longitudinal rugosity; gaster fusiform, with slightly upturned pygidium, sparsely pubescent; base of macrotergite as wide as petiole; basal sculpture of macrotergite with long medial furrow and short, fine and fan-shaped contiguous striation; prepygidial segments partly telescoped in repose; pygidium very short, slightly upturned.

Male (allotype). Differs from female in 14-segmented filiform antennae; scape slender, shorter than F1; F1 with semicircular emargination on basal third.

Variability. The examined material shows no apparent variation.

Differential diagnosis. Based on the morphological characters, *A. vernalis* sp. nov. has an intermediate position between *A. prolongata* (Kieffer, 1907) and *A. insolita*. It differs from the former species in the slender blackish antennae with subtle apical segment, short mandibles, short marginal cell and subquadrate scutellar fovea. From *A. insolita* it differs in the flagellum and scape not narrowed at the apex and in the more transverse head in frontal view.

Etymology. Adjective *vernalis* (Latin) = spring; referring to the spring flight period of the species.

Bionomy. Hosts unknown; flight period from May to June.

Distribution. So far known only from the Czech Republic and Slovakia.

***Aclista subtilis* sp. nov.**

(Figs. 7, 14, 21, 28, 35, 42)

Type locality. Czech Republic, Sokolov district, Svatý Jiří strip mine.

Type material. HOLOTYPE: ♀, 'Czech Republic, Sokolov distr., Starý Jiří (5742), 6.vii.2001, Macek lgt. et det.' (NMPC). ALLOTYPE: ♂, 'Czech Republic, Bohemia cent., Karlštejn (6051), 10.viii.1986, Macek lgt. et det.' (NMPC). PARATYPES: **CZECH REPUBLIC:** BOHEMIA or., Orlické hory Mts., NR Kačerov (5764), 28.vi.-16.vii.1994, 2 ♀♀; BOHEMIA centr., Klíčava river (5950), 16.vii.1986, 1 ♂; Čelákovice (5854), 25.ix.-9.x.1991, 1 ♀. MORAVIA mer., NP Podyjí, NR Braitava (7160), 8.ix.1993, 1 ♂, all J. Macek lgt. et det. (NMPC). **SLOVAKIA** centr.: Slovenské Rudohorie Mts., NR Dobročský prales (7284), 30.vii.1986, 1 ♂; J. Macek lgt. & det. (NMPC). **AUSTRIA:** STEIERMARK, Mariahof, Vockenbergr, 900 m a.s.l., 3.viii.1969, 1 ♂, M. Fischer lgt., J. Macek det. (NHMW). **POLAND** centr.: Warszawa, NR Park J. Sobieskiego, 7.-16.x.1980, 1 ♂; 26.viii.1980, 2 ♂♂, J. Ekipa lgt., J. Macek det. (NMPC).

Description. Female (holotype). Length 2.4 mm; colour dark brown; legs, mouthparts and tegulae yellowish; antennae brownish, scape yellowish brown.

Head in dorsal view strongly transverse and not wider than mesosoma, with moderately prominent antennal sockets; toruli distant from each other, with shallow cleft between them; vertex highly convex; temples strongly receding behind; ocelli small, OOL > POL; longest eye diameter longer than malar space; eyes large, pubescent; head in lateral view higher than

long, in frontal view suboval with smooth and lustrous face; genae strongly converging towards mouthparts; antennal sockets smooth below; subantennal furrows slightly indicated; epistomal sulcus developed; tentorial pits placed in deep hollows; mouth aperture shorter than malar space; clypeus (in lateral view) convex in middle, finely rugose; mandibles strongly sickle-shaped, overlapping; antennae long, slender, 15-segmented, submoniliform; scape slender, cylindrical, bowed, 2.5 times as long as F1; F1-F5 cylindrical, becoming gradually shorter towards apex of flagellum; F1 four times as long as wide; F6-F12 moniliform, with erect pubescence, F13 subconical, not larger than the preceding segment.

