

Case 3174

***Pardosa* C.L. Koch, 1847 (Arachnida, Araneae): proposed fixation of *Lycosa alacris* C.L. Koch, 1833 as the type species to conserve the usage of *Pardosa* and of *Alopecosa* Simon, 1885**

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Abstract. The purpose of this application is to fix *Lycosa alacris* C.L. Koch, 1833 as the type species of the wolf spider genus *Pardosa* C.L. Koch, 1847. In 1898 Simon gave *Lycosa striatipes* C.L. Koch, 1837 as the type, but this taxon has long been classified in *Alopecosa* Simon, 1885 and acceptance of it as the type species of *Pardosa* would cause *Alopecosa* to be replaced by *Pardosa*; a substitute name would be required for the genus now commonly called *Pardosa*. The originally included nominal species *Lycosa alacris* C.L. Koch, 1833 is identifiable from its description and an original specimen exists. *P. alacris* has generally been treated as a junior synonym of *P. lugubris* (Walckenaer, 1802), but the names *alacris* and *lugubris* have recently been shown to refer to distinct though very closely related taxa. *Aranea chelata* O.F. Müller, 1764 was at one time considered to be the oldest synonym of *P. alacris* and *P. lugubris*, but this name is unidentifiable and has been unused for many years; its suppression is proposed.

Keywords. Nomenclature; taxonomy; Araneae; LYCOSIDAE; *Pardosa*; *Pardosa alacris*; *Pardosa lugubris*; *Alopecosa*; *Alopecosa striatipes*; *Aranea chelata*; wolf spiders.

1. *Pardosa* was established by C.L. Koch (1847, p. 100; for the date see Sherborn, 1914) as a subgenus of *Lycosa* Latreille, 1804 containing nine species of European wolf spiders, including *L. striatipes* C.L. Koch, 1837, *L. alacris* C.L. Koch, 1833 and *Aranea monticola* Clerck, 1758; no type species was fixed.

2. Menge (1850, p. 62) treated *Pardosa* as a separate genus containing three species. Ohlert (1851, p. 6) gave *P. monticola* as an 'example' of the genus, but under Article 67.5.1 of the Code this cannot be interpreted as a valid type species designation.

3. The first author who tried to designate a type species for *Pardosa* was Thorell (1870, p. 190). His choice was *Aranea lugubris* Walckenaer, 1802 (p. 239), which he stated to be a senior synonym of *Lycosa alacris* C.L. Koch, 1833 (Heft 120, pl. 17, fig. 18), a nominal species which (unlike *A. lugubris*) was included by Koch when he established *Pardosa*. In normal circumstances this would be a valid designation of *L. alacris* under Article 69.2.2, but Thorell pointed out that Koch had not retained *Lycosa* as a subgeneric name when splitting *Lycosa* into five subgenera and that 'his sub-genus *Pardosa* appears to us [i.e. to Thorell] to embrace the forms in which the type of the Lycosoidae is best developed'. Thorell therefore adopted *Lycosa*, rather than *Pardosa*, as the valid name of the genus for which he selected *L. lugubris* as the type species and in consequence his action is not a type fixation for *Pardosa*. Nor did Thorell validly fix the type species for *Lycosa*, because many years previously Latreille (1810, p. 424) had designated *Aranea tarantula* Linnaeus, 1758 and the genus is currently interpreted in this sense.

4. The first author to give a formally correct type species designation for *Pardosa* was Simon (1898, p. 362) who stated that the type was *Lycosa striatipes* C.L. Koch, 1837 (p. 22), the first species listed by Koch (1847) when establishing *Pardosa*. However, Bösenberg (1903, p. 391) and Dahl (1908, p. 342) included this species in the genus *Alopecosa* Simon, 1885 (under the name *Tarentula* Sundevall, 1832, for which see Dondale & Redner, 1979, pp. 1033–1034), and since those authors the name *Alopecosa* (= *Tarentula* auct.) *striatipes* (C.L. Koch, 1837) has been widely used (e.g. Charitonov, 1932; Roewer, 1954; Bonnet, 1955; Lugetti & Tongiorgi, 1969; Fuhn & Niculescu-Burlacu, 1971; Platnick, 1998), despite the circumstance that the original description was based on a juvenile specimen and its specific identity implicitly doubtful (Simon, 1937, p. 1133). The type specimen of *L. striatipes* C.L. Koch, 1837 is apparently no longer in existence: Dr M. Moritz (pers. comm. 1983) informed us that he was unable to find it in the C.L. Koch collection of the Zoologisches Museum, Humboldt-Universität, Berlin. Tikader & Malhotra (1980), Tanaka (1993) and Yin et al. (1997) mentioned '*Pardosa striatipes* C.L. Koch' as being the type species of *Pardosa*, but if *L. striatipes* were treated as the type species of *Pardosa* then the generic name *Alopecosa* Simon, 1885 (p. 10) would become a junior synonym of *Pardosa* and a substitute name would be required for the genus now called *Pardosa*. Like *Pardosa*, *Alopecosa* (type species *Aranea fabrilis* Clerck, 1758) is in wide use. Rather than accept these consequences, Bonnet (1951, p. 307) proposed that Simon's (1898) designation should be ignored: 'Il vaut mieux dire que le type choisi par Simon était mal choisi et ne pas en tenir compte'.

