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Research article

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Revision of the Eurasian species of *Aegilips* Haliday, 1835 (Hymenoptera: Figitidae: Anacharitinae)

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Abstract. The knowledge of *Aegilips* in Eurasia is updated. One new species is described: *Aegilips insularis* Mata-Casanova and Pujade-Villar sp. nov., from Portugal (Madeira). The genus is also cited for the first time in the Indomalayan region with specimens of *A. atricornis* found in Northern India and Pakistan. *Aegilips curvipes* Giraud, 1860, *Aegilips gemellus* Belizin, 1961, *Aegilips laevis* (Hedicke, 1914), *Aegilips montanus* Belizin, 1951 and *Aegilips punctatus* Belizin, 1951 are synonymized with *A. nitidulus* (Dalman, 1823). *Aegilips vena* Fergusson, 1985 is synonymized with *Aegilips zaitzevi* Kovalev, 1974. *Aegilips notatus* Belizin, 1951, and *Aegilips punctulatus* Hedicke, 1928 are designated as incertae sedis. The known distributions of *A. atricornis*, *A. kozlovi*, *A. nitidulus* and *A. romseyensis* are expanded. Morphological differences are discussed and a key for Eurasian *Aegilips* species is also given.

Keywords. Anacharitinae, *Aegilips*, Palaearctic, Indomalayan, new species, taxonomy.

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Introduction

Aegilips Haliday, 1835 is a genus of cynipoid parasitoid wasps included in the Anacharitinae. Anacharitinae is one of 12 subfamilies currently comprising Figitidae (Paretas-Martínez *et al.* 2011), and can be distinguished from other figitid wasps by the presence of three synapomorphies (Ros-Farré *et al.* 2000): (1) rounded and continuous pronotal plate (Fig. 1a), (2) broadly overlapping mandibles and (3) triangular-shaped head in anterior view (Fig. 1d) The latter character is less clear due to a secondary expansion of the malar area in *Acanthaegilopsis*, *Proanacharis* and some species of *Xyalaspis* (Mata-Casanova *et al.* 2015a), as well as some *Aegilips*; the result is a more quadrate head shape in

anterior view (Fig. 1f). Anacharitinae currently includes nine genera: *Acanthaegilips* Ashmead, 1896, *Acanthaegilopsis* Pujade-Villar, 2013, *Aegilips* Haliday, 1835, *Anacharis* Dalman, 1823, *Calofigites* Kieffer, 1909, *Hexacharis* Kieffer, 1907, *Proanacharis* Kovalev, 1996, *Solenofigites* Díaz, 1979, and *Xyalaspis* Hartig, 1843 (Mata-Casanova & Pujade-Villar 2013). Regarding their biology, the aphid-feeding larvae of Hemerobiidae (Neuroptera) have been cited as hosts of some Anacharitinae (Díaz 1979; New 1979; Kyerich 1984; Miller & Lamdin 1985; Fergusson 1986; Cave & Miller 1987; Ronquist 1999; Buffington *et al.* 2012; Mata-Casanova *et al.* 2014a, 2018).

Aegilips is morphologically close to *Acanthaegilopsis* and *Xyalaspis* (Buffington *et al.* 2012; Mata-Casanova *et al.* 2014b), all three sharing short and coarsely sculptured petiole, transverse carinae on the lower mesopleuron and third metasomal tergum at least two times as long as the fourth and usually longer. The differentiation of these three morphologically similar genera is often troublesome; however, both *Acanthaegilopsis* and *Xyalaspis* possess a spine derived from the circumscutellar carina (Fig. 1b), a character absent in *Aegilips* (Fig. 1c).

Aegilips was described by Haliday in Walker (1835), based on Dalman material labeled as *Cynips nitidula* Dalman, 1823. In the original description the authors did not mention anything about the etymology of the genus, not assigning any gender to it. *Aegilips*, deriving from an adjective form which can be equally treated as feminine or masculine and without any statement of the describing author regarding the gender, should be treated as masculine according to ICZN article 30.1.4.2 (Alonso-Zarazaga pers. comm.) (ICZN, 1999). The pertinent nomenclatural changes have been made.

Aegilips is the most diverse of the Anacharitinae genera, with 27 described species worldwide prior to our study. It has a cosmopolitan distribution, being present in all continents except for Antarctica. Data for *Aegilips* in the Palaearctic region has been out of date for some time, and limited to Western Europe, with ten described species: *Aegilips bicolorata* Cameron, 1887, *Aegilips curvipes* Giraud, 1860, *Aegilips dalmani* Reinhard, 1860, *Aegilips fumipennis* Westwood, 1833, *Aegilips nitidulus* (Dalman, 1823), *Aegilips punctulatus* Hedicke, 1928, *Aegilips ruficornis* Cameron, 1883, *Aegilips rufipes* Westwood, 1833, *Aegilips rugicollis* Reinhard, 1860 and *Aegilips striolata* Cameron, 1883. The studies of Belizin (1951, 1961, 1973) extended the known distribution of the genus to the Caucasus, Central Asia and the Russian Far East, and added seven new species to the Palaearctic *Aegilips*: *Aegilips gemellus* Belizin, 1961, *Aegilips longicellus* Belizin, 1951, *Aegilips montanus* Belizin, 1951, *Aegilips notatus* Belizin, 1951, *Aegilips paucus* Belizin, 1961, *Aegilips punctatus* Belizin, 1951 and *Aegilips ustulatus* Belizin, 1973. Two more species were described by Kovalev (1974): *Aegilips kozlovi* Kovalev, 1974 and *Aegilips zaitzevi* Kovalev, 1974. The last revision on the Palaearctic *Aegilips* was done by Fergusson (1986), in which *A. bicolorata*, *A. dalmani*, *A. fumipennis*, *A. ruficornis*, *A. rufipes*, *A. rugicollis* and *A. striolata* were synonymized with *A. nitidulus*, and three new species from the British Isles were described: *Aegilips atricornis* Fergusson, 1985, *Aegilips romseyensis* Fergusson, 1985 and *Aegilips venus* Fergusson, 1985. Our previous work on *Xyalaspis* (Mata-Casanova *et al.* 2015a) showed that *Xyalaspis laevis* (Hedicke, 1914) belonged to *Aegilips; Anacharis flavidicornis* Kieffer, 1910 also belongs to *Aegilips* (Mata-Casanova *et al.* 2018). Thus, 16 species of *Aegilips* were known in the Palaearctic region when our study begun.

In this study, the Palaeartic species A. atricornis, *A. flavidicornis*, *A. kozlovi*, *A. longicellus*, *A. nitidulus*, *A. paucus*, *A. romseyensis*, *A. ustulatus* and *A. zaitzevi* are redescribed and the distribution area for some of them is expanded. *Aegilips curvipes*, *A. gemellus*, *A. laevis*, *A. montanus* and *A. punctatus* are established as synonyms of *A. nitidulus*, while *A. vena* is synonymized with *A. zaitzevi*. We describe *A. insularis* Mata-Casanova & Pujade-Villar sp. nov. from Madeira. Diagnostic characters for these species are given, and data about morphological features, known distribution area and biology are discussed. *Aegilips notatus* and *Aegilips punctulatus* Hedicke, 1928 are established here as incertae

sedis and are not included in the key because the original descriptions are insufficient and the type material has been apparently lost.

Material and methods

The material studied is deposited in the Canadian National Collection of Insects, Arachnids and Nematodes (CNC, Ottawa), the Museum für Naturkunde (ZMHB, Berlin), the Muséum national d'histoire naturelle (MNHN, Paris), the Natural History Museum (NHMUK, London), the Universitat de Barcelona (UB, Barcelona), the United States National Museum (USNM) and the Zoological Institute of the Russian Academy of Sciences (ZIN, Saint Petersburg).

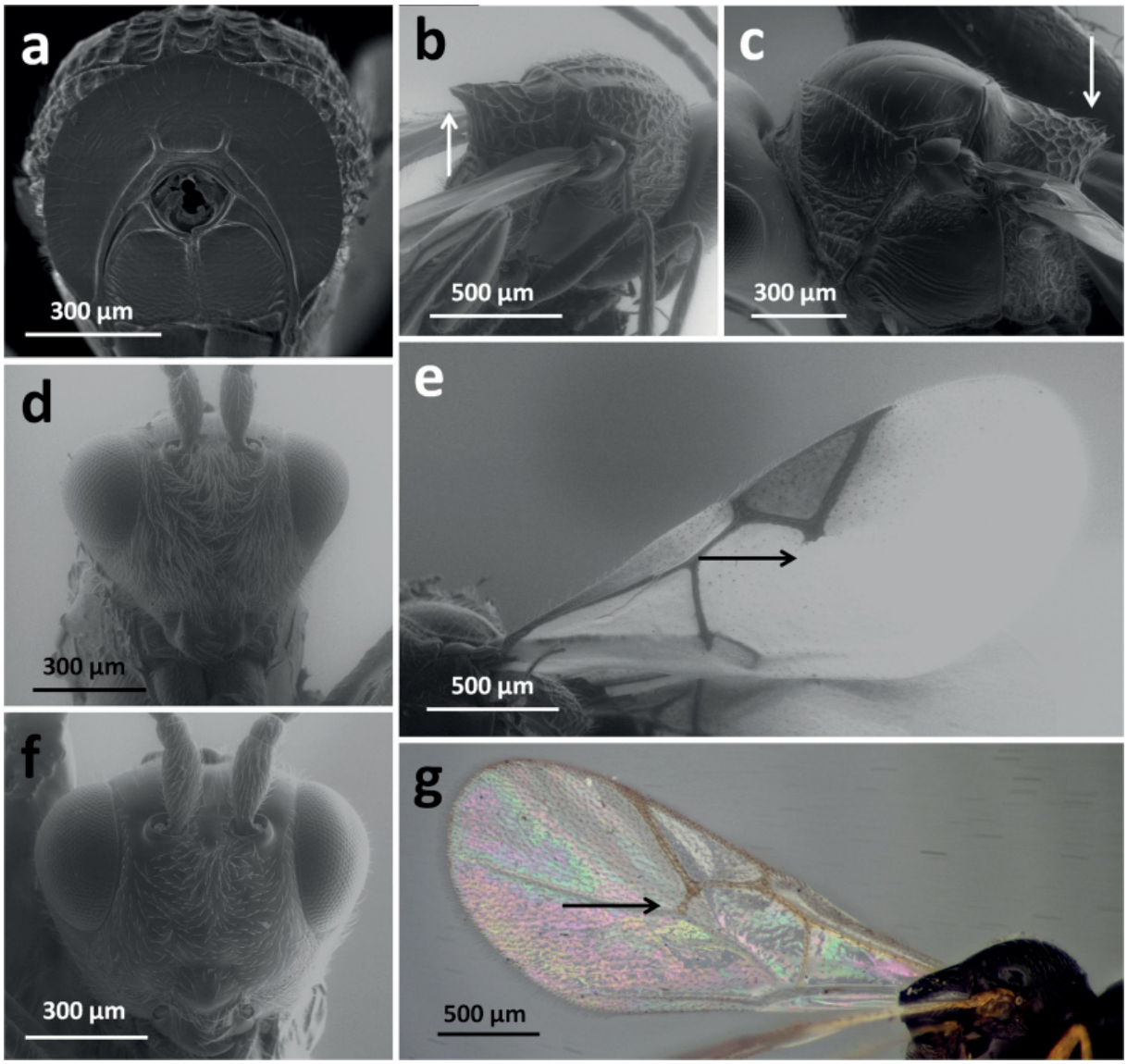

Fig. 1. a. Pronotal plate of *Acanthaegilopsis* sp. in anterior view. **b**. *Xyalaspis* sp., mesoscutum in lateral view. **c**. *Aegilips* sp., mesoscutum in lateral view. **d**. *Aegilips zaitzevi* Kovalev, 1974, head in anterior view. **e**. *Aegilips nitidulus* Dalman, 1823, forewing venation. **f**. *Aegilips romseyensis* Fergusson, 1985, head in anterior view. **g**. *Aegilips zaitzevi* Kovalev, 1974, forewing venation.

For this study 366 undetermined specimens were examined: 232 males and 134 females. Morphological terms used are those of Richards (1977), Ronquist (1995) and Ros-Farré *et al.* (2003). All measurements are relative except for the body length. Measurements and abbreviations include: F1–F12, first and subsequent flagellomeres; POL (post-ocellar distance) is the distance between the inner margins of the posterior ocelli; OOL (ocular–ocellar distance) is the shortest distance between the inner margin of the compound eye and the outer edge of the posterior ocellus; LOL (lateral–frontal ocellar distance) is the distance between the edges of the lateral and frontal ocelli. Antennal formula includes scape, pedicel and flagellomeres length and relative width in brackets.

The images included were made in 'Serveis Científico-Tècnics' of the University of Barcelona. The field-emission gun environmental scanning electron microscope (Quanta 200 ESEM, FEI, Hillsboro, OR, USA) was used for high-resolution imaging, under a low voltage (12.0 kV) and without gold-coating of the specimens in order to preserve the material.

