

## A review of some Holarctic *Agyneta* Hull s.str. (Araneae, Linyphiidae)

**Heikki Hippa**

Zoological Museum,  
University of Helsinki,  
P. Rautatiekatu 13,  
SF-00100 Helsinki 10,  
Finland

and

**Ilkka Oksala**

Department of Biology,  
University of Turku,  
SF-20500 Turku 50,  
Finland

### Summary

Originally both *Microneta passiva* O. Pickard-Cambridge, 1906 and *Neriene subtilis* O. Pickard-Cambridge, 1863 were designated as the type-species of *Agyneta*. The final choice between these has not yet been made and is still left open. *Microneta passiva* is a junior synonym of *Neriene decora* O. Pickard-Cambridge, not of *Microneta cauta* O. Pickard-Cambridge. *Microneta cauta* and *M. olivacea* Emerton are not conspecific, but two different species. The first is known from Europe, the latter is Holarctic; these species have often been confused. *Agyneta allosubtilis* Loksa is widespread in Siberia and occurs also in North America. Its female has previously been described as *A. cauta* and *A. decora*. *Agyneta trifurcata* sp. n. is described from Finnish subarctic Lapland, *A. breviceps* sp. n. from Finnish Forest Lapland.

### Introduction

The Palaearctic fauna of *Agyneta* s.str. consists of eight species with the following names regarded as valid: *A. conigera* (O. Pickard-Cambridge, 1863), *A. subtilis* (O. Pickard-Cambridge, 1863), *A. decora* (O. Pickard-Cambridge, 1871), *A. arietans* (O. Pickard-Cambridge, 1872), *A. cauta* (O. Pickard-Cambridge, 1902), *A. ramosa* Jackson, 1912, *A. suecica* Holm, 1950 and *A. allosubtilis* Loksa, 1965. The status of *A. arietans* and *A. suecica* has been uncertain (see Palmgren, 1975) and still remains so. The only Nearctic species referred to *Agyneta* s.str. are *A. olivacea* (Emerton, 1882), which has been regarded as a synonym of *A. cauta* in spite of twenty years

priority, and *A. decora* which is based on misidentification.

The examination of a large amount of North Palaearctic material, analysis of the literature and checking the necessary types revealed a great deal of confusion and misinterpretation concerning the identity of many species. In addition, two undescribed species were discovered from northern Fennoscandia. Further, the concept of the type-species of *Agyneta* proved to be obscure in many ways.

The aim of the present work is briefly to review the taxonomy of the Holarctic *Agyneta* where the published information is inadequate or erroneous. No attempt has been made to discover the detailed distribution of the species.

### Material and Methods

The material studied is preserved in the following collections, later referred to by the abbreviations in parentheses: Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts (MCZ), Biological Institute, SO ANSSR, Novosibirsk (BIN), Hope Entomological Collections, University Museum, Oxford (HEC), Swedish Museum of Natural History, Stockholm (SMNH), Zoological Museum, University of Helsinki, Helsinki (ZMH) and Zoological Museum, University of Turku, Turku (ZMT).

The drawings were made with a camera lucida attached to a stereomicroscope from specimens in liquid, those of the palps, carapaces and epigynes from untreated specimens, those of the vulvae from specimens treated in KOH without compression. For structures that are illustrated verbal descriptions are usually unnecessary and these are therefore restricted to a minimum.

The measurements were made by an ocular scale from specimens in liquid, originally to an accuracy of 0.018 mm. The ratios were calculated from original scale readings.

If not specially mentioned in the legends to figures, respective figures of different species have been prepared in the same approximate size, not to the same scale.

Because a detailed infrageneric classification of *Agyneta* s.l. is lacking, we use *Agyneta* s.str. only for the sake of convenience in its original meaning (Hull, 1911; Locket & Millidge, 1953, etc.); however, we do not accept the arguments of Millidge (1977) who