5. Charitonov (1932, p. 21) erroneously [in terms of modern Codes] considered that Thorell (1870; see para. 3 above) had validly designated *Aranea lugubris* Walckenaer, 1802 as the type species of *Pardosa*. Charitonov considered that *Pardosa lugubris* (Walckenaer) was a junior synonym of both *P. alacris* (but see para. 6 below) and of the older name *Aranea chelata* O.F. Müller, 1764 (p. 94), and he therefore listed *A. chelata* as the type species. However, *A. chelata* was not an originally included nominal species, and under Article 69.2.2 Charitonov's act can be regarded as a designation of the originally included *Lycosa alacris* C.L. Koch, 1833 as the type species for *Pardosa* (see Zyuzin, 1979, p. 434 and 1980, p. 167); however, it had been preceded by Simon's designation in 1898 of *L. striatipes* (see para. 4 above). Bonnet's later (1951, p. 307) selection of *L. hortensis* Thorell, 1872 (which he synonymized with

Pardosa saccata sensu C.L. Koch, 1847) is also invalid, but despite this Bonnet (1958), Roewer (1959) and Fuhn & Niculescu-Burlacu (1971) cited *L. hortensis* as the type species.

6. The identification of *Aranea chelata* Müller, 1764 with *A. lugubris* Walckenaer, 1802 is dubious. Müller's name was almost completely neglected (see Bonnet, 1958, p. 3381) until Dahl (1908, p. 449) argued that it was a senior subjective synonym of *A. lugubris*. Following Dahl (1908), a number of 20th-century araneologists (such as Charitonov, 1932) used the name *Pardosa* (or *Lycosa*) *chelata* instead of *lugubris* or *alacris* for the same species. However, Simon (1937) maintained the use of *P. lugubris* because he regarded the synonymy with *A. chelata* as doubtful. Müller's material is lost (Horn et al., 1990) and the original description of *A. chelata* is not sufficient for identification; it would fit not only *P. lugubris* but also other lycosid species occurring in Denmark, the type locality of *A. chelata*. We propose that the name *Aranea chelata* O.F. Müller, 1764 should be suppressed because it has not been used for many years and as a very old nomen dubium it can only be a source of instability.

7. The name *Pardosa lugubris* (Walckenaer, 1802) has been widely accepted in modern major works (e.g. Roewer, 1954; Bonnet, 1958; Tongiorgi, 1966; Fuhn & Niculescu-Burlacu, 1971; Tyshchenko, 1971; Zyuzin, 1979 and 1980; Roberts, 1985; Platnick, 1998); *P. alacris* (C.L. Koch, 1833) has been treated as a junior synonym of *P. lugubris*. However, *P. lugubris* and *P. alacris* have recently been shown on morphological and behavioural grounds to refer to separate but very closely related taxa (Töpfer-Hofmann & von Helversen, 1990; Kronstedt, 1992; Töpfer-Hofmann, Cordes & von Helversen, 2000); the name *P. lugubris* has also been applied in the past to the recently recognised species *P. saltans* Töpfer-Hofmann, 2000. Walckenaer's original material of *Aranea lugubris* does not exist but a male neotype has been designated (Töpfer-Hofmann, Cordes & von Helversen, 2000, p. 265) and is deposited in the Senckenberg Museum, Frankfurt; a male syntype of *Lycosa alacris* C.L. Koch, 1833 is preserved in the Zoologisches Museum of the Humboldt-Universität in Berlin (specimen ZMB 1986).

8. As mentioned in para. 4 above, acceptance of the first valid designation of type species for *Pardosa* (that of *Lycosa striatipes* by Simon, 1898) would upset the universal usage of both *Pardosa* and *Alopecosa*. We propose that the originally included species *Lycosa alacris* C.L. Koch, 1833 should be accepted as the type species, as fixed by Charitonov in 1932 (see para. 5 above), because this taxon is clearly identifiable from its description and an original specimen exists (see preceding para.). An alternative would be the closely related *Aranea lugubris* Walckenaer, 1802, but as mentioned above this nominal species was not originally included, no original specimen exists, and the name has been applied to more than one taxon and only very recently been distinguished from *L. alacris*.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

(a) to set aside all fixations of type species for the nominal genus *Pardosa* C.L. Koch, 1847 before that of *Lycosa alacris* C.L. Koch, 1833 by Charitonov (1932);

(b) to suppress the name *chelata* O.F. Müller, 1764, as published in the binomen *Aranea chelata*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Pardosa* C.L. Koch, 1847 (gender: feminine), type species *Lycosa alacris* C.L. Koch, 1833 by the fixation by Charitonov (1932), as ruled in (1) above;
 - (b) *Alopecosa* Simon, 1885 (gender: feminine), type species by monotypy *Aranea fabrilis* Clerck, 1758;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *alacris* C.L. Koch, 1833, as published in the binomen *Lycosa alacris* (specific name of the type species of *Pardosa* C.L. Koch, 1847);
 - (b) *fabrilis* Clerck, 1758, as published in the binomen *Aranea fabrilis* (specific name of the type species of *Alopecosa* Simon, 1885);
- (4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *chelata* O.F. Müller, 1764, as published in the binomen *Aranea chelata* and as suppressed in 1(b) above.

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