

On the occurrence of *Agroeca dentigera* Kulczynski in Belgium (Araneae, Clubionidae)

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Agroeca dentigera was described by Kulczynski (1913) on a single female from the region of Walouiki (S. Russia). The species was discovered in Germany by Braun (1967) who redescribed it, again on a single female. The latter author suggested that *A. gaunitzi* Tullgren 1952, only known from the male, could possibly be a junior synonym of *A. dentigera*. Oltean (1973) found a third female near the Danube delta in Rumania. Wunderlich (1975) finally obtained several males and females from the region of Berlin (Germany).

Some years ago we caught three females and four males which undoubtedly belong to *A. dentigera*. The heart-shaped epigynum provided with two tooth-like structures is characteristic and allows easy identification (Fig. 6). Our females, however, are slightly larger (length and width of the carapace ranging between 2.78-2.85 mm and 2.05-2.11 mm respectively) than those of Braun (2.4 and 1.95 mm respectively), Kulczynski and Oltean (2.55 and 1.95 mm). In our specimens the first row of eyes is clearly procurved as in the female described by Kulczynski but unlike that of Braun in which the first row is straight.

Description of the male

Dimensions: total length: 5.8 mm; carapace: 2.63 mm long, 1.97 mm broad; abdomen 3.35 mm long. **Carapace:** the general appearance is much like that of *A. brunnea* (Blackwall) although the ground colour as well as the pattern is lighter. **Eyes:** both rows of eyes clearly procurved. Wunderlich (1975), however, mentions that the first row of eyes is straight, which was also stated in the female described by Braun (1967). This contradiction may be due to a different interpretation of the facts. We always consider the line connecting the centre of the eyes viewed from directly in front and not the upper or lower edges, a feature used by some other authors. Anterior medians

smaller than anterior laterals, but equal in size to posterior medians. **Sternum:** red-brown, darker than the carapace. **Chelicerae:** reddish-brown, with three teeth on the outer and two teeth on the inner margin. **Legs:** uniform red-brown without annulations. Total length: I: 7.16 mm; II: 6.65 mm; III: 6.27 mm; IV: 9.08 mm. Femora I, III and IV with three, femur II with two or three dorsal spines; in the female each femur with three dorsal spines. On the other segments the number and position of the spines is as in the female, though there may be some variation since even in the same specimen the left and right side may show some differences. **Abdomen:** pale grey to light brown with very faint curved bars. **Male palp:** Figs. 1-3.