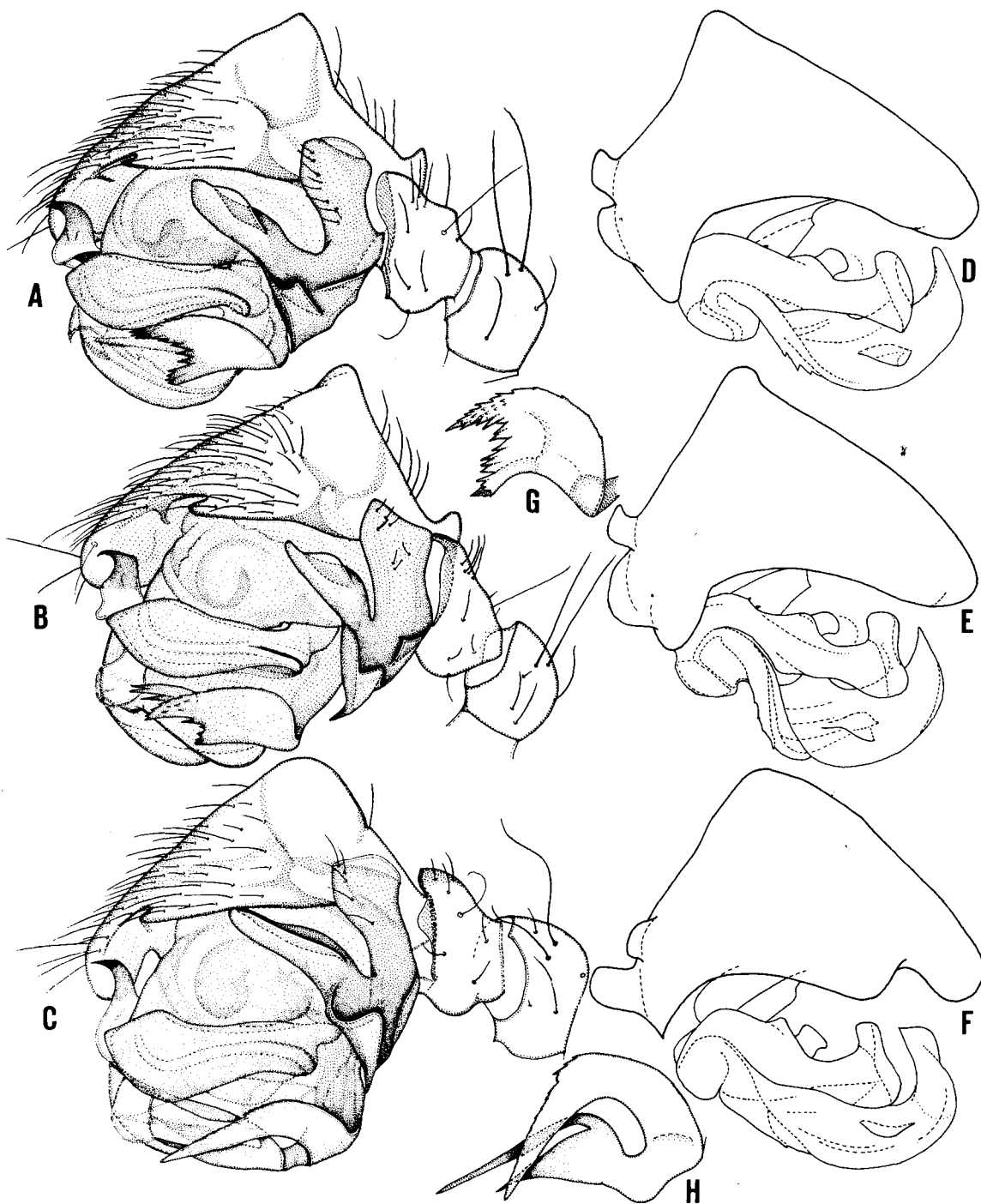


Fig. 1: Male palp, retrolateral (A-C) and prolateral view (D-F), and lamella characteristic, lateral view (G, H). A, D & G *Agyneta cauta* (O. P.-Cambridge) (Finland: A & D Eno, G Turku); B & E *A. olivacea* (Emerton) (Finland, Eno); C, F & H *A. trifurcata* sp. n. (holotype).

suggests that *Agyneta* and *Meioneta* belong to different phylogenetic lines because of wide differences in the trichobothrial formula.

#### Type-species of *Agyneta*

*Microneta passiva* O. Pickard-Cambridge or *M. cauta* O. Pickard-Cambridge, in the belief that the latter is a synonym of the former, have been regarded as the type-species of *Agyneta* on the basis of Hull's (1911) original designation on p. 583 (e.g. Bonnet, 1955; Saaristo, 1973). It seems to have escaped notice that earlier Hull (1911) on p. 578 says that the type-species is *Neriene subtilis* O. Pickard-Cambridge ("*subtilis* Cb. is the type"). So far as we are aware, the choice between these two is open and we will leave it as such to await further work on the infrageneric classification of *Agyneta*. The identity of *Microneta passiva* is discussed below.

#### *Agyneta passiva* (O. Pickard-Cambridge)

*Microneta passiva* O. Pickard-Cambridge, 1906: 89.

**Discussion:** The original description was based on several females from near Weymouth, at Hexham and at Huddersfield, England, and on one male from the latter place. In the O. Pickard-Cambridge Collection, among the material identified by him as *M. passiva*, there is one tube labelled "Huddersfield, Falconer". It contains a male and a female. These cannot be syntypes, because of the extra male (see below). Both specimens are *A. olivacea*. There is another tube with a single male labelled: "*M. passiva* Type ♂, Huddersfield July 5 1902". This certainly is a syntype, because its palp was illustrated: the palpal sclerites are still in the original position with a seeming image resembling a string of pearls in the middle of the bulbus. This male is *A. decora* as fixed by Locket (1964). At least one of the syntype females, the one illustrated, is not conspecific, but is *Meioneta saxatilis* (Blackwall) (cf. Jackson, 1912, etc.). Based apparently on Jackson's (1912) opinion *A. passiva* has been widely regarded as a junior synonym of *A. cauta* (O. Pickard-Cambridge).

Because *Microneta passiva* is one of the type-species originally mentioned for his *Agyneta* by Hull (1911: 583, see also above), we consider it necessary to fix its identity and hereby designate the above-mentioned only syntype male as lectotype. Accordingly, *Microneta passiva* O. Pickard-Cambridge,

1906 = *Neriene decora* O. Pickard-Cambridge, 1871, new synonymy.

*Agyneta cauta* (O. Pickard-Cambridge) (Figs. 1 A, D, G; 2 A, B; 3 B, G; 4)

*Microneta cauta* O. P.-Cambridge, 1902: 31.

Measurements (mm): Length of carapace, ♂ 0.82-0.95, ♀ 0.78-0.89; width of carapace, ♂ 0.64-0.75, ♀ 0.59-0.64; length/width of carapace, ♂ 1.17-1.33, ♀ 1.32-1.44; length of tibia I, ♂ 0.59-0.75, ♀ 0.55-0.63; tibia I length/carapace length, ♂ 0.72-0.85, ♀ 0.67-0.72; position of trichobothrium on metatarsus I, ♂ 0.83-0.91, ♀ 0.85-0.89. See also Fig. 4.

Female carapace (Fig. 3 B); carapace with usual sexual dimorphism, being relatively wider in male than in female (see measurements); clypeus of male unmodified, not far from perpendicular. Male chelicerae unusually strongly and abruptly attenuated in apical third, in both sexes with the normal two apical marginal teeth (see Saaristo, 1973). Trichobothria of metatarsi angled. Male palp, Fig. 1 A, D, G. Female palp (Fig. 3 G); tarsus with short stiff dorsal setulae not illustrated. Female epigyne and vulva, Fig. 2 A, B.

Cephalothorax pale yellowish brown to deep orange-brown with slight differences in intensity of colouration in different parts, eyes surrounded with black, lateral margin of carapace, clypeus, chelicerae, labium, sternum, tibiae and tarsi (especially of legs I and II) and cymbium more or less distinctly suffused with grey, sometimes with faint traces of a suffused-grey postocular patch and radiating striae on thoracic part of carapace; abdomen of male grey-black, of female yellow-grey to grey-brown.

**Material examined:** Finland: about 500 ♂♂ and 700 ♀♀ from throughout the country (in ZMT); Sweden: Lule Lappmark, Messaure ecol. station, pit-fall traps, 19 ♂♂, 2 ♀♀, K. Müller (in ZMT); England: S. Wales July 1901 1 ♂, Jackson (in HEC); Switzerland: Uri, Hospental V-IX 1969 1 ♂, P. Lehtinen (in ZMT).