Results

Phylum Arthropoda von Siebold, 1848
Subphylum Hexapoda Blainville, 1816
Class Insecta Linnaeus, 1758
Order Hymenoptera Linnaeus, 1758
Superfamily Cynipoidea Billberg, 1820
Family Figitidae Hartig, 1840
Subfamily Anacharitinae Thomson, 1862

Genus ***Aegilips*** Haliday, 1835

Key to the Eurasian species of *Aegilips*

1. Vein 2rm present (Fig. 1g) ..... ***A. zaitzevi*** Kovalev, 1974
– Vein 2rm absent (Fig. 1e) 2

2. Scutellum completely smooth, scutellar foveae weakly impressed and not sharply delineated (Fig. 2a–b) ..... ***A. insularis*** Mata-Casanova & Pujade-Villar sp. nov.
– Scutellum from strongly alutaceous to strongly areolate, scutellar foveae may be basally defined or not, but always clearly distinguishable from the rest of the scutellar surface (Figs 2e–f, 3b–d, f) 3

3. Notauli complete (Fig. 2e–g) 4
– Notauli incomplete, effaced in anterior mesoscutum. (Fig. 3b–d, f) 7

4. Notauli with clearly defined horizontal carinae (Fig. 2e–f); pronotum carinate across its surface (Fig. 2c) 5
– Notauli lacking horizontal carinae; if present, then very weak (Fig. 2g); pronotum smooth to coarse, at most with few ventral carinae (Fig. 2d) 6

5. Region between notauli region strongly carinate, scutellum areolate (Fig. 2e) .... ***A. kozlovi*** Kovalev, 1974
– Region between notauli smooth and shiny; central scutellum smooth, only margins are areolate (Fig. 2f) ..... ***A. romseyensis*** Fergusson, 1975

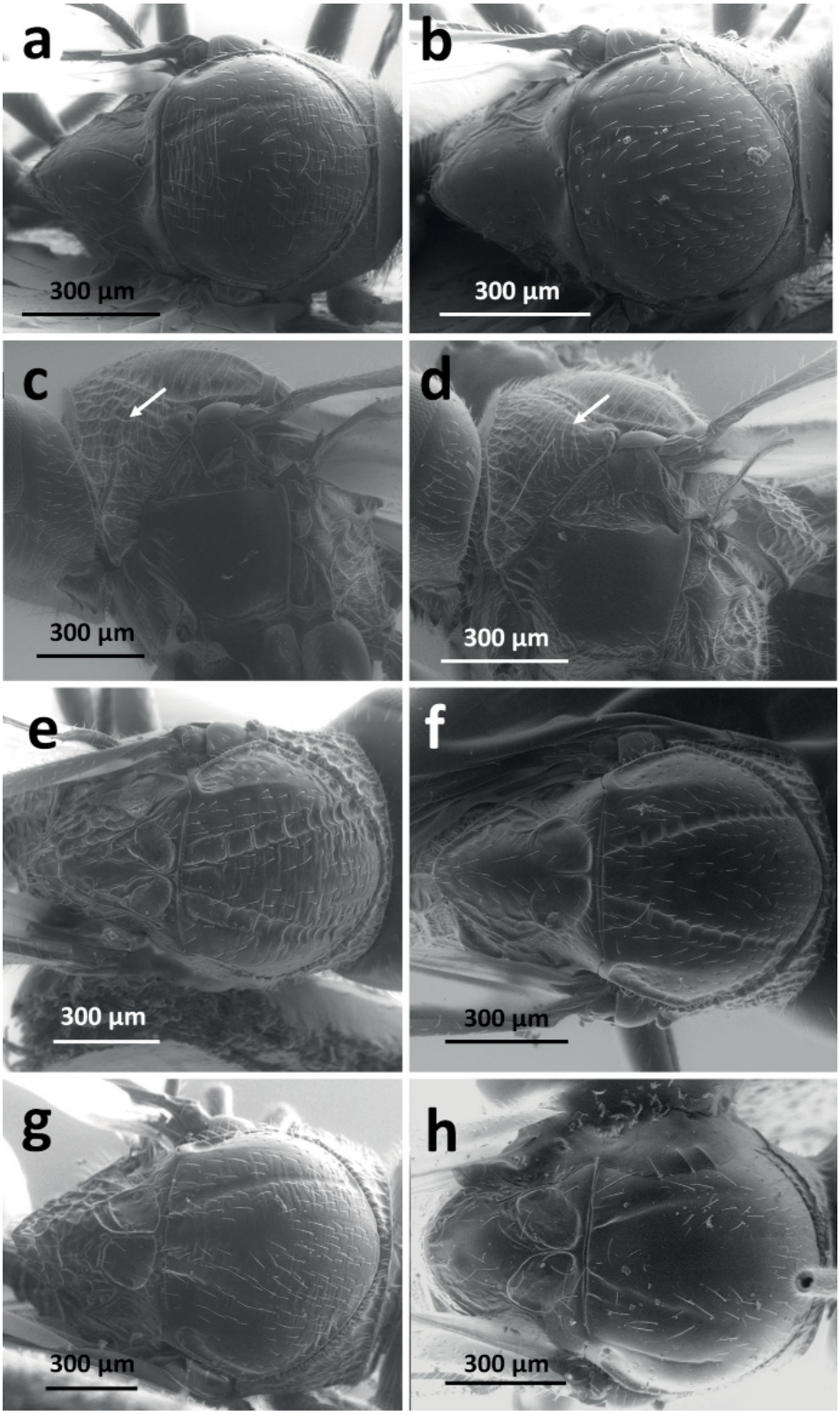

Fig. 2. a. *Aegilips insularis* Mata-Casanova & Pujade-Villar sp. nov, 2014, ♂, mesosoma in dorsal view. **b**. *A. insularis*, ♀, mesosoma in dorsal view. **c**. *A. romseyensis* Fergusson, 1985, mesosoma in lateral view. **d**. *A. nitidulus* Dalman, 1823, mesosoma in lateral view. **e**. *A. kozlovi* Kovalev, 1974. **f**. *A. romseyensis*. **g**. *A. nitidulus*. **h**. *A. zaitzevi* Kovalev, 1974.

6. Mesopleuron with some antero-basal carinae which can be anteroposteriorly extended but never covering most of mesopleural surface (Fig. 2d) ..... ***A. nitidulus*** (Dalman, 1823)
– Mesopleuron with densely wrinkled in anterior to central parts (Fig. 3a) .... ***A. ustulatus*** Belizin, 1973

7. Scutellar foveae not defined posteriorly, interfoveal line incomplete (Fig. 3b) .... ***A. longicellus*** Belizin, 1951
– Scutellar foveae defined posteriorly by a carina, which can be more or less apparent, but always distinguishable; interfoveal line complete (Fig. 3c–f) 8

8. Scutellum alutaceous; short, blunt projection present posteriorly (Fig. 3c) .... ***A. flavidicornis*** (Kieffer, 1911)
– Scutellum areolate; round, not projecting posteriorly (Fig. 3d–f) 9

9. Notauli excavated, extending over ⅓ of mesoscutal total length, almost reaching the pronotum in some individuals (Fig. 3d); parascutal sulcus shallowly excavated but always present (Fig. 3e) .... ***A. atricornis*** Fergusson, 1985
– Notauli superficial, extending less than ⅓ of mesoscutal total length (Fig. 3f); parascutal sulcus absent (Fig. 3g) ..... ***A. paucus*** Belizin, 1961

Aegilips atricornis Fergusson, 1985
Fig. 3d–e

Aegilips atricornis Fergusson, 1985: 813 (♂).

Diagnosis

Species very similar to *A. nitidulus,* from which it can be distinguished by the presence of incomplete notauli, the absence of median mesoscutal furrow and carinate sculpture on the mesoscutum (notauli complete, median mesoscutal furrow present and mesoscutum with some transverse carinae in *A. nitidulus*). It can be distinguished from *A. flavidicornis*, *A. longicellus*, *A. paucus* and *A. zaitzevi* (which also lack complete notauli) despite having incomplete notauli, they are clearly excavated, almost complete in some individuals (notauli very superficial and never exceeding than one third of the scutellum length in *A. flavidicornis*, *A. longicellus*, *A. paucus* and *A. zaitzevi*).

Type material

Holotype

UNITED KINGDOM • ♂; "London: Bedford Park, July 1929, J. Waterston coll." (white label); "Holotype of *Aegilips atricornis* N.D.M. Fergusson, 1982" (white label); "B.M. Type Hym 7.166" (white label), NHMUK.

Paratype

UNITED KINGDOM • ♂; "London: Bedford Park, July 1929, J. Waterston coll." (white label); "Paratype *A. atricornis* ♂ N.D.M. Fergusson, 1982" (white label) ; NHMUK.

Material examined (76 ♀♀ & 26 ♂♂)

ANDORRA • 4 ♀♀; Santa Coloma; MT; Aug. 1992; J. Pujade leg.; UB • 2 ♀♀; Santa Coloma; MT; Sep. 1992; J. Pujade leg.; UB • 2 ♀♀; Santa Coloma; MT; 16–30 Jun. 1992; J. Pujade leg.; UB • 3 ♀♀; Santa Coloma; MT, 1–15 Jul. 1993; J. Pujade leg.; UB • 3 ♀♀; Santa Coloma; MT; 16–31 Jul. 1993; J. Pujade leg.; UB • 2 ♀♀; Santa Coloma; MT; 16–31 Aug. 1993; J. Pujade leg.; UB • 1 ♀; Santa Coloma; MT; 1–15 Sep. 1993; J. Pujade leg.; UB • 1 ♀; Santa Coloma; MT; 16–30 Sep. 1993; J. Pujade leg.; UB • 1 ♀; Santa Coloma; MT; 16–31 Oct. 1993; J. Pujade leg.; UB.

AUSTRIA • 1 ♀; Wienerland, Vienna; 21 Aug. 1960; CNC • 1 ♂; Vienna; 14 Oct. 1982; Mays leg. USNM.

CHINA • 4 ♀♀, 2 ♂♂; 130 km N of Beijing, Lyan Ling (Linshan Mountians); 1749 m a.s.l.; 40º00.279' N, 115º30.758' E; 8 Feb. 2002; H. Baur leg.; USNM • 3 ♀♀, 5 ♂♂; same collection data as for preceding; 8 Apr. 2002; H. Baur leg.; USNM • 1 ♀; same collection data as for preceding; 31 Jun. 2002; H. Baur leg.; USNM • 1 ♀; same collection data as for preceding; 31 Jul. 2002; H. Baur leg.; USNM.

CYPRUS • 1 ♂; Mt Troodos; 9 Aug. 1987; NHMUK.

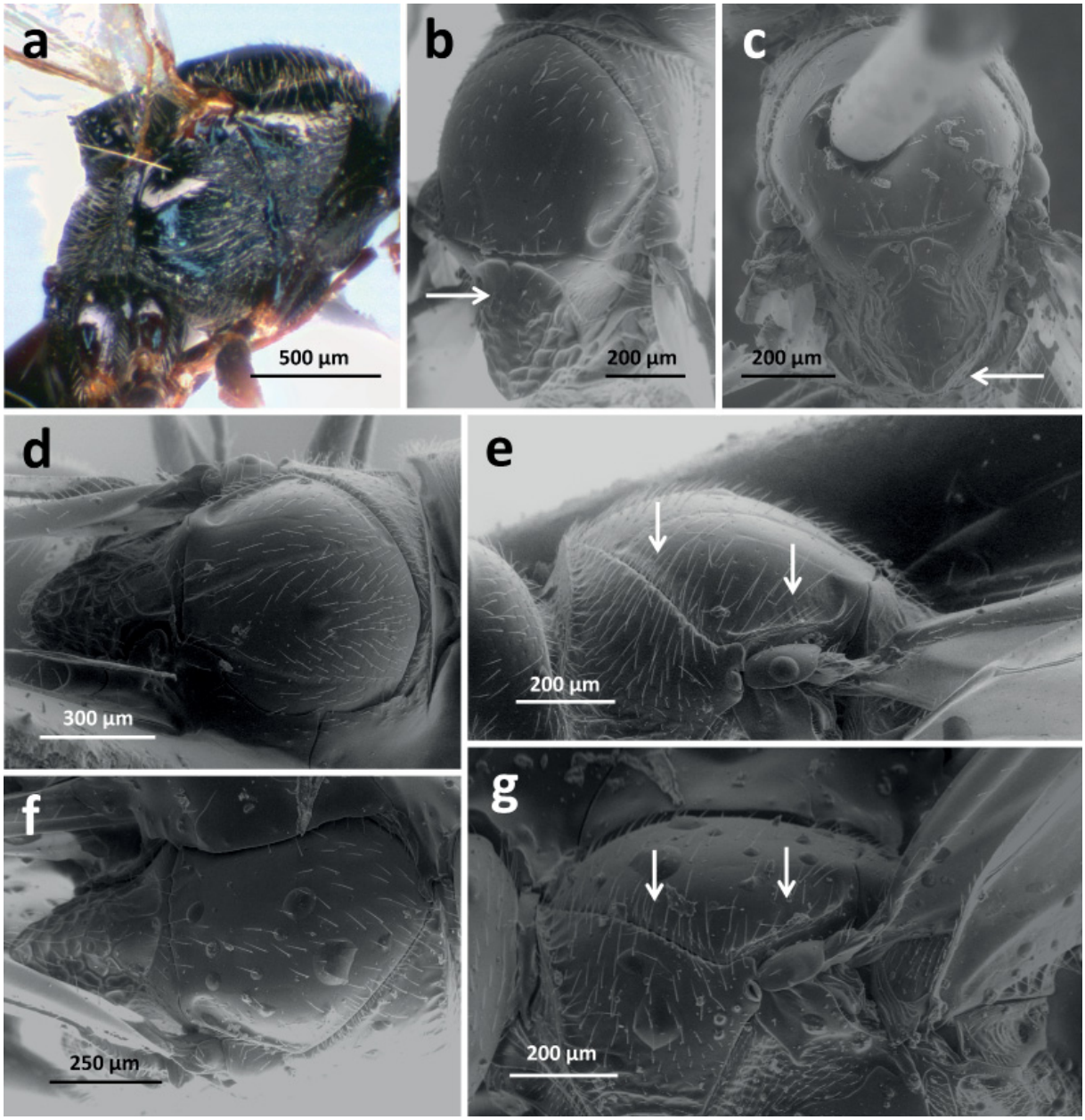

Fig. 3. a. *Aegilips ustulatus* Belizin, 1973, mesosoma in lateral view. **b**. *A. longicellus* Belizin, 1951, mesosoma in dorsal-lateral view. **c**. *A. flavidicornis* (Kieffer, 1911), mesosoma in dorsal view. **d**. *A. atricornis* Fergusson, 1985, mesosoma in dorsal view. **e**. *A. atricornis*, mesoscutum in lateral view. **f**. *A. paucus* Belizin, 1961, mesosoma in dorsal view. **g**. *A. paucus*, mesoscutum in lateral view.

