LEUCASPIS SIGNORET, 1869 (INSECTA, HOMOPTERA, DIASPIDIDAE): PROPOSED CONSERVATION BY THE SUPPRESSION OF LEUCASPIS BURMEISTER, 1835 (INSECTA, HYMENOPTERA, LEUCOSPIDAE). Z.N.(S.)2448

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Walker, 1834, p. 13, in discussing the genus *Leucospis* Fabricius, 1775, said in a footnote: ' $\lambda \epsilon \nu \kappa$ òs albus, $\delta \psi \iota s$ facies. I think with Dumeril [sic] that the name of the genus is derived from these words.'

2. Burmeister, 1835, p. 47, in reviewing Walker's 1834 paper, said in a footnote that the generic name is formed from the Greek 'leucos' and 'aspis' and should be spelled *Leucaspis*. *Leucaspis* Burmeister, 1835, is clearly an unjustified emendation of *Leucospis* and therefore an available name. To our knowledge, *Leucaspis* Burmeister is practically never used now by hymenopterologists as a valid name (see also Morrison & Morrison, 1866, pp. 108–109).

3. Targioni-Tozzetti, 1868, p. 41, also 1869, p. 734) listed in a catalogue of scale insects '*Leucaspis* nob. Gen. n.' with two species, *L. candida* and *L. signoreti*, both nomina nuda. The name *Leucaspis* is here clearly a nomen nudum, although it is common practice to credit the name to 'Targioni-Tozzetti, 1868'.

4. Signoret, 1869a, 14 April, p. 865, listed *Leucaspis* with *pini* Hartig and the reference 'C. *pini* Hart. Jahr. über die Forsh. des Forstwess. (1839), 642'. Despite some errors in this reference ('C[occus]' instead of Aspidiotus, 'Forsh.' for 'Fortschritte' and so on) it is an unambiguous reference to Aspidiotus pini Hartig, 1839, p. 642. This indication (Code, Article 16a(v)) makes the name Leucaspis available. The name is to be credited to Signoret, 1869 and the type species, by monotypy, is Aspidiotus pini Hartig (the other specific name cited in combination with Leucaspis, on p. 872, was 'L. signoreti Targioni, 1868' at that time a nomen nudum).

5. Accepting *Leucaspis* Signoret, 1869 as preoccupied by *Leucaspis* Burmeister, 1835, Kirkaldy, 1904, p. 257, replaced the junior homonym by '*Leucodiaspis* Signoret, 1869'. This spelling in Signoret's work (1869b, p. 99) was certainly a lapsus calami for *Leucaspis*, because it is not indicated as an emendation and is not accepted in later parts of Signoret's work. *Leucodiaspis* should be credited to Kirkaldy, 1904, because he made the name available by using it as a replacement name. Although some authors (Lindinger, Zimmermann, Zahradnik) followed Kirkaldy, a large majority of coccidologists still use *Leucaspis*. Williams

(1969, p. 330) indicated that an application must be made to the International Commission on Zoological Nomenclature for the conservation of *Leucaspis* in scale insects.

6. The genus *Leucaspis* Signoret includes nine mostly European or Mediterranean species, some of them economically important as pests of pine. It is the type genus of the subfamily LEUCASPIDINAE Atkinson, 1886, pp. 271, 273–274 (as 'Leucaspiaria').

7. An additional problem is the identity of *Aspidiotus pini* Hartig, the type species of *Leucaspis* Signoret. Hartig (1839, p. 642) described two new species of *Aspidiotus* injurious to pine in Germany, but he mixed up the sexes (a possibility that he himself did not exclude). It is clear from his original descriptions that

A. pini Hartig = Leucaspis sp. male + Nuculaspis abietis (Schrank, 1776), female;

A. flavus Hartig = Nuculaspis abietis male + Leucaspis sp. female.

Those parts of the descriptions that are based on *Leucaspis sp.* fit two or three species of this genus occurring in Germany (Lindinger, 1906). Nothing is known of the fate of Hartig's scale-insect material and it is most probable that it is all lost. Enquiries were made of two institutions (Forstliche Hochschule, Eberswalde, DDR and Zoologisches Museum, Munich, BRD) which, at least before World War II had some remnants of Hartig's collections of insects in other groups, but no answer was received from Eberswalde and none of Hartig's scale-insect material was found in Munich (Dr M. Baehr, in correspondence).

8. In 1870 Signoret published a detailed description of *Leucaspis pini* Hartig. The name has been used consistently since then for the same species by nearly all authors, including those of the latest monographs (Balachowsky, 1953; Borchsenius, 1966). Another point of view (Lindinger, 1906; 1943) is that *Aspidiotus pini* Hartig should be treated as a nomen dubium in *Leucaspis* and that the species named *L. pini* by Signoret should receive another name. Morrison & Morrison, 1966, p. 109, said 'it seems preferable to fix the Hartig name in this [generally accepted] status'.