**Discussion:** The description of *Microneta cauta* was based on "Examples of both sexes found by Dr. Randall Jackson near Glamorgan in 1901" (O. P.-Cambridge, 1902). Locket (1964) designated a neotype male for *Microneta cauta*. It was found in O. P.-Cambridge's collection in a tube labelled "*Microneta*

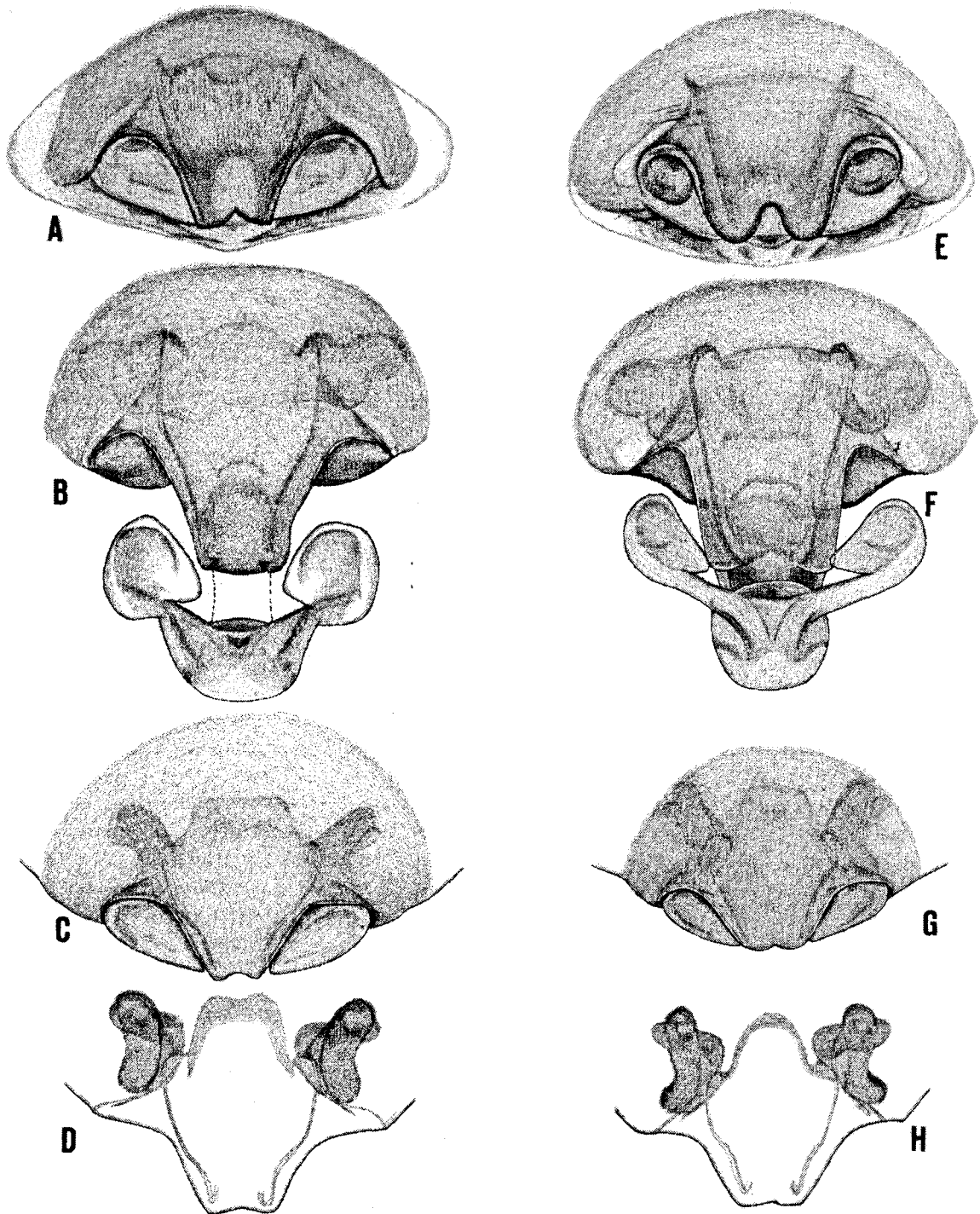


Fig. 2: Epigyne (A, C, E, G), expanded epigyne (B, F) and vulva (D, H), ventral views. A & B *Agyneta cauta* (O. P.-Cambridge) (Finland, Eno); C & D *A. subtilis* (O. P.-Cambridge) (Finland, Utsjoki); E & F *A. olivacea* (Emerton) (Finland, Eno); G & H *A. allosubtilis* Loksa (USSR, Altai).

sp. n. ♂" and "*M. cauta* Cb. Types ♂ ♀", which further was in a bottle labelled "*Microneta cauta* Camb. sp. n. Dr. Jackson, S. Wales July 2 1901" (Locket, 1964). The selected neotype consists of only an imperfect cephalothorax. In addition the tube contained a female cephalothorax and abdomen and at least today contains also a loose male abdomen. The two pieces of female belong together. The details of the epigyne of this specimen and the illustration of the epigyne of *Microneta cauta* in the original description are identical; the illustration of the cephalothorax in the description is also based on the female, not on the male as it should be according to the legend to the figures, and apparently on this same female. At least this female certainly belongs to the syntype series. It is identical with *Agyneta ramosa* Jackson. The loose male abdomen and the "neotype" hardly belong together. The illustration of the male palp in the original description is very unlikely to have been based on the "neotype". However, the conditions under which this male was found by Locket suggest its belonging to the syntype series with as good a probability as can be expected in this kind of case. Because syntypes exist, the "neotype" even being one of them, no neotypes can be designated (ICZN Article 75), but on the basis of the above arguments we interpret Locket's (1964) neotype actually to mean a lectotype. The type selection is very fortunate because the type is the only specimen of the species in O. P.-Cambridge's collection and because it preserves the name *A. cauta* for one of the species commonly known by this name.

*A. cauta* has commonly been confused with *A. olivacea*, but the inadequate descriptions make it impossible to decide which of them really concern *A. cauta*. In a few cases it is only possible to separate those which concern *A. olivacea*. We do not know of any description certainly referable to the female of *A. cauta* (see also under *A. olivacea*). The distinguishing characters between *A. cauta* and *A. olivacea* are discussed under the latter.

*Agyneta olivacea* (Emerton) (Figs. 1 B, E; 2 E, F; 3 A, F; 4)

*Microneta olivacea* Emerton, 1882: 77.

Measurements (mm): Length of carapace, ♂ 0.75-0.91, ♀ 0.70-0.89; width of carapace, ♂ 0.64-

0.75, ♀ 0.48-0.63; length/width of carapace, ♂ 1.13-1.31, ♀ 1.33-1.54; length of tibia I, ♂ 0.52-0.64, ♀ 0.38-0.55; tibia I length/carapace length, ♂ 0.64-0.75, ♀ 0.52-0.64; position of trichobothrium on metatarsus I, ♂ 0.81-0.92, ♀ 0.81-0.90. See also Fig. 4.