FRANCE • 3 ♀♀; Vaucluse and Mont Ventoux; 1200 m a.s.l.; 24 Aug. 1988; CNC • 1 ♀; Hautes Alpes, Arrieux; 1700 m a.s.l.; 15 Jul. 1990; NHMUK • 1 ♀; Montes Alps, Queyras, Arvieux; 18 Jul. 1990; CNC • 1 ♀; Aveyron, Migne Lignas, Lac des Pises; 25 Aug. 1990; CNC • 1 ♀; Ardèche, Valgorge, Massif de Tarnague; 1370–1480 m a.s.l.; 16 Aug. 1991; CNC • 1 ♀; Valdeblore, Col de Salèse; 10–24 Jun. 2009; MNHN • 1 ♂; Valdeblore, Col de Salèse; 13–27 Aug. 2009; MNHN.

HUNGARY • 1 ♀; Mátra; 24 Jul. 1955; UB • 1 ♀; Mount Tátra; 23 Aug. 1958; UB • 1 ♂; Vas, Kondorfa; 19 Jun. 1994; UB.

INDIA • 1♀, Kashmir, Ladakh, Leh, 11500 ft, 9 Aug.1984, M. G. Allen leg; NHMUK.

IRELAND • 2 ♀♀; Rathgar, Mayfield; Jul. 1921; NHMUK • 2 ♀♀; Rathgar, Mayfield; 9 Sep. 1921; NHMUK.

MOROCCO • 1 ♀; MT; Apr. 1996; CNC • 1 ♂; 3–8 Apr. 1996; CNC • 2 ♀♀; Ouirgane; 2000 m a.s.l.; MT; 17–23 Oct. 1996; Kaseebeer leg.; CNC • 1 ♀; Marrakech, Ouirgane; 1000 m a.s.l.; MT; 22–29 Oct. 1996; C. Kassebeer leg.; CNC • 1 ♀; 23–29 Oct. 1996; CNC • 1 ♀; 19–26 Jan. 1997; CNC • 2 ♀♀; 9–18 Apr. 1997; CNC.

PAKISTAN • 4 ♂♂; W Pakistan, Chitral, Shenyak; 3350 m a.s.l.; Jul.–Aug. 1984; NHMUK.

PORTUGAL • 1 ♀; Madeira; 1951; T.V. Wollaston leg.; UB.

ROMANIA • 1 ♀; Hargita Co., Kiruly Valley; 15 Aug. 2000; CNC.

SLOVAKIA • 1 ♀; Čachtice; 11 Aug. 1981; CNC.

SLOVENIA • 1 ♂; Postojne; 20 Jul. 1958; CNC.

SPAIN • 1 ♀; Sierra Nevada; 1650 m a.s.l.; 27 Jul. 1960; CNC • 1 ♀; Segovia, Siete Picos, Praderas de Navalazor; 1 Aug. 1962; CNC • 1 ♀; Madrid, Cercedilla; 8 Jul. 1974; UB • 1 ♀; Málaga, 6 km nr. Nerja; 6 May 1988; CNC • 1 ♂; Catalunya, Vilassar de Dalt; 5–11 Jun. 1995; UB • 1 ♀; Teruel, Alcañiz, Salada Grande; no data specified; UB.

SWEDEN • 1 ♀; Eksharad; 23 Jul. 1960; 1♀; Lund, Lund Zoological Museum grounds; Aug. 1976; NHMUK • 1 ♀; Vallentuna; 6 Aug. 1991; NHMUK.

SWITZERLAND • 1 ♀; Pontresina, Engadin; 30 Aug. 1964; CNC.

UNITED KINGDOM • 1 ♀, 1 ♂; Scotland, Bonhill; 26 Jun. 1912; J.R. Malloch leg.; USNM • 1 ♂; Scotland, Dunoon; 11 Jul. 1912; J.R. Malloch leg.; USNM • 2 ♂♂; Harold's Cross; 22 May 1934; USNM • 1 ♂; Harold's Cross; 30 Sep. 1934; USNM • 1 ♀; Staffordshire, Buynt Woods; 30 Jul. 1935; NHMUK • 1 ♀; Staffordshire, Madeley; 3 Apr. 1936; NHMUK • 1 ♀; Oxford; 3 May 1953; NHMUK • 1 ♂; Denbighshire, Llangollen; 29 Jun. 1954; NHMUK • 1 ♀; London, Wimbledon Com.; 4 Jun. 1960; NHMUK • 1 ♀; Staffordshire, Newcastle-u-Lyme; 4 Jun. 1960; NHMUK • 1 ♀; Devon, Torquay; 15 Jun. 1960; NHMUK • 1 ♀; Dorking; 17 Jun. 1960; NHMUK • 1 ♀; Jersey, St. Brelades; 24 Jul. 1965; NHMUK • 1 ♀; no details; Jul. 1974; NHMUK • 1 ♀; Cambridgeshire, Duxford; 25 Jul.–1 Aug. 1979; NHMUK • 1 ♂; England, Surrey, Chobham Common; 26 Aug. 1982; E.E. Grissell leg.; USNM • 1 ♀, 1 ♂; England, London, Bedford Park, Esmond Road; J. Waterston leg.; USNM • 1 ♀; Essex; USNM.

Type locality

London, Bedford Park, United Kingdom.

Redescription

Measurements. Body: 2.5–2.7 mm; antennae: 2.8 mm (♂), 2.3 mm (♀); wings: 2.4–2.7 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Antennae dark brown. Leg dark yellow with darker metacoxa. Veins of wings brownish.

Head. Head square-shaped in anterior view, 1.5 times as broad as high, malar area expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.8 times as long as compound eye. Clypeus smooth, glabrous, shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.1 times as long as compound eye. Diameter of torulus larger than inter-toruli and torulus-eye distances. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 1.8 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 8.0:4.5:2.5, diameter of lateral ocellus is 3.0.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla abundant in all flagellomeres; F1 not modified; antennal formula: 9.0(3.5), 4.0(4.0), 10.0(3.0), 9.0(3.0), 9.0(3.0), 9.0(3.0), 9.0(3.0), 8.0(3.0), 8.0(3.0), 7.5(3.0), 7.0(3.0), 6.0(3.0), 6.0(3.0), 8.0(3.0). In females, antenna 13-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla starting at F2 but not abundant until F4; antennal formula: 9.0(3.0), 3.5(3.0), 10.0(2.0), 9.0(2.5), 8.0(2.5), 8.0(2.5), 7.0(3.0), 7.0(3.0), 6.0(3.0), 6.0(3.0), 5.0(3.0), 5.0(3.0), 8.0(3.0).

Mesosoma. Pronotal plate smooth. Pronotum smooth and punctate; pubescence uniformly distributed over its surface with some irregular ventral carinae. Mesoscutum as broad as long in dorsal view. Mesoscutum smooth and not punctate, short hyaline setae along notauli and anterior mesoscutum. Notaulus incomplete but apparent, usually effaced at anterior third, sometimes almost reaching pronotal margin, without horizontal carinae (Fig. 3d); median mesoscutal furrow absent. Lateral mesoscutum smooth and glabrous, except for some short hairs; parapsidal signum absent, parascutal sulcus very tenuous and not internally carinate (Fig. 3e). Scutellum strongly areolate and triangular-shaped, not apically rounded, 0.6 times as long as mesoscutum; scutellar foveae square-shaped, large and smooth, posteriorly defined by carina; presence of superficial and narrow pit next to inner margin of scutellar foveae. Interfoveal line complete. Circumscutellar carina not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate, central and posterior mesopleuron smooth. Mesopleural triangle smooth except for an oblique sulcus near its anterior margin; short hyaline seta present. Metanotal troughs coarsely sculptured, almost glabrous. Lateral propodeum with strong coarse sculpture; central propodeum glabrous, coriaceous, and divided in two symmetrical areas by median longitudinal carina; lower central region and rest of propodeal surface divided into smaller cells.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.3 times longer than wide. Vein 2rm absent.

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.0 times longer than fourth in dorsal view. Metasomal terga smooth and glabrous; T5 to T7 punctate.

Distribution

Palaearctic and Indomalayan. Known from United Kingdom (Fergusson 1985), China (Mata-Casanova *et al.* 2015b). First records for Portugal, Morocco, Spain, Andorra, France, Switzerland, Ireland, Austria, Slovenia, Hungary, Slovakia, Sweden, Romania, Cyprus, Pakistan and India.

Biology

Reared from Hemerobiidae *Wesmaelius betulinus* (Ström, 1788) and *W. subnebulosus* (Stephens, 1836) (Fergusson 1985).

Aegilips flavidicornis (Kieffer, 1911)
Fig. 3c

Anacharis flavicornis Kieffer, 1910: 335 (♂).
Anacharis flavidicornis Kieffer, 1911: 121. Replacement name for *Anacharis flavicornis*.

Anacharis flavidicornis – Kieffer 1910 (non *Anacharis flavicornis* Kieffer, 1909).

Diagnosis

Species with incomplete notauli and smooth mesoscutum like *A. atricornis*, *A. longicellus*, *A. paucus* and *A. zaitzevi*, from which can be distinguished by having alutaceous scutellum slightly projected at the end (scutellum areolate and not dorsally projected in *A. atricornis*, *A. longicellus*, *A. paucus* and *A. zaitzevi*).

Type material

Holotype
CHINA • ♂; "Chinese Turkestan, Kora-Ssu b. Polu, 2115 m, 6.6.90, Conradt S." (white label); "Type" (red label); "*A. flavidicornis*" (white label); "Zool.Mus. Berlin" (white label); "*Aegilips flavidicornis* ♂ (Kieffer, 1910), N. Mata-Casanova det, 2014" (white label); ZMB.

Type locality

China, Xinjiang Uyghur Autonomous Region.

Redescription

Measurements. Body: 2.4 mm; antennae: 0.3 mm (♂, scape and pedicel only); wings: 2.5 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Antennae yellow. Leg yellow with brown coxae. Veins of wings yellowish.

Head. Triangular-shaped in anterior view, 1.2 times as broad as high, malar area not expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.6 times as long as compound eye. Clypeus smooth, glabrous and shortly projected; anterior tentorial pits small, indistinct. Transfacial distance as long as compound eye. Diameter of torulus larger than inter-toruli and torulus-eye distances. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 1.7 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 8.0:4.5:2.5, diameter of lateral ocellus is 3.5.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla abundant in all flagellomeres; F1 not modified; antennal formula (flagellum lost): 6.0(3.0), 3.5(2.5).

Mesosoma. Pronotal plate smooth. Pronotum punctate; slightly pubescent, some short irregular ventral carinae present. Mesoscutum 1.2 times as broad as long in dorsal view. Mesoscutum smooth to slightly alutaceous, shiny, glabrous. Notaulus incomplete but apparent, effaced at anterior mesoscutum and never internally carinate (Fig. 3c); median mesoscutal furrow short and narrow. Lateral mesoscutum punctate; parapsidal signum reduced to a short and narrow groove, parascutal sulcus very tenuous and not internally carinate, presence of a punctate band instead. Scutellum alutaceous and shiny, laterally coarse, 0.6 times of mesoscutal length; scutellar foveae trapezoidal, large, smooth, posteriorly defined by carina; presence of superficial and narrow pit next to inner margin of scutellar foveae. Interfoveal line complete. Circumscutellar carina shortly projected at apex of scutellum (Fig. 3c), triangular shape in dorsal view. Anterior and ventral mesopleuron carinate, central and posterior mesopleuron smooth. Mesopleural triangle heavily alutaceous, not pubescent. Metanotal troughs coarsely sculptured and almost glabrous. Lateral propodeum with strong coarse sculpture; central propodeum glabrous, coriaceous, divided in two symmetrical areas by median longitudinal carina; lower central region and rest of propodeal surface divided into smaller cells.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.5 times as long as wide. Vein 2rm absent.