Mesosoma wide, convex, slightly narrower than head, with long decumbent pubescence; pronotal collar indistinct, pronotal shoulders rounded; epomia short; lateral pronotum strongly impressed, smooth and lustrous, not visible from above; sulcus connecting pronotal shoulder to tegula with indistinct upper rim; mesoscutum convex, wider than long, steeply falling anteriorly; notauli continuous, deep and diverging posteriorly; scutellum convex, smooth, with transverse, rounded anterior fovea; lateral foveae smooth, with a very fine tuft of pubescence; mesopleuron smooth, with large scrobe in middle; dorsellum not prominent medially; sides of metanotum smooth and concave; propodeum transverse with smooth sparsely pubescent dorsal surface; posterior rim of propodeum distinct and raised; medial keel of propodeum simple; inner plicae converging and not projecting posteriorly; space between median keel and inner plicae with short posterior keel.

Wings slightly infumate; marginal vein longer than half of parastigma; radial cell closed, long, twice as long as marginal vein; postmarginal vein far surpassing radial cell; stigmal vein oblique to marginal vein, slightly shorter than marginal vein, straight.

Petiole subcylindrical, smooth, with irregular longitudinal rugosity, twice as long as wide; gaster fusiform, very sparsely pubescent all over dorsal surface; base of macrotergite as wide as petiole; basal sculpture of macrotergite with distinct medial furrow reaching as far as one fourth of macrotergite and with short lateral striation; prepygidial segments ring-like, very narrow, tightly abutting each other; pygidium slightly longer than prepygidium, apical segment slightly upcurved.

Male (allotype). Differs from female as follows: (i) antennae 14-segmented, filiform, with slender flagellar segments; (ii) scape slender, slightly longer than F1; (iii) F1 cylindrical with prominent tyloid on basal third; (iv) pubescence of antennae short, semidecumbent and dense.

Variability. The examined material shows no apparent variation.

Differential diagnosis. Based on the morphological characters, *A. subtilis* sp. nov. resembles *Aclista elegantula* sp. nov. (see below) but differs in the following combination of characters: i) habitus stouter, mesosoma as wide as head (dorsal view); (ii) scape shorter and stouter, six times as long as wide; (iii) antennae brownish with a pale scape; (iv) propodeum rectangular with a narrow raised posterior ledge; (v) petiole stout, at most 2.5 times as long as wide, longitudinally rugose; (vi) scape in males nearly as long as F1; (vii) F3 in males not emarginate and with a long and straight tyloid at the base.

Etymology. Adjective *subtilis* (Latin) = subtle; referring to the general appearance of the species.

Bionomy. Hosts unknown; flight period from July to October

Distribution. So far known from Austria, the Czech Republic, Poland and Slovakia.

***Aclista elegantula* sp. nov.**

(Figs. 6, 13, 20, 27, 34, 41)

Type locality. Czech Republic, Králický Sněžník Mt., Horní Morava.

Type material. HOLOTYPE: ♀, 'Czech Republic, NR Králický Sněžník, Horní Morava (5866), 24.viii.2001, J. Macek lgt. et det.' (NMPC). ALLOTYPE: ♂, 'Czech Republic, NR Králický Sněžník, Mlýnský potok (brook) (5866), 2.viii.2001, J. Macek lgt. et det.' (NMPC). PARATYPES: **CZECH REPUBLIC:** BOHEMIA or., NR Králický Sněžník, Mlýnský potok brook (5866), 20.viii.2001, 1 ♀; same locality, 24.x.2001, 1 ♀; Horní Morava (5866), 24.viii.2001, 2 ♀♀; BOHEMIA or., Orlické hory Mts., NR Kačerov (5764), 18.vii.-5.viii.1994, 1 ♀; Pod Sfingou hill (5764), 19.viii.2003, 2 ♀♀; Bedřichovka (5664), 15.-24.ix.1993, 1 ♂. **SLOVAKIA** centr.: Nízke Tatry Mts., Štiavnica (7084), 6.viii.1984, 1 ♀; Pohorelá (7186), 31.vii.1984, 1 ♀; NR Ohnišťa (7084), 3.viii.1984, 1 ♂, all J. Macek lgt. & det. (NMPC). **AUSTRIA:** STEIERMARK, Vockenberg, Furtner Teich, 900 m a.s.l., 3.viii.1971, 4 ♀♀ 3 ♂♂; KÄRNTEN, St. Georgen, Längsee, 700 m a.s.l., 7.viii.1977, 1 ♀, all M. Fischer lgt., J. Macek det. (NMPC, NHMW); Zell am See, 3.x.1988, 1 ♀, R. Danielsson lgt., J. Macek det. (MZLU).