Similar to *A. cauta* except: Female carapace (Fig. 3 A); male palp (Fig. 1 B, E); female palp (Fig. 3 F); female epigyne and vulva (Fig. 2 E, F). Colour of cephalothorax pale to deep yellowish brown, generally more yellowish in shade than in *A. cauta*, with usually more distinct suffused-grey pattern on carapace, but less distinct pattern on legs.

*Material examined*: Finland: about 50 ♂♂ and 100 ♀♀ from throughout the country (in ZMT). England: Northumberland 2 ♂♂, 3 ♀♀, J. E. Hull; (Huddersfield) 20 July 1909 1 ♂, Falconer; Huddersfield 1 ♂, 1 ♀, Falconer; Chat Moss 1904 1 ♂, 2 ♀♀, T. H. Bloom (all in HEC). USSR: S.W. Altai, several localities near Katanda, 800-1000 m, steppe and mixed forests, moss and litter, 22 June-26 July 1983 2 ♂♂, 60 ♀♀, exp. Mikkola, Hippa, Jalava (in ZMH, ZMT and BIN); Yakutia: Oktyomey, Toibochoi, Ljampeshka, moss, 8-26 July 1977 3 ♀♀, S. Koponen (in ZMT). Canada: New Quebec, Great Whale River 30 m, forest, moss 17-28 July 1983 1 ♀, S. Koponen (in ZMT). USA: New Hampshire, Mt. Washington 2 ♂♂ (H. W. Levi, in litt.) (syntypes, in MCZ).

*Discussion*: *Agyneta olivacea* was described from Mt. Washington, New Hampshire, on the basis of two males (Emerton, 1882). Both are conspecific and similar to our European material (H. W. Levi, in litt.). The female was described later from Maine (Emerton, 1911, fig. 5 c, d, g and apparently i and k), but was also confused with a species with an only weakly modified palpal tarsus (fig. 5 e). After comparing North European material with that from Newfoundland, Hackman (1954) concluded that *A. olivacea* is a synonym of *A. cauta*. Van Helsdingen (1973) studied the types of *A. olivacea* and accepted this synonymy, see also Kaston (1981).

Both *A. olivacea* and *A. cauta* have in the Old World been included under the name of the latter and the descriptions are mostly quite insufficient to decide which species they concern. The following descriptions concern or probably concern *A. olivacea*: Jackson (1912: pl. 8, fig. 5 a, b, c, f), Locket & Millidge (1953: fig. 205 e, f), Wiehle (1956: figs. 171, 172), Loksa (1965: fig. 4), Tyshchenko (1971: fig.

635), Saaristo (1973: figs. 58, 63, 68) and Palmgren (1975: fig. 4:23).

*A. olivacea* and *A. cauta* are extremely similar. In the male they differ from the other species of *Agyneta* s.str. by, e.g., the characteristic shape and relative size of the basal prolateral protuberances of the cymbium (Fig. 1 D, E). They can be distinguished from each other by the structure of the lamella characteristica and paracymbium: in *A. olivacea* there is a tooth near the ventral margin of the paracymbium between the basal and distal prongs, in *A. cauta* only a straight crest at the same

place; in *A. olivacea* the lamella has an extra apico-dorsal branch arising from the inner surface, whereas in *A. cauta* this structure is either missing or forms the dorsal apex itself (Fig. 1 A, B, G).

The females of *A. olivacea* and *A. cauta* differ from the other species with strongly tumid palpal tarsi by several characters of the epigyne and vulva: in both species the ducts leading to the receptacula seminis, usually easily seen through the epigynal integument in ventral view, are subparallel, not anteriorly divergent, and their anterior loop to the receptaculum extends further anteriorly than either