Metasoma. Shorter than head + mesosoma. Petiole slightly longer than wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.9 times longer than fourth in dorsal view. Metasomal terga smooth and glabrous; T4 to T7 punctate.

Biology

Unknown.

Distribution

Palaearctic. China: Xinjiang Uyghur Autonomous Region (Kieffer 1910), Beijing (Mata-Casanova *et al.* 2015b).

Comments

Kieffer (1909) described an American species of *Anacharis* as *A. flavicornis*. One year after, another species of *Anacharis* was described from Chinese Turkestan with the same denomination (Kieffer 1910). The author changed the homonymy one year later as part of a revision and correction on the names of different species of Cynipoidea and Evanoidea (Kieffer 1911), thus resulting in one American species, *A. flavicornis* Kieffer, 1909, and one Palaearctic species, *A. flavidicornis* Kieffer, 1911.

When studying the type of *Anacharis flavidicornis*, it did not present the typical features of the genus *Anacharis* but *Aegilips* instead, being recombined into *Aegilips flavidicornis* (Mata-Casanova *et al.* 2018).

Aegilips insularis Mata-Casanova & Pujade-Villar sp. nov.
urn:lsid:zoobank.org:act:FC778329-0813-473B-A625-CD98883E0514
Fig. 2a–b

Diagnosis

Species easily distinguishable other Palaearctic species of *Aegilips* by having completely smooth scutellum with scutellar foveae absent or indistinct, never sharply delineated (scutellum from alutaceous to areolate in other species of *Aegilips* from the Palaearctic region, scutellar foveae always noticeable).

Etymology

The specific name comes from the island of Madeira, the only known location of the species.

Type material

Holotype

PORTUGAL • ♂; "Madeira, Queimadas, 11.VIII.1982" (white label); "M.W.R. de V. Graham coll." (white label); "Anacharitinae, *Aegilips* sp. nr. *nitidulus* J. L. Nieves det" (white label); "Holotype of *Aegilips insularis* sp. nov., ♂ desig. Mata-Casanova, 2014" (red label); "*Aegilips insularis* sp. nov., ♂, det. Mata-Casanova, 2014" (white label); NHMUK.

Paratypes (5 ♀♀, 15 ♂♂)

PORTUGAL • 1 ♂; Madeira, Caramujo; 1250 m a.s.l.; 9 Aug. 1954; Durham University Madeira Expedition leg.; NHMUK • 2 ♂♂; Madeira, Monte; Nov. 1960; N.L.H. Kraus leg.; NHMUK • 2 ♂♂; Madeira, Ribeiro Frio; Aug. 1962; N.L.H. Krauss leg.; USNM • 1 ♀; Madeira, Ribeiro Frio; Sep. 1962; N.L.H. Krauss leg.; USNM • 2 ♂♂; Madeira, Curral dos Romeiros; 11 May 1980; M.W.R. de V. Graham leg.; NHMUK • 1 ♂; Madeira, Curral dos Romeiros; 13 May 1980; M.W.R. de V. Graham leg.; NHMUK • 1 ♂; Madeira, Queimadas; 14 May 1980; M.W.R. de V. Graham leg.; NHMUK • 1 ♀; Madeira, Pousada dos Vinhaticos; 18 May 1980; M.W.R. de V. Graham leg.; NHMUK • 1 ♂; Madeira, Curral dos Romeiros; 20 Jul. 1982; M.W.R. de V. Graham leg.; NHMUK • 1 ♀, 1 ♂; Madeira, Curral dos Romeiros; 23 Jul. 1982; M.W.R. de V. Graham leg.; NHMUK • 1 ♂; Madeira, 3 km E of Posio; 1 Aug. 1982; M.W.R. de V. Graham leg.; NHMUK • 1 ♀; Madeira, Montado dos Pecequietos; 3 Jul. 1982; M.W.R. de V. Graham leg.; NHMUK • 1 ♂; Madeira, 3 km E of Posio; 7 Aug. 1982; M.W.R. de V. Graham leg.; NHMUK • 1 ♂; Madeira, Calderas Verde; 9 Aug. 1982; M.W.R. de V. Graham leg.; NHMUK • 1 ♀, 1 ♂; Madeira, Queimadas; 11 Aug. 1982; M.W.R. de V. Graham leg.; NHMUK.

Type locality

Portugal, Madeira, Queimadas.

Description

Measurements. Body: 2.2–2.4 mm; antennae: 1.8–2.1 mm (♀), 2.8–3.0 mm (♂); wings: 2.5–2.6 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Antennae dark brown. Leg.s yellowish brown with darker coxae, metacoxa black. Veins of wings dark brown.

Head. Triangle-shaped in anterior view, 1.1 times as broad as high, malar area not expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.7 times as long as compound eye. Clypeus smooth, glabrous, shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.1 times as long as compound eye. Diameter of torulus larger than inter-toruli and torulus-eye distances. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 2 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 5.0:4.5:2.0, diameter of lateral ocellus is 2.0.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla abundant in all flagellomeres; F1 not modified; antennal formula: 6.0(3.5), 3.0(2.5), 9.0(3.0), 9.0(3.0), 8.5(3.0), 8.5(3.0), 8.5(2.5), 8.5(2.5), 8.5(2.5), 8.0(2.5), 7.5(2.5), 7.0(2.5), 7.0(2.5), 8.0(2.5). In females, antenna 13-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla starting at F3 but not abundant until F5; antennal formula: 8.0(3.5), 3.5(3.0), 8.5(2.0), 7.0(2.0), 6.5(2.0), 6.0(2.0), 5.5(2.0), 5.0(2.0), 4.0(2.5), 4.0(2.5), 4.0(2.5), 4.0(2.0), 6.5(2.0).

Mesosoma. Pronotal plate smooth. Pronotum smooth, with some irregular ventral carinae. Mesoscutum 1.1 times as broad as long in dorsal view. Mesoscutum smooth, shiny, almost glabrous except for some

scarce short hyaline pubescence (Fig. 2a–b); posteriorly carinate in males (Fig. 2b). Notaulus complete, with horizontal carina; median mesoscutal furrow absent. Lateral mesoscutum smooth and glabrous; parapsidal signum and parascutal sulcus absents. Scutellum completely smooth, 0.7 times as long as mesoscutum; scutellar foveae rounded, large, slightly coarse, not posteriorly defined (Fig. 2a–b); presence of very tenuous and superficial narrow pit next to inner margin of scutellar foveae. Interfoveal line short, almost effaced (Fig. 2a–b). Circumscutellar carina complete but not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate, central and posterior mesopleuron smooth. Mesopleural triangle obliquely carinate. Metanotal troughs densely pubescent smooth except for some coarse sculpture in lower margin. Propodeum surface strongly alutaceous to coriaceous; central area defined from by two lateral ridges.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.3 times as long as wide. Vein 2rm absent.

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.5 times as long as fourth in dorsal view. Metasomal terga smooth and glabrous; T4 to T7 punctate.

Biology

Unknown.

Distribution

Palaearctic. Known only from Madeira (Portugal).

Aegilips kozlovi Kovalev, 1974
Fig. 2e

Aegilips kozlovi Kovalev, 1974: 283 (♂).

Diagnosis

Species with strongly horizontal carinae in mesoscutum and notauli. Morphologically similar to *A. romseyensis*, from which it can be distinguished by having horizontal carinate sculpture in the mesoscutum and areolate scutellum (mesoscutum and scutellum smooth in *A. romseyensis*).

Type material

Holotype

MONGOLIA • ♂; "Mongolia, Dzab., 30 km SSE Somona Tes, step, rastitelnost po sajru, 3-4.VII.1968: M. Ke." (white label); "Holotype ♂ *Aegilips kozlovi* O. Kovalev det" (red label); ZIN.

Material examined (6 ♀♀ , 11 ♂♂)

HUNGARY • 1 ♀, 1 ♂; Lilafüred; 2 Sep. 1962; Bajári leg.; UB • 1 ♂; Vas, Örség, Rikkagahaza Kétvölgy; 22 Jun. 1994; Narolsky leg.; UB • 1 ♀, 1 ♂; Vas, Szakonyfalú; 24 Jun. 1994; Kotenko leg.; UB • 1 ♂; Vas, Szalafö Felsözer; 1 Aug. 1994; Kotenko leg.; UB • 1 ♂; Vas, Szalafö Felsözer; 2 Aug. 1994; Kotenko leg.; UB • 1 ♂; Vas, Cák; 4 Aug.1994: Melika leg.; UB • 1 ♀, 7 ♂♂; Vas, Celdörmölk; 5 Aug. 1994; Melika leg.; UB • 1 ♀, 3 ♂♂; Vas, Cák; 8 Aug. 1994; Kotenko leg.; UB • 1 ♀; Veszprém Co., Kolontár; 10 Aug. 1999; Z. Ács leg.; UB • 1 ♀, 3 ♂♂; Veszprém Co., Zomlóvásárhely; 14 Aug. 1999; Z. Ács leg.; UB • 1 ♂; Veszprém Co., Máriahalom; 1 Sep. 1999; Z. Ács leg.; UB • 2 ♂♂; Veszprém Co., Bakonygyepes; 2 Aug. 2000; Zoltán Ács leg.; UB.

ROMANIA • 2 ♂♂; Hargita Co., Kiruly Valley; 10 Aug. 2000; Zoltán Ács leg.; UB.

Type locality

Mongolia, Uvs aimag, Tes sum.

Redescription

Measurements. Body: 2.5–2.9 mm; antennae: 2.4 mm (♀), 2.5 mm (♂); wings: 2.3–2.4 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Leg yellowish brown with darker coxae. Veins of wings dark brown.

Head. Head square-shaped in anterior view, 2.0 times as broad as high, malar area expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.8 times as long as compound eye. Clypeus smooth, glabrous and shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.1 times as long as compound eye. Diameter of torulus as long as inter-toruli distance but larger than torulus-eye distance. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 2 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 7.0:4.0:3.0, diameter of lateral ocellus is 2.0.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla abundant in all flagellomeres; F1 not modified; antennal formula: 10.0(3.0), 3.0(3.0), 9.0(3.0), 8.0(3.0), 8.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 6.0(3.0), 5.0(3.0), 7.0(3.0). In females, antenna 13-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla starting at F2, abundant from F3 onwards; antennal formula: 11.0(3.0), 3.5(4.0), 8.0(2.5), 6.0(2.5), 6.0(2.5), 6.0(3.0), 5.0(3.0), 5.0(3.0), 5.0(3.0), 5.0(3.0), 4.0(3.0), 5.0(3.0), 7.0(3.0).

Mesosoma. Pronotal plate smooth. Pronotum covered by strongly coarse sculpture and obliquely carinated in its entire surface. Mesoscutum 1.2 times as broad as long in dorsal view. Mesoscutum shiny, slightly alutaceous, region between notauli strongly carinate (Fig. 2e). Notaulus complete with horizontal carinae; median mesoscutal furrow present but not strong. Lateral mesoscutum smooth, punctate, with short hyaline pubescence; parapsidal signum present, parascutal sulcus deeply excavated and carinate. Scutellum areolate (Fig. 2e), 0.7 times as long as mesoscutum; scutellar foveae rounded, small, smooth, posteriorly defined by carina; presence of large and elongated pit next to inner margin of scutellar foveae. Interfoveal line complete. Circumscutellar carina complete but not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate with rugose microsculpture, central and posterior mesopleuron smooth. Mesopleural triangle densely pubescent. Metanotal troughs glabrous, almost smooth except for some weak coarse sculpture. Propodeum coriaceous, densely pubescent, divided in large cells; central area defined by two strong lateral carinae, median longitudinal carina unconspicuous.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.4 times as long as wide. Vein 2rm absent.

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.2 times longer than fourth in dorsal view. Metasomal terga smooth and glabrous; T4 to T7 punctate.

Biology

Unknown.

Distribution

Palaearctic. Mongolia (Kovalev 1974); first record for Hungary and Romania.

Aegilips longicellus Belizin, 1951
Fig. 3b

Aegilips longicellus Belizin, 1951: 372 (♀).

Diagnosis

Species with incomplete notauli like *A. atricornis*, *A. flavidicornis*, *A. paucus* and *A. zaitzevi.* It can be distinguished from all these species by not having posteriorly defined carinae in the scutellar foveae and possessing incomplete interfoveal line (scutellar foveae always defined by a posterior carina and interfoveal line complete in *A. atricornis*, *A. flavidicornis*, *A. paucus* and *A. zaitzevi*).

Type material

Holotype

TADJIKISTAN • ♀; "Avzob, 3000 m a.s.l., 31 Aug. 1946; V. Gussakovskij" (white label); "Holotype *Aegilips longicellus* ♀ V. Belizin det" (red label); ZIN.

Material examined

UNITED KINGDOM • 1 ♂; Scotland, Argyleshire, Armidale; 12. Jul. 1912; J.R. Malloch leg.; USNM.

Redescription

Measurements. Body 2.7 mm; antennae: 1.8 mm (♀, from scape to F8), 2.6 mm (♂); wings: 2.9 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Antennae yellowish. Leg dark yellowish with dark brown metacoxa. Veins of wings yellow.

