

***Cinetata gradata* (SIMON, 1881) (Araneae: Linyphiidae) – the new spider species for Poland**

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ABSTRACT. *Cinetata gradata* is a mountain spider species recorded in numerous locations in Central and Western Europe. The paper presents information on the first record of *C. gradata* in Poland. The locality of *C. gradata* discovered in Southern Roztocze is the most north-eastern one in Europe.

KEY WORDS: *Cinetata gradata*, Poland, first record.

Cinetata gradata (SIMON, 1881) is a rare spider species living in mountains and foothills of Middle Europe (BLICK et al. 1995, BLICK & GROSSNER 2006). The species distribution has been recently worked out, and it is said that compact area of *C. gradata* occurrence includes eastern Belgium and Luxemburg (Ardennes), central and southern Germany (mainly Harz Mountains, Baden-Württemberg, Bayern, Lower Saxony, Hessen) (BLICK & GROSSER 2006, STAUDT 2007), French Alps Italian Alps, Switzerland, Austrian Alps, as well as Czech Republic (BUCHAR & RŮŽIČKA 2002) and Slovakia (BLICK & GROSSER 2006, GAJDOŠ et al. 1999). Moreover single stands of *C. gradata* has been recorded also in Pyrenees (Spain), Massif Central (France) (BLICK & GROSSER 2006), Bulgaria (DELTSHEV 1985), Serbia, and Slovenia (BLICK & GROSSER 2006). Up-to-date, the spider species has not been recorded in Poland (BLICK et al. 2004, STAREGA 2004), although BLICK & GROSSNER (2006) suggested its occurrence as very probable in Poland on a base of *C. gradata* European distribution analysis.

Only one individual of *Cinetata gradata* (Fig. 1), that confirmed above hypothesis, has been found in Southern Roztocze during studies upon araneofauna of xerothermal plant associations.

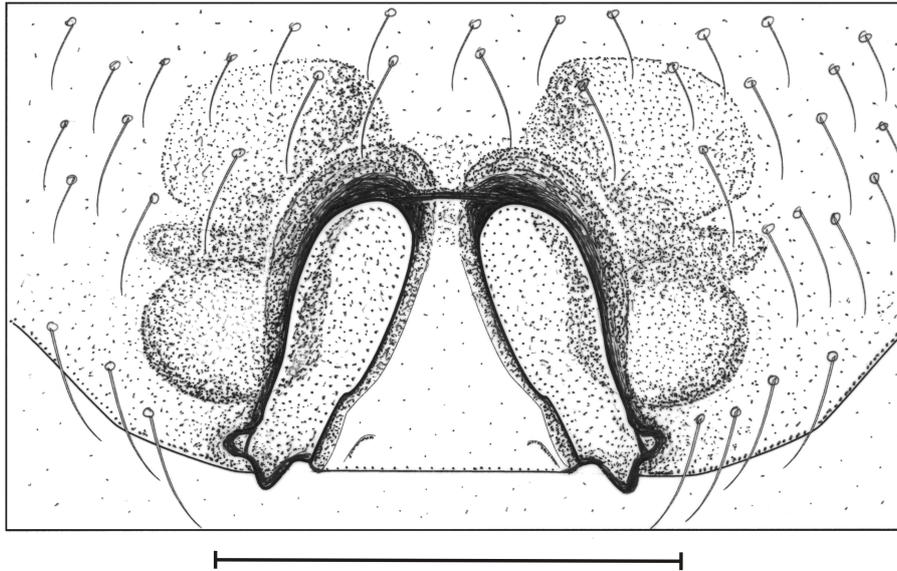


Fig. 1. Epigyne of *Cinetata gradata* (SIMON, 1881) ventral view; scale bar 0,2 mm.

Material examined

1 ♀: 2.05.1998. "Machnowska Góra" Reserve, 265-268 m.a.s.l.; 50°22'17''N; 23°34'54''E; xerothermic plant association: *Brachypodio-Teucrietum*, sieves from mosses and clumps of grasses, leg. et det. R. ROZWAŁKA.

Cinetata gradata is a spider usually found in mountain and foothill coniferous forests growing the wet subsoil (BLICK & GROSSNER 2006). It has been found both in a litter, under stones, and on low tree branches, namely spruce (BLICK & GROSSNER 2006). A single female has been captured in Machnów in samples collected from a sod and mosses growing on strongly insolated xerothermal lawn on lime subsoil. It is relatively atypical habitat for that species. However there are several locations of *C. gradata* listed in the review of BLICK & GROSSNER (2006, Tab. 12), which indicate that the species has been reported also in very dry sites. For instance *C. gradata* has been collected in Harz Mountains from low coniferous tree branches growing on granite, quartz or gypsum waste dumps with southern, south-eastern, and south-western exposure (BLICK & GROSSNER 2006). Very insolated and

afforested waste dumps are similar to xerothermal meadows where an individual of *C. gradata* in Machnów was found. Moreover, only few junipers (*Juniperus communis*) grew at the site the spider has been captured and few tree groups consisted of about 15-20-year-old pines (*Pinus silvestris*, *Pinus nigra*) and junipers could be found about 10-20 m away from the collecting point. Thus, the individual of *C. gradata* found on an open xerothermal meadow has probably come from neighboring coniferous trees. Localization of Machnów above sea level – about 265-268 meters a.s.l. – is within the range of *C. gradata* vertical distribution: the spider species most often occurs at levels from 400 to 800 meters a.s.l. (BLICK & GROSSNER 2006), but there are also known locations localized much lower, e.g. 102 meters a.s.l. in Saxony (BLICK & GROSSNER 2006), and far higher – 2300 m a.s.l. in Pirin Mountains, Bulgaria (DELTSHEV 1985).

Presented location of *Cinetata gradata* in southern Roztocze is at present the most north-eastern occurrence site of the spider species in Europe (BLICK & GROSSNER 2006, Fig. 4). Most probably, it is disjunctive and isolated by the Sandomierska Lowland from compact area of the species occurrence that includes mountains and foothills of central and Western Europe (BLICK & GROSSNER 2006, Fig. 4). However, *C. gradata* occurrence in Roztocze is well fitted into the general description of araneofauna in that geographical region because despite of the distance from mountains, it is characterized by significant percentage of mountain species (ROZWALKA 2004, STAREGA 1984, 2000). Furthermore presence of *C. gradata* in Roztocze suggests that it is possible to find other stands of the species in mountains or foothills in southern Poland, which was earlier supposed by BLICK & GROSSNER (2006).

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