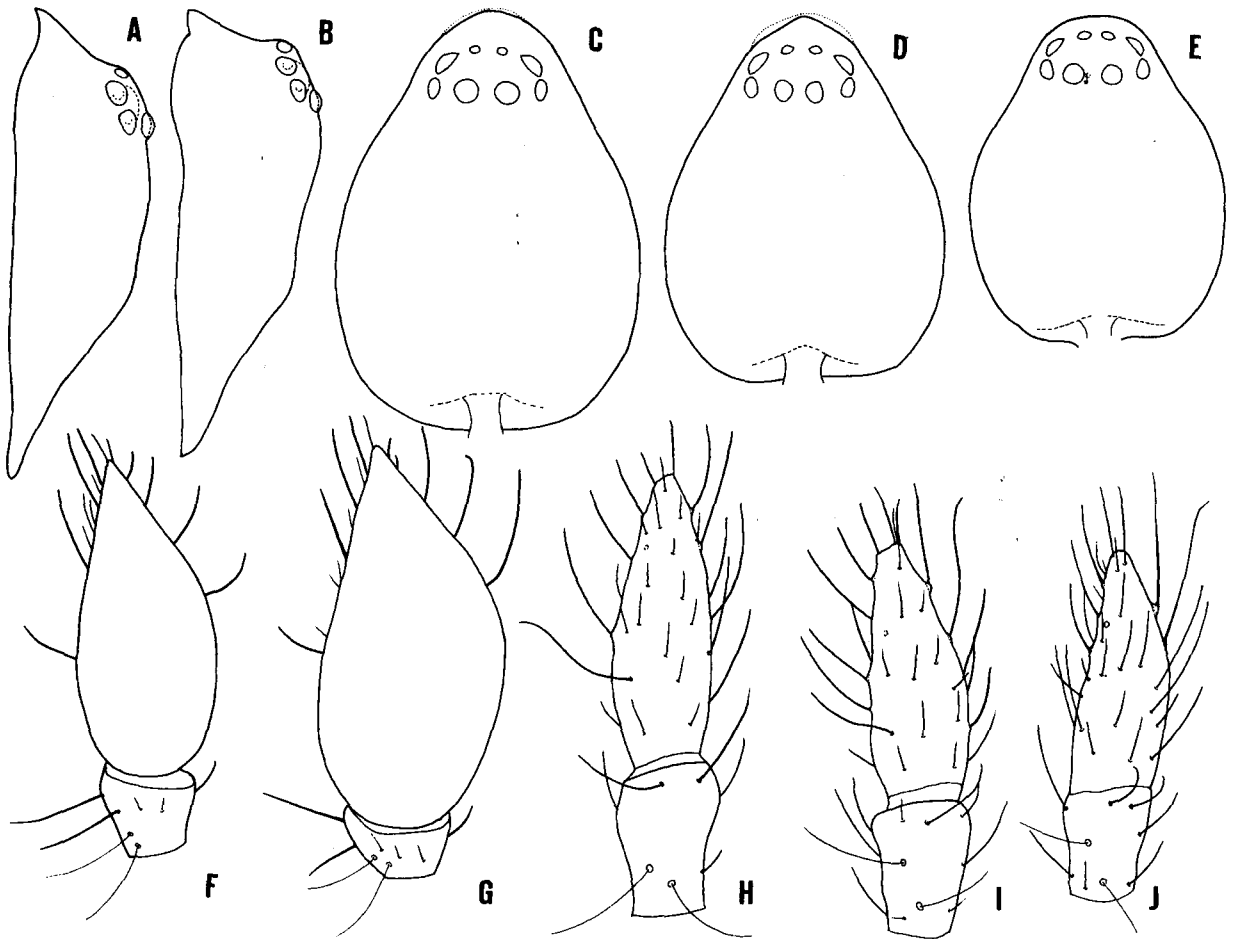


Fig. 3: Female carapace, lateral (A, B) and dorsal view (C-E), and female palpal tibia and tarsus, dorsal view (F-J). A & F *Agyneta olivacea* (Emerton) (Finland, Eno); B & G *A. cauta* (O. P.-Cambridge) (Finland, Eno); C & H *A. ramosa* Jackson (Finland, Utsjoki); D & I *A. trifurcata* sp. n. (paratype); E & J *A. breviceps* sp. n. (holotype). A-E, F-G, and H-J to the same scale, in F and G the small dorsal spinules omitted.

the receptacula or the anterior wall of the epigynal aperture into which the apical part of the scape is folded; all these structures appear as a darker area in which the loops of the ducts form small anterolateral horns (Fig. 2 A, B, E, F cf. 2 C, D, G, H and 6). The two species can be distinguished from each other by, e.g., the following characters: in *A. cauta* the palpal tarsus is more swollen (Fig. 3 G cf. 3 F) and the clypeus is less produced (Fig. 3 B cf. 3 A) than in *A. olivacea*, in *A. cauta* the epigynal scape in ventral view is narrower and distinctly attenuated towards the apex and has a shallow angular apical incision (Fig. 2A), whereas in *A. olivacea* the scape is broader and has more parallel sides and a deep rounded apical emargination (Fig. 3 E); in the unexpanded epigyne, two dark oblique dots are seen in the posterior part in *A. olivacea*, but not in *A. cauta* (Fig. 2 A, E). Furthermore, the apical folded part of the scape is narrower in *A. cauta* than in *A. olivacea*, but the vulval structures are extremely similar (Fig. 2 B, F). In the specimens of *A. olivacea* from Siberia

and Canada the epigyne differs distinctly from that in the specimens from Europe: the epigyne is more convex on the ventral surface so that the apical emargination is seen clearly only in oblique posterior view.

In addition to the characters discussed above, populations of *A. olivacea* and *A. cauta* are dissimilar in size: individuals of the latter are the larger in sympatric populations; there is only a slight overlap in tibial indices. In *A. olivacea* there is remarkable geographical variation in the measurements (Fig. 4).

*Agyneta allosubtilis* Loksa (Figs. 2 G, H; 5 C, F, G, H)

*Agyneta allosubtilis* Loksa, 1965: 3.

*Male:* For description of ♂, see Loksa (1965). Male palp, Fig. 5 C, F, G, H.

*Female:* Measurements (mm): Length of carapace 0.70-0.79, width of carapace 0.52-0.61, length/width of carapace 1.29-1.40, length of tibia I 0.45-0.48,

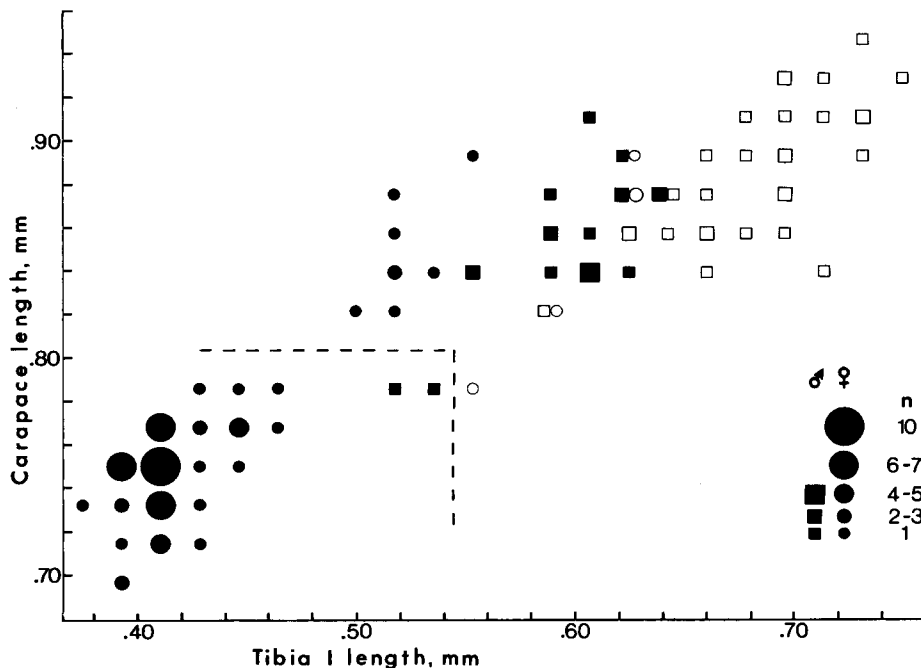


Fig. 4: Length of carapace in relation to length of tibia I in *Agyneta cauta* (O. P.-Cambridge) (open symbols) and *A. olivacea* (Emerton) (solid symbols) in a sympatric population (Finland, Eno); lower left, separated by broken line, is the population of *A. olivacea* in USSR, Altai.