Head. Triangle-shaped in anterior view, 1.1 times as broad as high, malar area not expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.6 times as long as compound eye. Clypeus smooth, glabrous and shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.1 times as long as compound eye. Diameter of torulus larger than inter-toruli distance, same than torulus-eye distance. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 1.6 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 6.0:5.5:2.5, diameter of lateral ocellus is 2.0.

Antennae. In females, flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla starting at F2; antennal formula (from scape to F8): 8.0(3.5), 4.0(3.0), 9.0(2.5), 9.0(2.5), 9.0(2.5), 8.0(2.5), 7.5(2.5), 7.0(2.5), 6.0(3.0), 6.0(3.0).

Mesosoma. Pronotal plate smooth. Pronotum smooth, scarcely pubescent, with some irregular ventral carinae. Mesoscutum 1.3 times as broad as long in dorsal view. Mesoscutum smooth, shiny, scarce short anterior white setae, central mesoscutum glabrous. Notaulus weak, incomplete, without horizontal carinae; median mesoscutal furrow absent. Lateral mesoscutum smooth and glabrous; parapsidal signum absent; parascutal sulcus reduced to few weakly impressed cells. Scutellum alutaceous; central scutellum smooth while strongly areolate at margins; 0.6 times of mesoscutal length; scutellar foveae rounded, large, alutaceous, not posteriorly defined by carina (Fig. 3b); presence of small pit next to inner margin of scutellar foveae. Interfoveal line incomplete (Fig. 3b). Circumscutellar carina complete but not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate with rugose microsculpture, central and posterior mesopleuron smooth. Mesopleural triangle weakly carinate, short hyaline pubescence uniformly distributed. Metanotal troughs glabrous, almost smooth except for some weak coarse sculpture. Propodeum strongly

alutaceous, densely pubescent, divided in large cells; central area divided in two symmetrical areas by median longitudinal carina; these two large areas are also asymmetrically divided by some weaker and irregular transverse carinae.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.3 times as long as wide. Vein 2rm absent.

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.0 times as long as fourth in dorsal view. Metasomal terga not punctate.

Biology

Unknown.

Distribution

Palaearctic. Tajikistan (Belizin 1951), Chelyabinsk oblast (Belizin 1961), first record for United Kingdom.

Aegilips nitidulus (Dalman, 1823)
Figs 1e, 2d–g

Cynips nitidula Dalman, 1823.
Aegilips nitidula Dahlbom, 1842.
Aegilips fumipennis Westwood, 1833. Synonymized by Fergusson (1985).
Aegilips rufipes Westwood, 1833. Synonymized by Fergusson (1985).
Aegilips dalmani Reinhard, 1860. Synonymized by Fergusson (1985).
Aegilips rugicollis Reinhard, 1860. Synonymized by Fergusson (1985).
Aegilips ruficornis Cameron, 1883. Synonymized by Fergusson (1985).
Aegilips striolata Cameron, 1883. Synonymized by Fergusson (1985).
Aegilips bicolorata Cameron, 1887. Synonymized by Fergusson (1985).
Aegilips curvipes Giraud, 1860. **Syn. nov.**
Aegilips gemellus Belizin, 1961. **Syn. nov.**
Aegilips laevis (Hedicke, 1914). **Syn. nov.**
Aegilips montanus Belizin, 1951. **Syn. nov.**
Aegilips punctatus Belizin, 1951. **Syn. nov.**

Diagnosis

Species with higher variability than other Palaearctic *Aegilips*. It is morphologically similar to *A. atricornis,* from which it can be distinguished by the presence of complete notauli, excavated median mesoscutal furrow, carinate mesoscutum and rugose dorsal pronotum (notauli incomplete, median mesoscutal furrow absent and smooth mesoscutum and dorsal pronotum in *A. atricornis*). It can be distinguished from *A. kozlovi* and *A. romseyensis* – which also present complete notauli – by possessing weak horizontal carinae in the notauli and not having dorsal carinae in the pronotum (notauli with strong horizontal carinae and pronotum areolate in its entire surface in *A. kozlovi* and *A. romseyensis*).

Type material

Holotype of *Aegilips nitidulus*
FRANCE • ♂; Lost (D. G. Notton pers. com.). *Aegilips curvipes* "Muséum Paris, J. Giraud coll." (white label); "*Aegilips nitidulus* (Dalman, 1823), det. Mata-Casanova, 2014" (white label); MNHN.

Holotype of *Aegilips gemellus*
RUSSIA • ♂; "Miass, Cheljabinsk obl., 15.VII.1958: V. Tobias" (white label); "Holotype *Aegilips gemellus* ♂ V. Belizin det" (red label); "*Aegilips nitidulus* (Dalman, 1823) det. Mata-Casanova" (white label); ZIN.

Holotype of *Aegilips laevis*
FRANCE • ♂; "Laurier sauce, Frèchain, 13 sep. 10" (white label); "det. Hedicke" (white label); "Muséum Paris coll. Cavro" (white label); "*Omalaspis laevis* Hedicke nouvelle espèce" (white label); "Holotype *Omalaspis laevis* Hedicke, 1914" (red label); "*Xyalaspis laevis* (Hedicke), det. Ros-Farré, 2012" (white label); "*Aegilips laevis* (Hedicke), det. J. P-V, 2013" (white label); "*Aegilips nitidulus* (Dalman, 1823), det. Mata-Casanova, 2014" (white label); MNHN.

Holotype of *Aegilips montanus*
GEORGIA • ♂; "Georgian SSR, valley of river Ancal-or, 1600 m, 17.VII.1913; A. Mlokosevich" (white label); "Holotype *Aegilips montanus* ♂; V. Belizin det" (red label); "*Aegilips nitidulus* (Dalman, 1823), det. Mata-Casanova, 2014" (white label); ZIN.

Holotype of *Aegilips punctatus*
RUSSIA • ♂; "Yakutia, Lutej-komo, 17.VII.1875; A. Chekanovskij" (white label); "Holotype *Aegilips punctatus* ♂; V. Belizin det" (red label); "*Aegilips nitidulus* (Dalman, 1823), det. Mata-Casanova, 2014" (white label); ZIN.

Material examined (30 ♀♀, 132 ♂♂)

ANDORRA • 2 ♀♀, 1 ♂; Santa Coloma; Aug. 1992; J. Pujade leg.; UB • 5 ♂♂; Santa Coloma; Sep. 1992; J. Pujade leg.; UB • 4 ♂♂; Santa Coloma; Nov. 1992; J. Pujade leg.; UB • 1 ♂; Santa Coloma; 16–30 Apr. 1993; J. Pujade leg.; UB • 3 ♂♂; Santa Coloma; 16–31 Jul. 1993; J. Pujade leg.; UB • 1 ♀, 1 ♂; Santa Coloma; 1–15 Oct. 1993; J. Pujade leg.; UB.

AUSTRIA • 1 ♂; Reichenau, Semmeringgebiet; 25 May–6 Jun. 1957; G.E.J. Nixon leg.; CNC • 1 ♀; Semmeringgebiet, Hollenthal; 31 May 1957; R.B. Benson leg.; CNC.

BOSNIA AND HERZEGOVINA • 1 ♂; Prenj Mountains, Crno Polje; 1300–1700 m a.s.l.; 15 Aug.1936; V. and E. Martino leg.; NHMUK.

CZECH REPUBLIC • 3 ♂♂; Moravia, 16 km N of Blansko; 8 Aug. 1991; L. Masner leg.; CNC.

FRANCE • 1 ♂; Vaclus nr. Bèdoin; 14 Jul. 1980; V. Crahm leg.; NHMUK • 1 ♂; Brôme, Col de l'Homme Mort; 15 Aug. 1988; Z. Bouček leg.; NHMUK • 1 ♂; Corsica, 3 km S of Ghisonaccia; 11 Jul. 1991; Z. Bouček leg.; NHMUK • 3 ♂♂; Valdeblore, le Boréon; MT; 24 Jun.–9 Jul. 2009; MNHN • 1 ♂; Saint-Dalmas-le-Selvage, Vallon de Saint-Dalmas; MT; 30 Jun.–10 Jul. 2009; MNHN • 1 ♀; Saint-Dalmas-le-Selvage, Vallon de Saint-Dalmas; MT; 23 Jul.–7 Aug. 2009; MNHN • 1 ♂; Valdeblore, Col de Salèse; MT; 24 Jul.–13 Aug. 2009; MNHN • 2 ♂♂; Valdeblore, Col de Salèse; MT; 13–27 Aug. 2009; MNHN • 1 ♀; Saint-Dalmas-le-Selvage, Vallon de Saint-Dalmas; MT; 18 Aug.–5 Oct. 2009; MNHN • 1 ♂; Valdeblore, le Boréon; MT; 27 Aug.–18 Sep. 2009; MNHN • 2 ♂♂; Valdeblore, Col de Salèse; MT; 27 Aug.–18 Sep. 2009; MNHN • 3 ♀♀, 2 ♂♂; Valdeblore, Col de Salèse; MT; 27 Aug.–18 Sep. 2009; MNHN • 1 ♂; Valdeblore, le Boréon; MT; 5–15 Oct. 2009; MNHN • 1 ♀; Saorge, Fôret de Caïros; MT; 1–16 Jul. 2010; MNHN • 3 ♀; Saorge, Fôret de Caïros; MT; 31 Jul.–16 Aug. 2010; MNHN • 3 ♀♀, 1 ♂; Saorge, Fôret de Caïros; MT; 16–30 Aug. 2010; MNHN • 2 ♀♀; Saorge, Fôret de Caïros; MT; 30 Sep.–15 Oct. 2010; MNHN.

GERMANY • 2 ♂♂; Mainz; 26 Aug.–3 Sep. 1965; A.W. Steffan leg.; CNC.

HUNGARY • 1 ♂; Sopron; 31 Jul. 1952; Erdós leg.; NHMUK • 1 ♀, 1 ♂; Lilafüred; 2 Sep. 1962; Bajári leg.; NHMUK • 1 ♀; Köszeg Kálvánia; 14 Jun. 1994; Melika leg.; UB • 1 ♀, 2 ♂♂; Zsida-Patak, Vas; 17 Jun. 1994; Narolsky leg.; UB • 1 ♀, 1 ♂; Celdömölk; 5 Jul. 1994; Melika leg.; UB • 2 ♂♂; Vas, Hörmann; sweep; 27 Jul. 1996; Cs. Thuróczy leg.; UB.

IRELAND • 1 ♂; Agherlow; 28 Sep. 1943; A.W. Stelfox leg.; NHMUK.

ITALY • 1 ♂; Abruzza, Gran Sasso, Monte Cristo; 1350 m a.s.l.; 21 Jun. 1992; S.D. Pinto leg.; CNC.

NETHERLANDS • 1 ♂; Limburg, Valkenburg; 5 Aug. 1966; N.L.H. Krauss leg.; USNM.

NORWAY • 1 spec., sex unknown; Hordaland, Osterøy; 4–15 Oct. 1972; T. Andersen leg.; CNC • 1 ♀; Oppdall, Kongsvoll, Raubekken; 900 m a.s.l.; MT; 14 Aug. 1980; J.O. Solem leg.; CNC • 1 ♀; same collection data as for preceding; 4 Sep. 1980; CNC • 1 ♂; Drammen, Underlin; MT; May 1992; Lars Ove Hansen leg.; CNC • 1 ♀; Alta, Detsika, Buolamalia; MT; 24 Jun.–16 Jul. 1996; Lars Ove Hansen leg.; CNC.

PORTUGAL • 1 ♂; Azores, Faial, Horta; 0–200 m a.s.l.; Jul. 1972; N.L.H. Krauss leg.; USNM • 4 ♂♂; Azores Island, Sao Vicente, Sao Miguel; 8 Sep. 1962; N.L.H. Krauss leg.; USNM.

ROMANIA • 2 ♂♂; Görgényi; 25 Aug. 1942; Erdós leg.; NHMUK • 1 ♀, 11 ♂♂; Hargita Co., Kiruly Valley; 10 Aug. 2000; Zoltán Ács leg.; CNC • 2 ♂♂; Hargita Co., Kiruly Valley; 15 Aug. 2000; Zoltán Ács leg.; CNC.

RUSSIA • 1 ♀; 170 km E of Vladivostok, Lazovski Zapovednik, Primorskii krai; 43º30'30" N 134º6'58" E; 1353 m a.s.l., MT; 3 Jul.–13 Aug. 2001; M. Quest leg.; CNC.

SLOVENIA • 2 ♀♀; Postojne; 18 Jul. 1958; CNC • 1 ♂; Pivka; 26 Jul. 1958; CNC.

SPAIN • 1 ♂; Ciudad Real, Puerto Lápice; 27 Jun. 1973; Z. Bouček leg.; CNC • 1 ♂; Madrid, Cercedilla; 22 Oct. 1978; J.S. Noyes leg.; CNC • 1 ♂; Barcelona, Matadepera; 20 May 1987; J. Pujade leg.; UB • 1 ♂; Castellón, Gatora, comarcal km 9; 11 May 1989; J.V. Falcó; UB • 1 ♂; Alicante, Torremanzanas; 28 Jun. 1989; F. Luna leg.; UB • Barcelona, Collserola, Mt. Montbau; 30 Aug. 1993; NHMUK • 1 ♂; Fontaneda, 7 May 1997; J. Pujade leg.; UB.

SWEDEN • 2 ♂♂; Lund, Zoological Museum grounds; Sep. 1976; NHMUK.