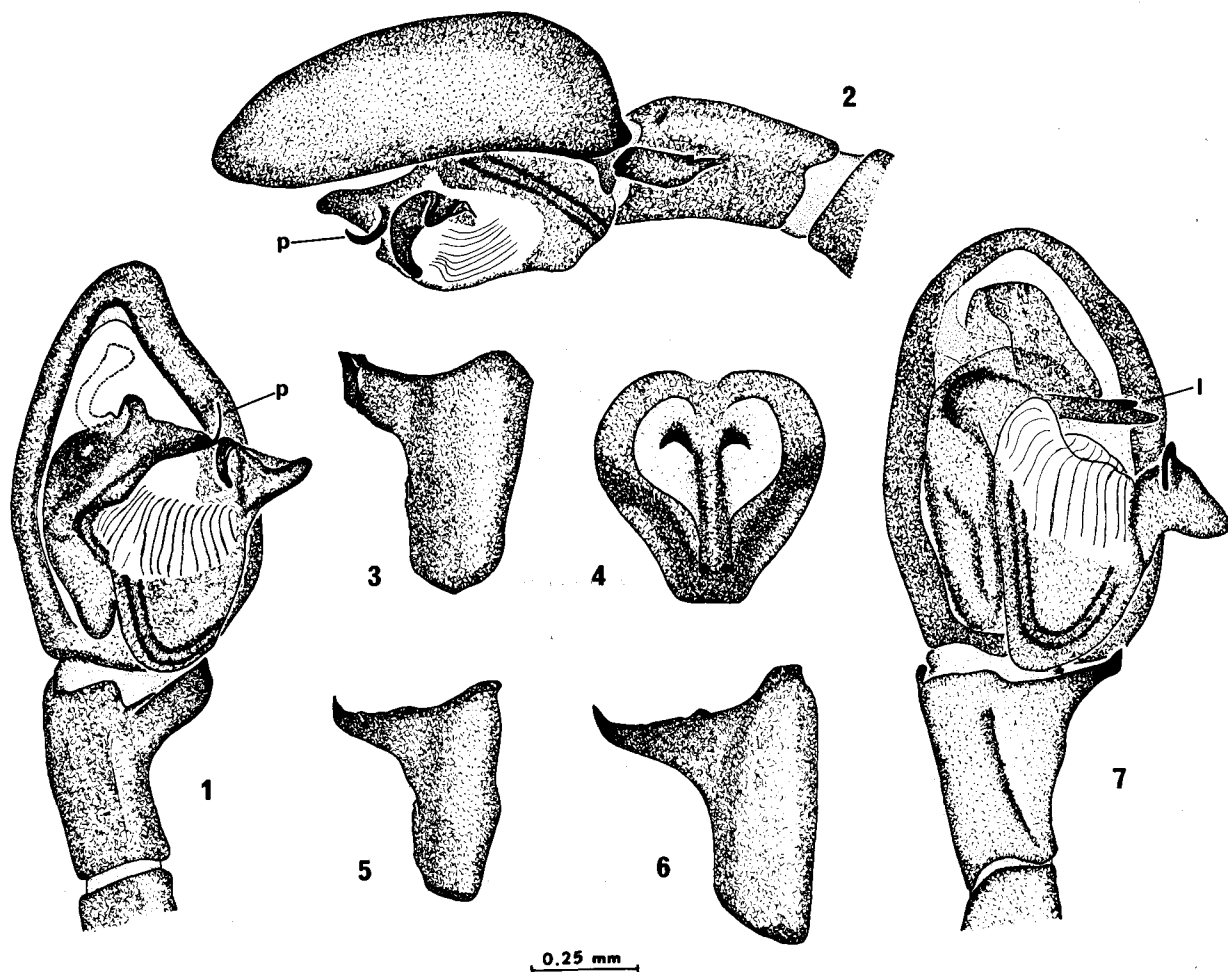
Diagnosis

A. gaunitzi and *A. dentigera* are obviously different species. The latter bears strong resemblances to *A. brunnea* and *A. lusatica* (L. Koch). It can be distinguished by the tibial apophysis of the male palp (Figs. 3-5) and the presence of a downward procurved spiniform process on the embolic division (Figs. 1-2, p). Locket and Millidge's (1951) drawing of the male palp of *A. brunnea* gives the impression that the same process exists in this species, but actually the structure shown is the sharp edge of the chitinous lamella (Fig. 7, 1) which in *A. dentigera* bears the procurved process.

Material

The specimens were caught in Kalmthout, Belgium, in pitfall traps situated along a gradient from dry *Calluna* heath through vegetation types dominated by *Erica tetralix* Linn., *Molinia caerulea* (Linn.) and *Juncus bulbosus* Linn., down to a *Sphagnum*-covered fen border. All females were caught in the *Calluna* belt on 22 November 1972, 1 March 1973 and 15 March 1973. The males were trapped in the *Molinia* vegetation on 23 November 1973 and 6 December 1973, and among *Calluna* on 24 December 1976 and 17 February 1977. Two more *Agroeca* species occur on the same gradient, i.e. *A. brunnea* and *A. proxima* (Cambr.), the latter being by far the most abundant.

A. dentigera is one of the very few relatively large spiders with an activity period during the winter. It is



Figs. 1-4: *Agroeca dentigera* Kulczynski. 1 Left male palp, ventral view (p = procurved process); 2 Ditto, viewed latero-ectally; 3 Male palpal tibia, dorsal view; 4 Female epigyne.

Fig. 5: *Agroeca lusatica* (L. Koch). Male palpal tibia, dorsal view.

Figs. 6-7: *Agroeca brunnea* (Blackwall). 6 Male palpal tibia, dorsal view; 7 Left male palp, ventral view (l = chitinous lamella).

not clear yet what is the optimal habitat for this species, but the vicinity of wet acid soils seems to be important. It is not unlikely that the juveniles spend their lives on *Sphagnum*-covered fen borders but occur on higher places when mature, the *Sphagnum* vegetation usually being immersed during the activity period of this spider.

A male and a female will be deposited at the "Koninklijk Belgisch Instituut voor Natuurwetenschappen", Vautierstraat 31, 1040-Brussels.

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