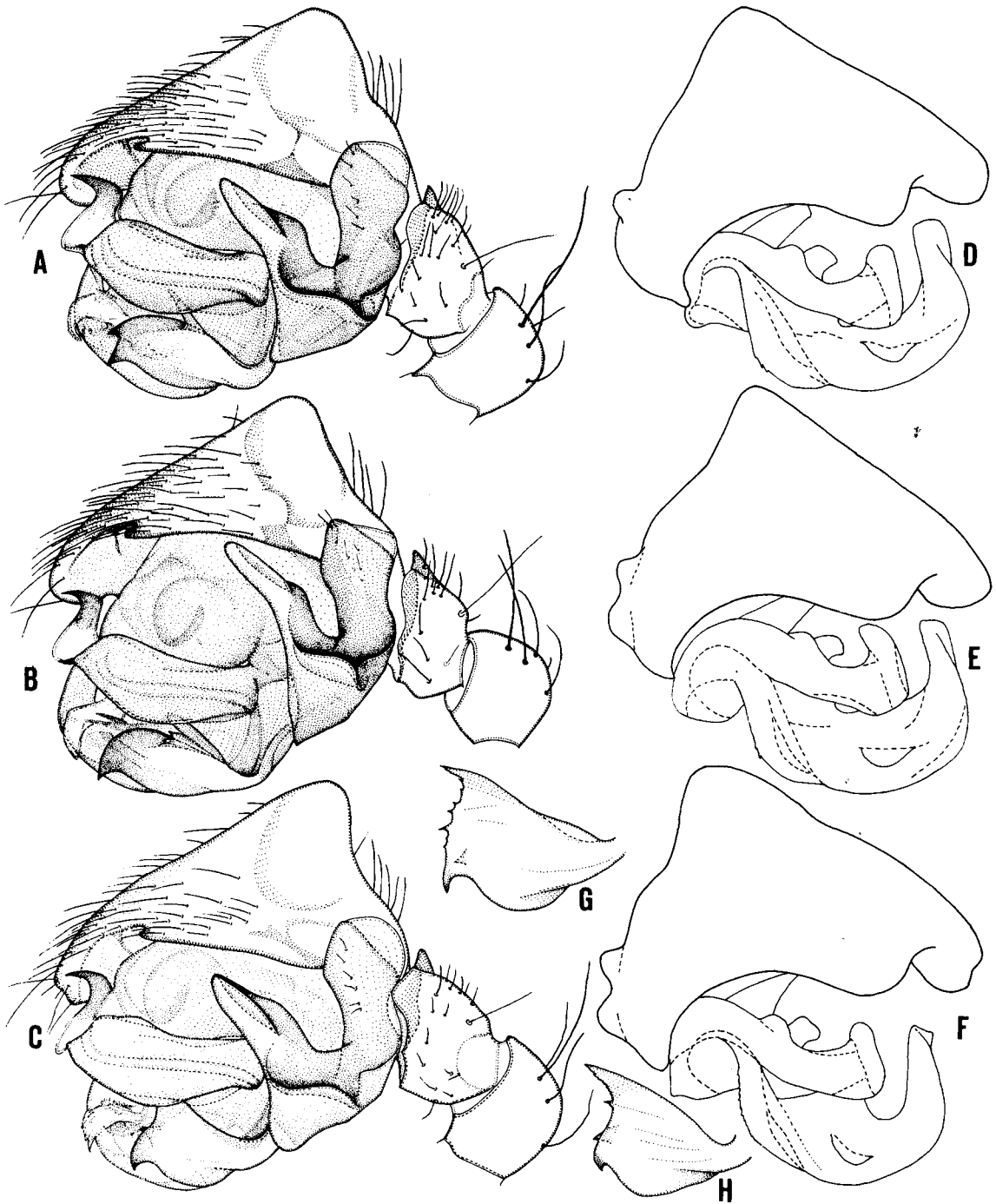


Fig. 5: Male palp, retrolateral (A-C) and prolateral view (D-F), and lamella characteristica, lateral view (G, H). A & D *Agyneta subtilis* (O. P.-Cambridge) (Finland, Utsjoki); B & E *A. subtilis* (another specimen from Finland, Utsjoki); C, F, G & H *A. allosubtilis* Loksa (C & F from USSR, Altai, H different specimen from Altai, G from Canada, New Quebec).



tibia I length/carapace length 0.59-0.69, position of trichobothrium on metatarsus I 0.77-0.82.

Similar to *A. subtilis*. Epigyne and vulva, Fig. 2 G, H.

**Material examined:** USSR: S.W. Altai, several localities near Katanda, 800-2000 m, forests and tundra, moss, 30 June-13 July 1983, 3 ♂♂, 5 ♀♀; Novosibirsk, deciduous forest, 16 June-4 Aug. 1983, 21 ♂♂, 1 ♀, both exp. Mikkola, Hippa, Jalava (in ZMH, ZMT and BIN); Canada: New Quebec, Great Whale River 30 m, forest, moss 17-28 July 1983, 1 ♂, S. Koponen (in ZMT).

**Discussion:** Only two syntype males from Ulan Baator, Mongolia, have hitherto been published under this name. Actually Loksa (1965) also described the female (Loksa (1965, fig. 3), but believed that it was the female of his *A. cauta*, which in turn is *A. olivacea* (Loksa 1965, fig. 4) (referred to as *allosubtilis* in Brignoli, 1983: 288). Our material from Siberia corresponds exactly to the description of Loksa (1965), but the male from Canada has a slightly different lamella characteristic (Fig. 5 C, F, G, H). The female from Newfoundland described as *A. decora* (O. P.-Cambridge) by Hackman (1954) is apparently *A. allosubtilis*.

*A. allosubtilis* is extremely similar to *A. subtilis*. In the male the two species differ in the lamella characteristic, in which the dorsal branch is more apical in *A. allosubtilis* and the two apical teeth are also different in *A. allosubtilis* when compared with *A. subtilis* (Fig. 5 A, B, C, G, H). In this context it is worth stressing that the lamella of *A. subtilis* is by no means constant: the dorsal branch is variable in size, detailed structure and relative position, the relative size and position of the apical teeth vary and one of them may even be missing (Fig. 5 A, B).

The females of the two species are almost identical and we do not know any reliable characters for their identification. It seems that the clypeus is a little more produced, the epigynal scape slightly narrower and the ventral compartment of the receptaculum seminis often more angularly bent in *A. allosubtilis* when compared with *A. subtilis* (Fig. 2 C, D, G, H).

We believe that *A. allosubtilis* and *A. subtilis* replace each other geographically, the latter being West Palaearctic, the former East Palaearctic and Nearctic in distribution.

*Agyneta trifurcata* sp. n. (Figs. 1 C, F, H; 3 D, I; 6 B, C, D)

Measurements (mm): Length of carapace, ♂ 0.70-0.71, ♀ 0.61-0.70; width of carapace, ♂ 0.57, ♀ 0.46-0.54; length/width of carapace, ♂ 1.22-1.25, ♀ 1.28-1.34; length of tibia I, ♂ 0.49-0.50, ♀ 0.38-0.41; tibia I length/carapace length, ♂ 0.70, ♀ 0.59-0.63; position of trichobothrium on metatarsus I, ♂ 0.78, ♀ 0.74-0.78.

Female carapace, Fig. 3 D; male carapace with the usual sexual dimorphism, being relatively broader and having the clypeus not produced, nearly perpendicular. Trichobothria on metatarsi curved, not angled. Male palp, Fig. 1 C, F, H. Female palp, Fig. 3 I. Female epigyne and vulva, Fig. 6 B, C, D.