UNITED KINGDOM • 1 ♂; Scotland, Dunoon; 12 Jun. 1912; J.R. Malloch leg.; USNM • 1 ♂; Rathgar, May field; 1924; A.W. Stelfox leg. USNM • 1 ♂; London, Bedford Park; 4 Jun. 1928; J. Waterston leg.; NHMUK • 1 ♂; Harold's Cross; 29 May 1932; USNM • 1 ♂; Harold's Cross; 1 Jun. 1932; USNM • 1 ♂; Harold's Cross; 13 Aug. 1934; USNM • 1 ♂; Nottinghamshire, Barton; 29 Jul. 1940; K.V. Clarke leg.; NHMUK • 1 ♂; Wembley; 5 Aug. 1946; K. Clarke leg.; NHMUK • 1 ♂; Harold's Cross, Garden; 11 Aug. 1948; USNM • 1 ♂; Whitmore; 19 Sep. 1949; H.W. Daltry leg.; NHMUK • 1 ♂; Maer Woods; 5 Jul. 1950; H.W. Daltry leg.; NHMUK • 1 ♂; Thorpa Cloud; 9 Jul. 1950; H.W. Daltry leg.; NHMUK • 1 ♀; Maer Woods; 12 Jul. 1950; H.W. Daltry leg.; NHMUK • 1 ♂; Tetford Hill; 17 Jul. 1951; M.W.R. de V. Graham leg.; NHMUK • 1 ♂; Rugby; 18 May 1952; H.W. Daltry leg.; NHMUK • 1 ♂; Rugby; 31 Aug. 1952; H.W. Daltry leg.; NHMUK • 2 ♂♂; Rugby; 21 Aug. 1952; H.W. Daltry leg.; NHMUK • 1 ♂; Dorset, Swyre; 30 Jun. 1953; H.W. Daltry leg.; NHMUK • 1 ♂; Newcastle; 24 Jun. 1954; H.W. Daltry leg.; NHMUK • 1 ♂; Harold's Cross; 8 oct. 1954; USNM • 1 ♂; Rugby; 30 May 1955; H.W. Daltry leg.; NHMUK • 1 ♂; Rugby; 27 Jun. 1955; H.W. Daltry leg.; NHMUK • 1 ♂; Rugby; 12 Aug. 1955; H.W. Daltry leg.; NHMUK • 1 ♂; England, Torquay; 25 Jun.

1960; J.R. Vockeroth leg.; NHMUK • 2 ♂♂; England, Gloucestershire, Gloucester; 24 Aug. 1966; N.L.H. Krauss leg.; USNM • 1 ♂; Middlesex, Southgate, Grovelands Park; 16 Jun. 1966; M.W.R. de V. Graham leg.; NHMUK • 1 ♀, 9 ♂♂; Jersey, St. Aubin; 12–19 Sep. 1966; T. Dackus leg.; NHMUK • 1 ♂; Surrey, Kew; 28 Jun. 1975; V.F. Eastop leg.; NHMUK • 2 ♂♂; Northamptonshire, Spratton; MT; Jul. 1975; I. and P. Gauld leg.; NHMUK • 1 ♂; Surrey, Kew; 2 Aug. 1975; V.F. Eastop leg.; NHMUK • 1 ♂; England, Northamptonshire, Spratton; MT; Sep. 1975; Gauld leg.; NHMUK • 1 ♂; Surrey, Kew; 5 Jun. 1977; V.F. Eastop leg.; NHMUK • 1 ♂; Wales, Pembs, Mynachlog-ddu; 23 Jun. 1977; J.S. Noyes and Z. Bouček leg.; NHMUK • 1 ♂; Scotland, Angus Airlie Castle; 19 Jul. 1977; Noyes, Rogers and Huddleston leg.; NHMUK • 1 ♂; Surrey, Kew; 17 Jun. 1979; V.F. Eastop leg.; NHMUK • 1 ♂; England, Hampshire, Romsey, Awbridge; Jul. 1981; C. Vardy leg.; NHMUK • 4 ♂♂; England, Surrey, Richmond Park; 14 Aug. 1982; J. Noyes leg.; NHMUK • 1 ♂; England, Surrey, Barnes Common; 12 Sep. 2009; J.S. Noyes leg.; NHMUK • 1 ♂; Surrey, Queen Mary Reservoir nr Laleham; 9–23 Jul. 2011; R. Booth and A. Galsworthy leg.; NHMUK.

Type locality

Sweden, Stockholm.

Redescription

Measurements. Body: 2.5–2.8 mm; antennae: 2.5–3.0 mm (♂), 2.3 mm (♀); wings: 2.3–2.8 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth.

Antennae yellowish. Leg yellowish with brown coxae, black metacoxa. Veins of wings yellow.

Head. Head square-shaped in anterior view, 1.4 times as broad as high, malar area expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.7 times as long as compound eye. Clypeus smooth, glabrous, shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.1 times as long as compound eye. Diameter of torulus larger than inter-toruli distance, same than torulus-eye distance. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 2 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 7:4.5:3, diameter of lateral ocellus is 3.0.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla abundant in all flagellomeres; F1 not modified; antennal formula: 9(3.5), 3(3), 9(3.5), 8(3.5), 8(3.5), 8(3.5), 8(3.5), 8(3.5), 8(3.5), 7(3), 6.5(3), 6(3), 6(3), 9(3). In females, antenna 13-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla starting at F3 but not abundant until F5; antennal formula: 9(3.5), 3.5(3), 11(2.5), 9.5(3), 8.5(3), 8(3), 7.5(3), 7(3), 7(3.5), 7(3), 6.5(3), 6(3), 8(3).

Mesosoma. Pronotal plate smooth. Ventral and anterior pronotum carinate; pronotal surface rugose, smoother near tegula (Fig. 2d). Mesoscutum 1.1 times as broad as long in dorsal view. Mesoscutum lightly rugose, punctate, almost glabrous except for short hyaline pubescence scattered across surface; transverse carinae variably extended: they range from covering entire mesoscutal surface to being only present in posterior mesoscutum. Notaulus weak but complete, with tenuous horizontal carinae (Fig. 2g); median mesoscutal furrow present but not strong. Lateral mesoscutum smooth and punctate; parapsidal signum absent; parascutal sulcus reduced to coarse band. Scutellum alutaceous, shiny; central scutellum smooth while strongly areolate at margins; 0.8 times as long as mesoscutum; scutellar foveae rounded, large, alutaceous, posteriorly defined by carina; presence of large and elongated pit next to inner margin of scutellar foveae. Interfoveal line complete, effacing in some

individuals. Circumscutellar carina complete but not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate with rugose microsculpture, central and posterior mesopleuron smooth. Mesopleural triangle alutaceous, almost glabrous except for some short hyaline pubescence. Metanotal troughs glabrous, almost smooth except for some weak coarse sculpture. Propodeum smooth, divided in large cells; almost glabrous except for two densely pubescent areas below metanotal troughs; central propodeum divided in two symmetrical cells by median longitudinal carina; lateral propodeum heavily areolate.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.3 times as long as wide. Vein 2rm absent (Fig. 1e).

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.5 times as long as fourth in dorsal view. Metasomal terga smooth and glabrous; T4 to T7 punctate.

Biology

Known to attack *Wesmaelius betulinus* and *W. subnebulosus* (Fergusson 1986).

Distribution

Palaearctic. Sweden (Dalman 1823), United Kingdom (Cameron 1883), Austria, France (Giraud 1860), Germany (Hedicke 1914), Ukraine and Russia (Belizin 1951), Armenia and Georgia (Belizin 1961), China (Mata-Casanova *et al.* 2015b); first record for Portugal (Azores), Spain, Andorra, Ireland, Italy, Netherlands, Czech Republic, Slovenia, Bosnia and Herzegovina, Hungary, Norway and Romania.

Comments

The study of *A. nitidulus* was based on specimens deposited in the NHMUK identified as belonging to that species by Fergusson due to the loss of the type material. These specimens present the morphological traits mentioned in the original description of the species.

Aegilips notatus Belizin, 1951 incertae sedis

Aegilips notatus Belizin, 1951: 571 (♀).

Type material

Lost according to S. Belokobylskij (pers. comm.).

Comments

The original description of the species mentions the presence of ridges ventrally on the pronotum and mesopleuron, a laterally wrinkled scutellum and distinct scutellar foveae, among characters regarding its coloration. The first are not useful enough to properly distinguish it from other similar species, and the characters regarding the coloration are mostly useless when talking about Cynipoidea. Thus, it is impossible to determine if *Aegilips notatus* is a separate and valid species. Because of this, we consider it to be incertae sedis.

Aegilips paucus Belizin, 1961
Fig. 3f–g

Aegilips paucus Belizin, 1961: 153 (♂).

Diagnosis

Species with incomplete notauli like *A. atricornis*, *A. flavidiornis* and *A. zaitzevi*. Unlike *A. flavidicornis* and *A. zaitzevi* it presents an areolate scutellum (scutellum smooth in *A. flavidicornis* and *A. zaitzevi*). It is morphologically close to *A. atricornis*; however, *A. paucus* has almost effaced notauli and posterior carina of scutellar foveae weakening in its central area (in *A. atricornis* the notauli though incomplete are strongly apparent and basal carina of scutellar foveae is strong throughout).

Type material

Holotype

KAZAKSTAN • ♂; "Kazakhstan, Su-Singana River Valley, 6 Aug. 1939; Obukhova leg.;" (white label); "Holotype *Aegilips paucus* ♂; V. Belizin det" (red label); "*Aegilips paucus* Belizin, 1951, N. Mata-Casanova det" (white label); ZIN.

Material examined

UNITED KINGDOM • 1 ♂; Scotland, Bonhill; 12. Jun. 1912; J.R. Malloch leg.; USNM.

Type locality

Kazakhstan, Karkhantay.

Redescription

Measurements. Body: 2.4 mm; antennae lost; wings: 2.5 mm.

Coloration. Head and mesosoma black. Mandibles yellowish brown with darker teeth. Leg yellowish brown with darker coxae. Veins of wings yellowish.

Head. Triangular-shaped in anterior view, 1.1 times as broad as high, malar area not expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.6 times as long as compound eye. Clypeus smooth, glabrous, shortly projected; anterior tentorial pits small, indistinct. Transfacial distance as long as compound eye. Diameter of torulus larger than inter-toruli and torulus-eye distances. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 1.3 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 6.0:5.0:2.0, diameter of lateral ocellus is 2.0.

Antennae. Lost.

Mesosoma. Pronotal plate smooth. Pronotum smooth and punctate; ventral pronotum carinate, presence of some short and weak ridges at the edges of the pronotal plate, not extended into the rest of the pronotal surface. Mesoscutum 1.3 times as broad as long in dorsal view. Mesoscutum smooth, shiny and glabrous except for some scarce hyaline hairs. Notaulus incomplete and very tenuous, hard to notice, reduced to posterior mesoscutum (Fig. 3f); median mesoscutal furrow short and weakly excavated, almost unnoticeable. Lateral mesoscutum smooth, punctate; parapsidal signum and parascutal sulcus absents (Fig. 3g). Scutellum heavily areolate, 0.6 times as long as mesoscutum; scutellar foveae rounded, large, alutaceous, posteriorly defined by carina weakening in central scutellum; presence of small pit next to inner margin of scutellar foveae. Interfoveal line complete. Circumscutellar carina complete but not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate, central and posterior mesopleuron smooth; ventral carinae reaching metapleura. Mesopleural triangle with weak coarse sculpture, covered by dense short pubescence. Metanotal troughs glabrous, almost smooth except for some weak coarse sculpture. Propodeum coriaceous, densely pubescent, divided in large cells; central area longitudinally divided by median carina, with some transverse weak carination.

Wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.6 times as long as wide. Vein 2rm absent.

Metasoma. Lost.

Biology

Unknown.

Distribution

Palaearctic. Kazakhstan (Belizin 1961); Mongolia (Kovalev 1974).

Aegilips punctulatus Hedicke, 1928 incertae sedis

Type material

Lost according to H. Rajaei (pers. comm.).

Comments

The original description of the species does not provide enough information to distinguish it from other similar species, thus making it impossible to properly identify it. Therefore, we consider this species incertae sedis.

Aegilips romseyensis Fergusson, 1985
Figs 1f, 2c–f

Aegilips romseyensis Fergusson, 1985: 815 (♀).

Diagnosis

Species with the entire surface of the pronotum strongly carinate and notauli with strong transverse carinae, like *A. kozlovi* (pronotal carinae only present in the lower pronotum and notauli not internally carinate or only weakly carinate in the other species of *Aegilips*). It can be distinguished from *A. kozlovi* due to its smooth mesoscutum and central scutellum (in *A. kozlovi*, mesoscutum transversely carinate in its entire surface and central scutellum areolate).

Type material

Holotype

UNITED KINGDOM • ♀; "Malaise trap 0-5 m in dead *Larix*" (white label); "ENGLAND: Hampshire, Romsey, Awbridge, 14-31 Jun. 1980; C. and M. Vardy" (white label); "Holotype of *Aegilips romseyensis* ♀; N. D. M. Fergusson, 1982" (white label); "B.M. Type Hym 7.165" (white label); NHMUK.