Description. Female (holotype). Length 3.3 mm; colour black; legs, mouthparts and tegulae yellowish; antennae yellowish brown, pedicel brownish.

Head in dorsal view strongly transverse, wider than mesosoma, in lateral view higher than long and in frontal view strongly transverse, with smooth, lustrous face; genae strongly converging towards mouthparts; antennal sockets slightly prominent, smooth below, with toruli separated by shallow cleft; vertex convex; temples strongly receding backwards; ocelli small, OOL > POL; eyes pubescent, in longest diameter longer than malar space; face lustrous; subantennal furrows short and distinct; epistomal sulcus distinct; tentorial pits placed in deep hollows; mouth aperture shorter than malar space; clypeus (in lateral view) moderately convex in middle, rugose; mandibles sickle-shaped and widely overlapping; antennae 15-segmented, long, slender, submoniliform; scape very slender, cylindrical, bowed, three times as long as F1; F1-F8 cylindrical, becoming gradually shorter towards apex; F1 three times as long as wide; F8 one and half times as long as wide, F9-F12 moniliform, with erect short pubescence, F13 subconical, not larger than F12.

Mesosoma wide, convex, slightly narrower than head, with long decumbent pubescence; pronotal collar indistinct, pronotal shoulders rounded; epomia short; lateral pronotum strongly impressed, lustrous, not perceptible from above; rim connecting pronotal spiracle with tegula obliterated; mesoscutum convex, as long as wide, rounded anteriorly; notauli continuous, deep and parallel posteriorly; scutellum convex, smooth, with subrectangular anterior fovea; lateral foveae smooth, with a very fine tuft of pubescence; mesopleura smooth, with large scrobe in middle; dorsellum with weak tubercle medially; sides of metanotum smooth and hollowed; propodeum transverse, with smooth, sparsely pubescent, dorsal surface; posterior rim of propodeum large and raised; medial keel of propodeum simple; inner plicae converging posteriorly and not prominent behind; outer plicae diverging and projecting posteriorly; space between median keel and inner plicae with short posterior keel.

Wings infumate; marginal vein longer than half of parastigma; radial cell twice as long as marginal vein; postmarginal vein far surpassing radial cell; stigmal vein oblique to marginal vein, slightly shorter than marginal vein, slightly curved.

Petiole subcylindrical, longitudinally ribbed, three times as long as wide; gaster fusiform, sparsely pubescent all over dorsal surface; base of macrotergite as wide as petiole; basal sculpture of macrotergite with distinct medial furrow extending as far as one third of macrotergite and with short lateral striation; prepygidial segments annular, very narrow, tightly abutting each other; pygidium as long as prepygidium, apical segment straight.

Male (allotype). Differs from female as follows: (i) antennae 14-segmented, filiform, with slender flagellar segments; (ii) scape slender, twice as long as F1; (iii) F1 emarginate on basal half; (iv) pubescence of antennae as long as flagellomeres wide, semidecumbent and dense.

Differential diagnosis. Based on the morphological characters, *A. elegantula* sp. nov. is similar to *A. subtilis* sp. nov. but differs in the following combination of characters (compare also the differential diagnosis of the latter species): (i) habitus slender, mesosoma narrower than head (dorsal view); (ii) scape very slender, seven times as long as wide; (iii) antennae blackish with black scape; (iv) propodeum quadrate with large raised posterior ledge; (v) petiole long, three times as long as wide, longitudinally ribbed; (vi) scape in males twice as long as F1; and (viii) F3 in males emarginate with a short tyloid at the base.

Variability. The examined material shows no apparent variation.

Etymology. Adjective *elegantulus* (Latin) = elegant; referring to the general appearance of the species.

Bionomy. Hosts unknown; flight period from July to October.

Distribution. So far known from Austria, the Czech Republic and Slovakia.

Acknowledgements

I am indebted to all curators who kindly provided types and further material of *Aclista* from their museum collections (see Material and Methods). This study was supported by the Ministry of Culture (grant no. MK 00002327201).

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