Cephalothorax pale yellow-brown, lateral margin of carapace and sternum and apices of coxae ventrally black; chelicerae, labium and sternum suffused with black; carapace with distinct suffused-grey postocular patch and similar radiating striae on thoracic part; abdomen in both sexes pale to dark grey.

**Material examined:** Holotype ♂: Finland, Inari Lapland, Utsjoki, Kevo, IBP-betulaetum, pitfall traps 9 June-17 Sept. 1971, S. Koponen (in ZMT). Paratypes: 1 ♂ same data as holotype except 30 June-8 Sept. 1969 (in ZMH); 1 ♀ Utsjoki, Kenesjärvi 15 July 1960; 1 ♀ Utsjoki, Nuorgam, Gältijoki 23 July 1961, P. T. Lehtinen; 1 ♀ Utsjoki, Tsieskulan pahta, leaf litter 2 Aug. 1962; O. Lindqvist; 1 ♀ Utsjoki, Kevo, Kevojoen suu, *Hylocomium* 23 June 1965, O. Lindqvist; 2 ♀♀ Utsjoki, Kevo, Kevojoen suu, ground layer 26 June 1965, O. Lindqvist (in ZMH, ZMT and SMNH).

**Discussion:** The male of *A. trifurcata* can be distinguished from all other species of *Agyneta* s.str. by the unique triramose lamella characteristic and by having the ventral basal protuberance of the cymbium larger than the dorsal one (Fig. 1 C, F, H). Furthermore, the dorsal trichobothria on the palpal tibia are unusually widely separated, as in the female. The unknown male of *A. breviceps* may be similar in many respects (see under that species). The female is similar to that of *A. ramosa* and *A. breviceps*. It is distinguished from *A. ramosa* by, e.g., the following characters: palpus with the dorsal trichobothria wider apart (Fig. 3 H, I), clypeus more pointed (Fig. 3 C, D), epigynal scape broader and different in shape (Fig. 6 A, B, C, E). It is also distinctly smaller, the

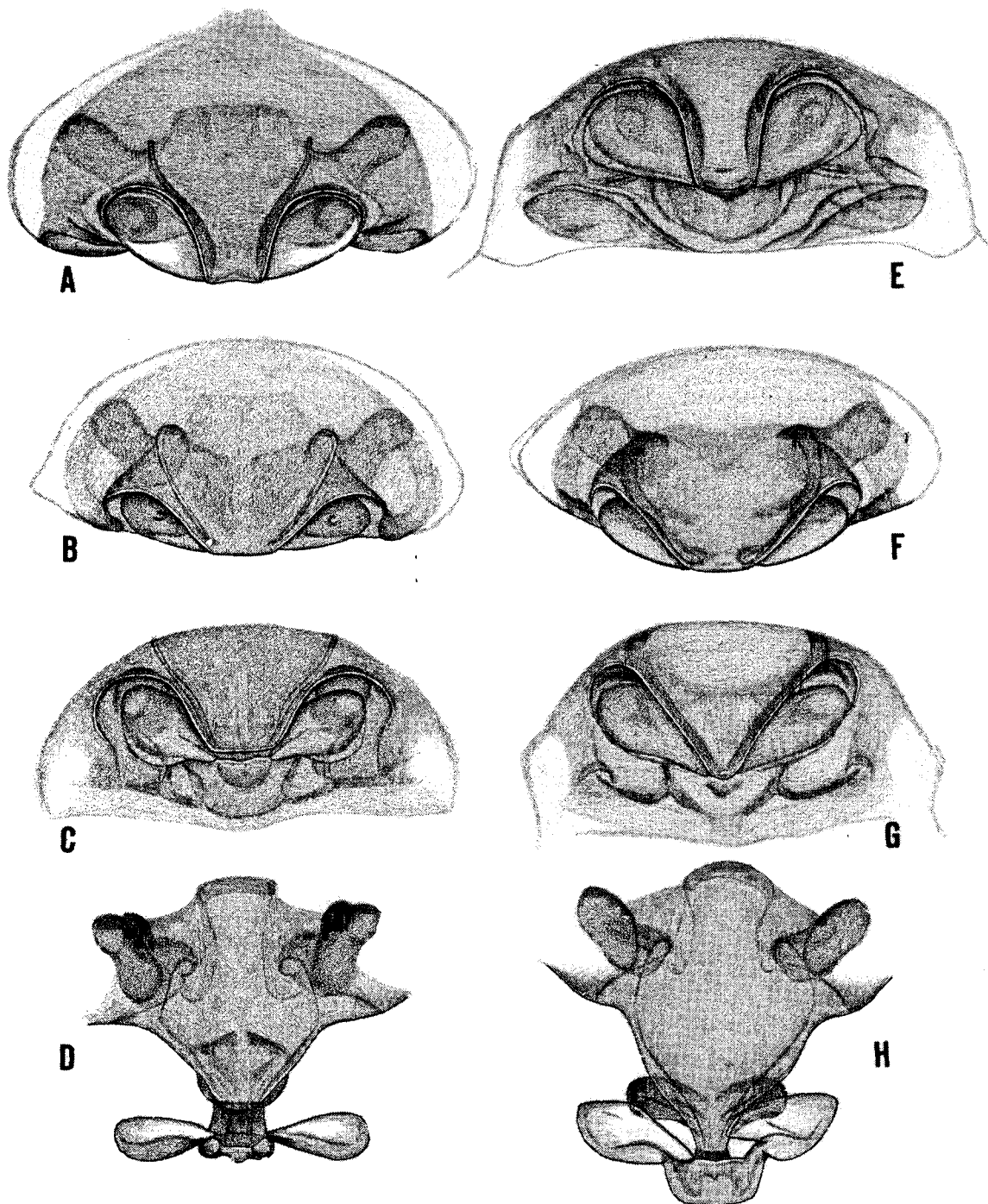


Fig. 6.: Epigyne, ventral (A, B, F) and posteroventral view (C, E, G), and expanded epigyne and vulva, ventral view (D, H). A & E *Agyneta ramosa* Jackson (Finland, Utsjoki); B, C & D *A. trifurcata* sp. n. (paratype); F, G & H *A. breviceps* sp. n. (holotype).

carapace of *A. ramosa* ranging from 0.75-0.80 mm in length in sympatric populations. The differences between *A. trifurcata* and *A. breviceps* are discussed under the latter. The female of *A. conigera*, which also has the palpal tarsus only slightly modified, can be distinguished easily from the three discussed species by the more basal (c.0.65) metatarsal trichobothrium. Together with *A. suecica*, *A. trifurcata* and *A. breviceps* are the smallest species of *Agyneta* s.str.