Paratype

UNITED KINGDOM • ♂; "Malaise trap 2-5 m a.s.l. in dead *Larix*" (white label); "ENGLAND: Hants. Romsey, Awbridge, 3-31 Aug. 1980; C. and M. Vardy" (white label); "Paratype of *Aegilips romseyensis* ♂; N. D. M. Fergusson, 1982" (white label); NHMUK.

Material examined (19 ♀♀, 49 ♂♂)

CHINA • 2 ♂♂; 130 km N of Beijing, Lyan Ling (Linshan Mountians); 1749 m a.s.l.; 40º00.279'N, 15º30.758'E; 8 Apr. 2002; H. Baur leg.; USNM.

CZECH REPUBLIC • 1 ♂, 1 ♀; Moravia, R.V. Dyje nr. Zrojmo; 12 Sep. 1991; L. Masner leg.; CNC.

FRANCE • 1 ♀; Gard, Causse de Blandas; 9 Sep. 1984; M.W.R. leg.; NHMUK • 1 ♀; Cahors; 20 Sep. 1989; H. Tussac leg.; NHMUK • 1 ♂; Cahors; 22 Sep. 1989; H. Tussac leg.; NHMUK • 1 ♀; Laurouz, Hérault; 31 Oct. 1989; G. Delvare leg.; NHMUK.

HUNGARY • 1 ♂; Budapest; 1929: Biró leg.; NHMUK • 1 ♂; Kalocsa; 19 May 1939; Erdós leg.; NHMUK • 1 ♂; Baranya, Beremend; 24 Apr.–9 May 1963; L. Horacsek leg.; NHMUK • 2 ♂♂; Vas, Köszeg Kálvaria; 14 Jun. 1994; Melika leg.; UB • 1 ♀; Vas, Kërvölgy; 18 Jun. 1994; Melika leg.; UB • 1 ♀; Vas, Kondoria; 19 Jun. 1994; Melika leg.; UB • 1 ♂; Vas, Örség, Rikkagahaza Kétvölgy; 22 Jun. 1994; Narolsky leg.; UB • 1 ♀, 1 ♂; Vas, Szakonyfalú; 24 Jun. 1994; Kotenko leg.; UB • 1 ♂; Vas, Szalafö Felsözer; 1 Jul. 1994; Kotenko leg.; UB • 1 ♂; Vas, Szalafö Felsözer; 2 Jul. 1994; Kotenko leg.; UB • 1 ♂; Vas, Szalafö Felsözer; 3 Jul. 1994; Melika leg.; UB • 1 ♂; Vas, Cák; 4 Jul. 1994; Melika leg.; UB • 1 ♀, 7 ♂♂; Vas, Celdörmölk; 5 Jul. 1994; Melika leg.; UB • 1 ♀, 3 ♂♂; Vas, Cák; 8 Jul. 1994; Kotenko leg.; UB • 1 ♀; Veszprém Co., Kolontár; 10 Jul. 1999; Z. Ács leg.; UB • 1 ♀, 3 ♂♂; Veszprém Co., Zomlóvásárhely; 14 Jul. 1999; Z. Ács leg.; UB • 1 ♂; Veszprém Co., Máriahalom; 1 Sep. 1999; Z. Ács leg.; UB • 2 ♂♂; Veszprém Co., Bakonygyepes; 2 Jul. 2000; Zoltán Ács leg.; UB.

ITALY • 1 ♂; Rocchetta di Vara; 3 May 1965: Erdós leg.; CNC • 1 ♀; Abruzzo, L'Aquila, Loc. Coppito; 20 Jun. 1992; John D. Pinto leg.; CNC.

PAKISTAN • 1 ♂; Murree, Punj. Prov.; 7000–7500 ft a.s.l., 26–28 Sep. 1976; G.F. Hevel and R.E. Diets leg.; USNM.

ROMANIA • 1 ♀, 1 ♂; Hargita Co., Kiruly Valley; 10 Aug. 2000; Zoltán Ács leg.; UB • 2 ♂♂; Hargita Co., Kiruly Valley; 15 Aug. 2000; Zoltán Ács leg.; UB.

SLOVAKIA • 1 ♀; Cachtice env.; 11 Aug. 1991; L. Masner leg.; CNC.

SRI LANKA • 1 ♂; Hakgala Botanical Gardens, N.E. Dist.; 6000 ft a.s.l., 6–8 Oct. 1976; G.F. Hevel, R.E. Diets IV, S. Karunaratne and D.W. Balasooriya leg.; USNM.

THAILAND • 2 ♂♂; Chiang Mai, Doi Phahompok NP, Kiewlom1/montane forest; 2174 m a.s.l.; 20º3.549' N, 99º 8.552' E; 7–14 Mar. 2008; P. Wongchai leg.; USNM.

UNITED KINGDOM • 1 ♂; England, Cornworthy; 13 Jul. 1939; G.H.M. and K.U.C. leg.; NHMUK • 1 ♂; England, Bricket Wood; 14 Aug. 1939; K. Clarke leg.; NHMUK • 1 ♂; England, Bricket Wood; 25 Aug. 1939; K. Clarke leg.; NHMUK • 1 ♂; Old Head; 26 May. 1942; USNM • 1 ♂; Frampton Wd; 27 May 1950; USNM • 1 ♂; Waverley Wd; 5 Jun. 1952; H.W. Daltry leg.; NHMUK • 1 ♂; Rugby; 7 Sep. 1954; H.W. Daltry leg.; NHMUK • 2 ♀♀, 1 ♂; Bagley Wd BK; 5 Jul. 1956; H.W. Daltry leg.; NHMUK • 1 ♀, 1 ♂; Jersey, St. Aubins; 12–19 Sep. 1966; T. Dackus leg.; NHMUK • 1 ♂; Wales, Pembs, Mynachlog-ddu; 23 Jun. 1977; Noyes and Boucek leg.; NHMUK • 2 ♂♂; England, Cambridgeshire, Peterborough, Castor Hanglands; 18–28 Jul. 1978; Fitton and Noyes leg.; NHMUK • 1 ♀, 1 ♂; Cambridgeshire, Duxford; 25 Jul.–1 Aug. 1979; R.S. George leg.; NHMUK • 1 ♀; Hampshire, Romsey, Awbridge; Oct. 1981; C. and M. Vardy leg.; NHMUK • 1 ♂; England, Surrey, Chobham Common; 26 Aug. 1982; E.E. Grissell; USNM • 1 ♂; Kent, Canterbury; 6 Oct. 1985; L. Clemons leg.; NHMUK • 1 ♂; England, Surrey, Barnes Common; 12 Sep. 2009; J.S. Noyes leg.; NHMUK.

Type locality

United Kingdom, Hampshire, Romsey, Awbridge.

Redescription

Measurements. Body: 2.4–2.5 mm; antennae: 2.2 mm (♀), 2.4 mm (♂); wings: 2.4–2.5 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Leg yellowish brown with darker coxae. Veins of wings yellowish.

Head. Head square-shaped in anterior view (Fig. 1f), 1.4 times as broad as high, malar area expanded. Face smooth and punctate, with short uniform pubescence. Malar area coriaceous, 0.8 times as long as compound eye. Clypeus smooth, glabrous, shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.2 times as long as compound eye. Diameter of torulus shorter than inter-toruli distance but larger than torulus-eye distance. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 2.3 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 7.0:4.0:3.0, diameter of lateral ocellus is 2.0.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla abundant in all flagellomeres; F1 not modified; antennal formula: 9.0(4.0), 3.5(3.0), 9.0(3.5), 8.5(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 7.0(3.0), 6.0(3.0), 8.0(3.0). In females, antenna 13-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla starting at F3 but not abundant until F4; antennal formula: 9.0(3.0), 3.0(3.0), 9.0(2.5), 7.0(2.5), 6.0(2.5), 6.0(3.0), 5.0(3.0), 5.0(3.0), 4.0(3.0), 4.0(3.0), 4.0(3.0), 4.0(3.0), 7.0(3.0).

Mesosoma. Pronotal plate smooth. Pronotum covered by strongly coarse sculpture in its entire surface (Fig. 2c). Mesoscutum 1.2 times as broad as long in dorsal view. Mesoscutum shiny, from smooth to slightly alutaceous, never carinate; short hyaline pubescence uniformly distributed across its surface. Notaulus complete with horizontal carinae (Fig. 2f); median mesoscutal furrow present but not strong. Lateral mesoscutum smooth, punctate; parapsidal signum short, parascutal sulcus deeply excavated and internally carinate. central scutellum smooth while strongly areolate at margins (Fig. 2f), 0.8 times of mesoscutal length; scutellar foveae rounded, small, smooth, posteriorly defined by carina weakening in central scutellum; presence of large and elongated pit next to inner margin of scutellar foveae. Interfoveal line complete. Circumscutellar carina complete but not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate with rugose microsculpture, central and posterior mesopleuron smooth. Mesopleural triangle smooth with two short sulcus in its anterior margin, glabrous. Metanotal troughs glabrous, almost smooth except for some weak coarse sculpture. Propodeum coriaceous, densely pubescent, divided in large cells; central area longitudinally divided by median carina, with some transverse weak carination.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.5 times as long as wide. Vein 2rm absent.

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.8 times as long as fourth in dorsal view. Metasomal terga smooth and glabrous; T4 to T7 punctate.

Biology

Unknown.

Distribution

Palaearctic and Indomalayan. United Kingdom (Fergusson 1985); first record for France, Italy, Austria, Czech Republic, Slovakia, Hungary, Romania, Pakistan, Sri Lanka, Thailand and China.

Aegilips ustulatus Belizin, 1973
Fig. 3a

Aegilips ustulatus Belizin, 1973: 31 (♂).

Diagnosis

Species with complete and not internally carinate notauli and smooth mesoscutum, similar to *A .nitidulus*. However, most of the mesopleural surface is completely wrinkled, a character exclusive of this species (other Palaeartic species of *Aegilips* present some antero-ventral carinae in the mesopleuron but they never reach central mesopleuron).

Type material

Holotype

KRYGYZSTAN • ♂; "*Aegilips ustulatus* Belizin" (red label); "Kirgiziya, Akbosaga, 5 Aug. 1964; (V. Tobias)" (white label); ZIN.

Type locality

Kyrgyzstan, Osh oblast, Ak-Bosogo.

Redescription

Measurements. Body: 2.3 mm; antennae: 3.0 mm (♂); wings: 3.0 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Leg yellow with darker coxae. Veins of wings dark brown.

Head. Head square-shaped in anterior view, 1.4 times as broad as high, malar area expanded. Face smooth, punctate, with short pubescence except in central rostrum, which is glabrous. Malar area coriaceous, 0.7 times as long as compound eye. Clypeus smooth, glabrous and shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.3 times as long as compound eye. Diameter of torulus larger than inter-toruli distance and torulus-eye distance. Frons, gena and occiput smooth, glabrous except for few sparse setae; occipital and postocular carinae absent. In dorsal view 1.7 times as broad as long, broader than mesosoma. Compound eyes glabrous. POL: OOL: LOL is 6.5:5.0:3.0, diameter of lateral ocellus is 2.0.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla abundant in all flagellomeres; F1 not modified; antennal formula: 9.0(3.5), 3.0(3.0), 10.0(3.0), 10.0(3.0), 10.0(3.0), 9.0(3.0), 9.0(3.0), 9.0(3.0), 9.0(3.0), 9.0(3.0), 9.0(3.0), 9.0(3.0), 8.0(3.0), 10.0(3.0).

Mesosoma. Pronotal plate smooth. Pronotum covered by short pubescence, ventral pronotum densely wrinkled (Fig. 3a). Mesoscutum almost as broad as long in dorsal view (25:24). Mesoscutum shiny, smooth; short hyaline pubescence uniformly distributed across its surface. Notaulus complete, not internally carinate, coarse margins; median mesoscutal furrow present. Lateral mesoscutum smooth and punctate; parapsidal signum absent; parascutal sulcus absent, presence of coarse band instead. Scutellum smooth with rugose margins, 0.6 times as long as mesoscutum; scutellar foveae rounded, smooth, posteriorly defined by carina weakening in central scutellum; presence of large and elongated pit next to inner margin of scutellar foveae. Interfoveal line complete. Circumscutellar carina complete but not projected to form tooth in lateral view. Mesopleural surface densely wrinkled except for dorso-posterior margin (Fig. 3a). Mesopleural triangle strongly coarse. Metanotal troughs glabrous, almost smooth except for some weak coarse sculpture. Propodeum coriaceous, densely pubescent, divided in large cells; central area longitudinally divided by median carina, with some transverse weak carination.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 3.0 times as longas wide. Vein 2rm absent.

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 3.2 times as long as fourth in dorsal view. Metasomal terga smooth and glabrous; T4 to T7 punctate.

Biology

Unknown.

Distribution

Palaearctic. Kyrgystan (Belizin 1973).

Aegilips zaitzevi Kovalev, 1974
Figs 1d–g, 2h

Aegilips zaitzevi Kovalev, 1974: 284 (♂).
Aegilips vena Fergusson, 1985. **Syn. nov**.

Diagnosis

It shares the presence of incomplete notauli with *A. atricornis*, *A. flavidicornis*, and *A. paucus*. However, it can be easily distinguished due to the absence of mesoscutal and scutellar sculpture (other species of *Aegilips* present some degree of sculpture in the scutellum) and the presence an elongated 2rm vein, a character that sets it apart from other Palaearctic species of *Aegilips* (vein 2rm absent in other Palaearctic species of *Aegilips*).