9. For this purpose we here designate a neotype of Aspidiotus pini Hartig, a female surrounded by a black circle in a preparation labelled 'Germania: Triglitz, Pinus sylvestris, 10.IV.09' and preserved in the Zoological Institute of the Academy of Sciences of the U.S.S.R., Leningrad. A corresponding neotype label will be added after publication. Triglitz is about 100 km from Berlin, in the vicinity of which Hartig apparently collected his material. A female (not a male) is proposed as neotype because modern taxonomy of the scale insects is based on females.

10. In accordance with the above, the International Commission on Zoological Nomenclature is asked:

(1) to use its plenary powers to suppress the generic name *Leucaspis* Burmeister, 1835 and all uses of that name prior to its use by Signoret, 1869, for the purposes of both the Law of Priority and the Law of Homonymy;

(2) to place the generic name *Leucaspis* Signoret, 1869 (gender: feminine), type species, by monotypy, *Aspidiotus pini* Hartig, 1839, on the Official List of Generic Names in Zoology;

(3) to place the specific name *pini* Hartig, 1839, as published in the binomen *Aspidiotus pini* (specific name of type species of *Leucaspis* Signoret, 1869) on the Official List of Specific Names in Zoology;

(4) to place the family-group name LEUCASPIDINAE Atkinson, 1886 (as 'Leucaspiaria') (type genus *Leucaspis* Signoret, 1869) on the Official List of Family-Group Names in Zoology;

(5) to place the name *Leucaspis* Burmeister, 1835 as suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Generic Names in Zoology.

REFERENCES

- ATKINSON, E. T. 1886. On the homopterous family Coccidae. J. Asiatic Soc. Bengal. vol. 55, pp. 267–298.
- BALACHOWSKY, A. 1953. Les cochenilles de France, d'Europe, du nord de l'Afrique, et du bassin mediterranéen, vol. 7, pp. 735–929. Paris.
- BORCHSENIUS, N. S. 1966. A catalogue of the armoured scale insects (Diaspidoidea) of the world, 499 pp. Moscow and Leningrad.
- BURMEISTER, H. 1835. Bericht über die Fortschritte der Entomologie im Jahre 1834. Arch. Naturgesch., Jahrg. 1, Bd. 2, pp. 7-74.
- HARTIG, T. 1839. Jahresberichte über die Fortschritte der Forstwissenschaft und forstlichen Naturkunde im Jahre 1836 und 1837 nebst Original-Abhandlungen aus dem Gebiete dieser Wissenschaften. Jahrg. 1, Heft 4, pp. 640–646.
- KIRKALDY, G. W. 1904. Bibliographical notes on the Hemiptera, No. 11. Entomologist, vol. 37, pp. 254-258.
- LINDINGER, L. 1906. Die Schildlausgattung Leucaspis. Jahrb. Hamb. wiss. Anst., vol. 23 (1905), Beiheft 3 (Hamburg. bot Staatsint., Abt. Pflanzenschutz, 8), 60 pp.

— 1943. Verzeichnis der Schildlaus-Gattungen, I. Nachtrag, (Homoptera Coccoidea). Z. wien. entomol. Ges., vol. 28, pp. 217–224.

MORRISON, H. & MORRISON, E. R. 1966. An annotated list of generic names of the scale insects. U.S. Dept. Agric. misc. publ. No. 1015, 206 pp.

SIGNORET, V. 1869a. Essai sur les cochenilles (Homoptères-Coccides), 2^e partie. Ann. Soc. entomol. France (4) vol. 8, pp. 829-876.

- 1869b. Ditto, 3^e partie. *Ibid.* vol. 9, pp. 97-104.

- 1870. Ditto, 6^e partie. *Ibid.* vol. 10, pp. 91-110.

- TARGIONI-TOZZETTI, A. 1868. Introduzione alla seconda memoria per gli studi sulle cocciniglie, e catalogo dei generi e delle specie della famiglia dei Coccidi. Atti Soc. ital. Sci. nat. vol. 11 for 1869, pp. 694–738.
- WALKER, F. 1834. Monographia Chalciditum (continued). *Entomol. Mag.* vol. 2, pp. 13–39.
- WILLIAMS, D. J. 1969. The family-group names of the scale insects. Bull. brit. Mus. (nat. Hist.) Entomol., vol. 23, no. 8, pp. 315-341.



Danzig, E M and Kerzhner, Izyaslav M. 1984. "Leucaspis Signoret, 1869 (Insecta, Homoptera, Diaspididae): proposed conservation by the suppression of Leucaspis Burmeister, 1835 (Insecta, Hymenoptera, Leucospidae). Z. N. (S.) 2448." *The Bulletin of zoological nomenclature* 41, 101–104.

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