*Agyneta trifurcata* is the species mentioned as *Agyneta* n. sp. by Koponen (1976) (pers. comm.).

#### *Agyneta breviceps* sp. n. (Figs. 3 E, J; 6 F, G, H)

**Female:** Measurements (mm): Length of carapace 0.63, width of carapace 0.49, length/width of carapace 1.27, length of tibia I 0.38, tibia I length/carapace length 0.60, position of trichobothrium on metatarsus I 0.84.

Carapace, Fig. 3 E. Palp, Fig. 3 J. Epigyne and vulva, Fig. 6 F, G, H. Trichobothria on metatarsi slightly bent and very long.

Colouration similar to *A. trifurcata* except coxae apico-ventrally not black.

**Male:** Unknown.

**Material examined:** Holotype ♀: Finland, Kemi Lapland, Sodankylä, Mantovaara 19 June 1967, M. Saarijisto (in ZMT).

**Discussion:** *A. breviceps* is similar to *A. trifurcata* from which it differs by, e.g., the following characters: clypeus short and truncate (Fig. 3 D, E), coxae uniformly pale, not apico-ventrally black, basal part of epigynal scape longer and more strongly narrowed towards apex (Fig. 6 C, G), apical part of scape with sub-basal lobes, which in an unexpanded scape are concealed under the basal part, larger and different in shape (Fig. 6 D, H), and receptaculum seminis slightly different in structure (Fig. 6 D, H). For the differences from other similar species, see under *A. trifurcata*. The unknown male must be similar to the male of *A. trifurcata* judging by the widely separated trichobothria on the palpal tibia, but would differ by the unicolorous coxae.

#### Acknowledgements

We wish to thank Drs H. W. Levi and J. Hunter, Cambridge, Mass., for checking the types of *Agyneta olivacea*, Dr I. Lansbury, Oxford, for O. Pickard-

Cambridge's material of several species of *Agyneta* and for much valuable information concerning O. P.-Cambridge's collection, and Dr S. Koponen, Turku, for indispensable material from Europe, Asia and North America.

#### References

- BONNET, P. 1955: *Bibliographia Araneorum* 2(1): 1-918. Toulouse (privately printed).
- BRIGNOLI, P. M. 1983: *A catalogue of the Araneae described between 1940 and 1981*. 1-755. Manchester University Press, Manchester.
- EMERTON, J. H. 1882: New England spiders of the family Theridiidae. *Trans.Conn.Acad.Arts Sci.* 6: 1-86.
- EMERTON, J. H. 1911: New spiders from New England. *Trans.Conn.Acad.Arts Sci.* 16: 385-407.
- HACKMAN, W. 1954: The spiders of Newfoundland. *Acta zool.fenn.* 79: 1-99.
- HELSDINGEN, P. J. van 1973: A recapitulation of the Nearctic species of *Centromerus* Dahl (Araneida, Linyphiidae) with remarks on *Tunagyna debilis* (Banks). *Zool.Verh., Leiden* 124: 1-45.
- HOLM, A. 1950: Studien über die Spinnenfauna des Torneträskgebietes. *Zool.Bidr.Upps.* 29: 103-213.
- HULL, J. E. 1911: Papers on spiders, I. The genus *Tmeticus* (Simon, 1884; Cambridge, 1900) and some allied genera. II. Some northern records for 1909. *Trans.nat.Hist.Soc.Northumb.* (N.S.) 3(3): 573-590.
- JACKSON, A. R. 1912: On the British spiders of the genus *Microneta*. *Trans.nat.Hist.Soc.Northumb.* (N.S.) 4: 117-142.
- KASTON, B. J. 1981: Spiders of Connecticut. *Bull.Conn.St.geol.nat.Hist.Surv.* 70 (revised edition): 1-1020.
- KOPONEN, S. 1976: Spider fauna (Araneae) of Kevo area, northernmost Finland. *Rep.Kevo Subarctic Res.Stat.* 13: 48-62.
- LOCKET, G. H. 1964: Type material of British spiders in the O. Pickard-Cambridge collection at Oxford. *Ann.Mag.nat.Hist.* (13) 7: 257-278.
- LOCKET, G. H. & MILLIDGE, A. F. 1953: *British spiders* 2: 1-449. Ray Society, London.
- LOKSA, I. 1965: 41. Araneae. In *Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei. Reichenbachia* 7: 1-32.
- MILLIDGE, A. F. 1977: The conformation of the male palpal organs of linyphiid spiders, and its application to the taxonomic and phylogenetic analysis of the family (Araneae: Linyphiidae). *Bull.Br.arachnol.Soc.* 4 (1): 1-60.
- PALMGREN, P. 1975: Die Spinnenfauna Finnlands und Ostfennoskandiens VI. Linyphiidae 1. *Fauna fenn.* 28: 1-102.
- PICKARD-CAMBRIDGE, O. 1863: Descriptions of twenty-four new species of spiders lately discovered in Dorsetshire and Hampshire; together with a list of rare and

- some other hitherto unrecorded British spiders. *Zoologist* **21**: 8561-8599.
- PICKARD-CAMBRIDGE, O. 1871: Descriptions of some British spiders new to science, with a notice of others, of which some are now for the first time recorded as British species. *Trans.Linn.Soc.Lond.* **27**: 393-464.
- PICKARD-CAMBRIDGE, O. 1872: Descriptions of twenty-four new species of *Erigone*. *Proc.Zool.Soc.Lond.* **1872**: 747-769.
- PICKARD-CAMBRIDGE, O. 1902: On new and rare British Arachnida. *Proc.Dorset nat.Hist.antiq.Fld Club* **23**: 16-40.
- PICKARD-CAMBRIDGE, O. 1906: On some new and rare British Arachnida. *Proc.Dorset nat.Hist.antiq.Fld Club* **27**: 72-92.
- SAARISTO, M. I. 1973: Taxonomical analysis of the type-species of *Agyneta*, *Anomalaria*, *Meioneta*, *Aprolagus* and *Syedrula* (Araneae, Linyphiidae). *Annls zool.fenn.* **10**: 451-466.
- TYSHCHENKO, V. P. 1971: *Opredelitel' paukov evropejskoj chasti SSSR*. 1-281. Leningrad.
- WIEHLE, H. 1956: Spinnentiere oder Arachnoidea (Araneae), X. 28. Familie Linyphiidae-Baldachinspinnen. *Tierwelt Dtl.* **44**: 1-337.
-