Type material

Holotype of Aegilips zaitzevi
MONGOLIA • ♂; "*Aegilips zaitzevi* Kovalev" (red label); "Ara-Khangaskiy aimak: 15 km NE rep. Egin-Daba, 27-28.VIII.1967: Zaitsev & Kerzhner" (white label); ZIN.

Holotype of *Aegilips vena*
MONGOLIA • ♀; "SCOTLAND: Aviemore, 4.VI.1952: R. B. Benson. B.M. 1952-447" (white label); "Holotype of *Aegilips venus* sp. nov., ♀; N.D.M. Fergusson, 1982" (white label); "B.M. Type Hym 7.164" (white label); NHMUK.

Paratype
MONGOLIA • ♂; "ENGLAND: Aviemore, 4 Jul. 1952; R.B. Benson. B.M. 1952-447" (white label); "Paratype of *Aegilips venus* ♂; N.D.M. Fergusson, 1982" (white label); NHMUK.

Type locality

Mongolia, Arkhangai aimag, Egin-Daba.

Material examined (2 ♀♀, 1 ♂)

RUSSIA • 1 ♀; Primorskiy Krai, Lazovski Zapovednik; 170 km E of Vladivostok; 43º30'30" N 134º6'58" E; 1853 m a.s.l., 3 Jul.–13 Aug. 2001; M. Quest leg.; NHMUK.

UNITED KINGDOM • 1 ♀; Maer Woods, ST; 23 Jul. 1950; H.W. Daltry leg.; NHMUK • 1 ♂; Burnt Woods, ST; 11 Jul. 1954; H.W. Daltry leg.; NHMUK.

Redescription

Measurements. Body 2.4–2.6 mm; antennae: 2.3–2.8 mm (♀), 2.3–2.6 mm (♂); wings: 2.8–3.1 mm.

Coloration. Head, mesosoma and metasoma black. Mandibles yellowish brown with darker teeth. Leg yellowish brown with darker coxae. Veins of wings yellowish.

Head. Head from triangular to sub-square-shaped in anterior view (Fig. 1d); 1.3 times as broad as high, malar area not expanded. Face smooth, punctate, with short uniform pubescence. Malar area coriaceous, 0.7–0.8 times as long as compound eye. Clypeus smooth, glabrous to sparcely pubescent, shortly projected; anterior tentorial pits small, indistinct. Transfacial distance 1.3 times as long as compound eye. Diameter of torulus equal to inter-toruli distance, slightly larger than torulus-eye distance. Frons, gena and occiput smooth and glabrous with few sparse setae; occipital and postocular carinae absents. In dorsal view 2.3 times as broad as long, broader than mesosoma. Compound eyes glabrous. In males POL: OOL: LOL is 6.0:5.0:3.0, diameter of lateral ocellus is 2.5; in females POL: OOL: LOL is 7.0:6.0:2.5, diameter of lateral ocellus is 2.0.

Antennae. In males, antenna 14-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla present in all flagellomeres but scarce from F1 to F3; F1 not modified; antennal formula: 9.0(4.0), 3.5(3.0), 9.0(3.0), 9.0(3.0), 8.0(3.0), 8.0(3.0), 8.0(3.0), 7.0(3.0), 6.5(3.0), 6.5(3.0), 6.5(2.5), 6.0(2.5), 6.0(2.5), 8.0(2.5). In females, antenna 13-segmented; flagellomeres cylindrical and pubescent, same width in all flagellomeres, placodeal sensilla starting at F3 but scarce; antennal formula: 8.0(3.5), 3.5(3.0), 10.0(2.5), 10.0(2.5), 9.0(3.0), 9.0(3.0), 8.0(3.0), 8.0(3.0), 6.5(3.0), 6.0(3.0), 6.0(3.0), 9.0(3.0).

Mesosoma. Pronotal plate smooth. Pronotum covered by long hyaline pubescence; ventrally carinate, dorsally smooth and punctuated. Mesoscutum 1.1–1.2 times as broad as long in dorsal view. Mesoscutum shiny, smooth, almost glabrous except for scarce short hyaline pubescence. Notaulus weak, effaced in anterior mesoscutum (Fig. 2h). Lateral mesoscutum smooth, glabrous; parapsidal signum and parascutal sulcus absents. Scutellum smooth, shiny (Fig. 2h), 0.7 times as long as mesoscutum; scutellar foveae rounded, large, slightly coarse, posteriorly defined by carina; presence of tenuous elongated pit next to inner margin of scutellar foveae. Interfoveal line complete. Circumscutellar carina complete but not projected to form tooth in lateral view. Anterior and ventral mesopleuron carinate. Mesopleural triangle strongly coarse, pubescent. Metanotal troughs densely pubescent, smooth except for some coarse sculpture in its lower margin. Propodeum alutaceous, covered with dense pubescence in laterals; central area glabrous defined by two longitudinal carinae, further divided in smaller cells by weak carinae.

Fore wings. Pubescent, marginal pubescence denser at apical third. Radial cell closed, 2.3–2.4 times as long as wide. Vein 2rm present, projected downwards (Fig. 1g).

Metasoma. Shorter than head + mesosoma. Petiole as long as wide, shorter than metacoxa, coarsely sculptured, shiny. Third metasomal tergum 2.3 times as long as fourth in dorsal view. Metasomal terga smooth and glabrous; T4 to T7 punctate.

Biology

Unknown.

Distribution

Palaearctic. Mongolia (Kovalev 1974), United Kingdom (Fergusson 1986); first record for Russia: Primorskiy Krai.

Discussion

The present work introduces important changes in our knowledge about the status of the Palaeartic species of *Aegilips.* The previously valid species *A. curvipes*, *A. gemellus*, *A. laevis*, *A. montanus* and *A. punctatus* have been considered to fall within the morphological diversity range of *A. nitidulus*, and are thus synonymized with it; *A. vena* has also been discovered to be a junior synonymy of *A. zaitzevi*. Taking those new synonyms and the description of *A. insularis* Mata-Casanova & Pujade-Villar sp. nov., the number of *Aegilips* species diminishes to 22 species, 13 of them being found in the Palaearctic region: *A. atricornis*, *A. flavidicornis*, *A. insularis* Mata-Casanova & Pujade-Villar sp. nov., *A. kozlovi*, *A. longicellus*, *A. nitidulus*, *A. notatus*, *A. paucus*, *A. punctulatus*, *A. romseyensis*, *A. ustulatus* and *A. zaitzevi.* Two species – *A. atricornis* – are and *A. romseyensis* also present in the Indomalayan region. The lack of type material for *A. notatus* and *A. punctulatus* makes their identity uncertain, and thus they have been designated as incertae sedis.

Aegilips atricornis, *A. romseyensis* and *A. vena* were recorded for the first time by Fergusson (1985) and were restricted to the United Kingdom. The study of large series of undetermined material has extended their known distribution area. *Aegilips atricornis* is well represented in the Western Palaearctic region, ranging from North Africa and the Iberian Peninsula to Scandinavia and Cyprus, also being present in Madeira. Specimens of *Aegilips atricornis* have also been found in northern regions of Pakistan, India and China, thus being the first citation of the genus in the Indomalayan region and extending the distribution area of the species to the Eastern Eurasia. A similar pattern has been found for *A. romseyensis*, with a wide distribution across the Western Palaearctic region and being also present in the Eastern Palaearcic (China) and Indomalayan regions.

A similar distribution can be found in *Aegilips longicellus*, *A. paucus* and *A. zaitzevi. Aegilips longicellus* and *A. paucus*, previously only known from Central Asia and Mongolia, are cited for the first time in the Western Palaearctic, in the United Kingdom. *Aegilips zaitzevi*, after the synonymy of *A. vena*, is also present in the United Kingdom. Thus, the distribution areas for these three species are divided in two separate zones, being recorded at United Kingdom on one side and Central Asia, Mongolia and the Russian Far East on the other. The split pattern in their records we see in *A. atricornis*, *A. kozlovi*, *A. longicellus*, *A. nitidulus*, *A. paucus*, *A. romseyensis* and *A. zaitzevi* suggests a wide distribution across Eurasia, probably a collection artifact if we take into account the scarce Central Asian record.

Other Palaearctic species of the genus present a more restricted recorded area: *A. flavidicornis*, *A. paucus* and *A. ustulatus* are only recorded from Central Asia, recorded from China, Tajikistan, Kazakhstan and Kyrgystan respectively, with no new records added. The newly described species *A. insularis* Mata-Casanova & Pujade-Villar sp. nov., has also only been recorded from Madeira.

Aegilips nitidulus was previously known from Western Europe, but the new synonymies and new records found when studying undetermined material have shown a distribution pattern of known records similar to *A. zaitzevi*, divided in two areas: one area extended across all Europe and most of the Western Palaearctic region, from the Iberian Peninsula in the west and the Caucasus mountain range as its easternmost location, while having another smaller distribution area in the Russian Far East. Its range is further extended to reach the Azores archipelago. Thus the genus *Aegilips* in the Macaronesian islands is well represented with three species: *A. atricornis*, *A. nitidulus* and *A. insularis* Mata-Casanova & Pujade-Villar sp. nov., the last being endemic of the region.

The Eurasian species of *Aegilips* are as morphologically diverse as those belonging to *Xyalaspis*. The main differences are related to the length and appearance of notauli and the sculpture of the scutellum. Regarding the notauli, two features should be mentioned: its extension and the presence of internal sculpture. The notauli in *Aegilips* can reach the anterior edge of the mesoscutum or be incomplete.

In *A. kozlovi* and *A. romseyensis* the notauli are complete and deeply excavated (Fig. 2e–f), while *A. insularis*, *A. nitidulus* and *A. ustulatus* also have complete notauli, but these are not as deeply excavated (Fig. 2a–b, g). *Aegilips atricornis* (Fig. 3d) and *A. flavidicornis* (Fig. 3c) represent the transitional state between complete and incomplete notauli: both species possess long notauli, almost reaching the anterior edge of mesoscutum in some individuals in *A. atricornis* (Fig. 3d), but those are always incomplete. The notauli in *A. zaitzevi* are shorter, disappearing in the anterior third of mesoscutum (Fig. 2h), while the notauli of *A. longicellus* and *A. paucus* present the shortest ones in the Palaearctic range of *Aegilips* (Fig. 3b–f), reaching only ⅓ of the mesoscutum total length and being almost unnoticeable in some specimens, especially in *A. paucus*. The horizontal carinae of the notauli show less variation: in *A. kozlovi* and *A. romseyensis* the notauli are internally divided by strong carinae (Fig. 2e–f), but in *A. nitidulus* and *A. insularis* the carinae are smooth (Fig. 2a, g). The other species of *Aegilips* studied have no trace of notaular sculpture.

Scutellar sculpture similarly has a wide range of variation, from a completely smooth scutellum without a trace of scutellar foveae, to a strongly areolate scutellum. *Aegilips insularis* represents the smoothest appearance the scutellum can have, with very tenuous scutellar foveae and without any other sculpture feature (Fig. 2a–b). *Aegilips flavidicornis*, *A. ustulatus* and *A. zaitzevi* have the central mesoscutum smooth or weakly coarse while having the margins areolate and the scutellar foveae clearly defined (Figs 2h, 3c). *Aegilips longicellus* and *A. nitidulus* represent the next step in scutellar sculpture, both having strong areolate sculpture at the margins of the scutellum while having the central scutellum tenuously coarse to strongly areolate; however, in *A. longicellus* the interfoveal line is very short and the scutellar foveae are not basally defined by a carina (Fig. 3b), a state of characters not seen in *A. nitidulus* (which has a complete interfoveal line and a strong carina basally defining the scutellar foveae) (Fig. 2g). The closely related *A. kozlovi* and *A. romseyensis* (Fig. 2e–f) greatly differ in the scutellar sculpture: *A. romseyensis* presents alutaceous central scutellum (Fig. 2f) similar to *A. longicellus* and *A. nitidulus* while in *A. kozlovi* the scutellum is heavily areolate (Fig. 2e). Finally, *A. atricornis* and *A. paucus* present a strongly areolate scutellum in its entire surface (Fig. 3d, f). A noteworthy feature that should be mentioned is the presence of the 2rm vein in *A. zaitzevi* (Fig. 1r), a character not seen in either *Xyalaspis* or in other species of *Aegilips*. This character makes the species easily distinguishable from the rest of the Palaearctic species of the genus.

Regarding the biology of the Palaearctic species of *Aegilips*, only *A. atricornis* and *A. nitidulus* have known hosts belonging to Hemerobiidae (Fergusson 1986). Both species have been cited attacking the larvae of *Wesmaelius betulinus* (Strøm, 1788) and *W. subnebulosus* (Stephens, 1836). *Wesmaelius* seems to be a common host for Palaearctic anacharitines: *Anacharis eucharioides* (Dalman, 1818) and *Xyalaspis petiolata* Kieffer, 1901 have also been described as parasitoids of *W. betulinus* and *W. subnebulosus* (Fergusson 1986). However, the hosts of most of the Palaearctic species of *Aegilips* and other Anacharitinae from this region are still unknown, so more research should be done in order to fully comprehend their biology.

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