Case 2911

_Spherillo_ Dana, 1852 (Crustacea, Isopoda): proposed designation of _S. vitiensis_ Dana, 1853 as the type species, with designation of a neotype

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Abstract. The purpose of this application is to stabilise the nomenclature of the nominal genus _Spherillo_ Dana, 1852 for a widespread genus of woodlice. Confusion arises from the absence of a type species designation and a tradition of neglect of the rules of nomenclature by isopod taxonomists. A neotype is designated for _Spherillo vitiensis_ Dana, 1853, which is proposed as the type species of _Spherillo._

Keywords. Nomenclature; taxonomy; Crustacea; Isopoda; Oniscidea; _Spherillo; Spherillo vitiensis_; woodlice.

1. Dana (1852, p. 301) described a genus of woodlice from some of the Pacific islands; he named the genus _Spherillo_ but did not name any species. The nominal genus is available from 1852, although some authors attribute it to 1853 when Dana described four species in _Spherillo:_ _S. monolinus_ (p. 719) from New Zealand; _S. vitiensis_ (p. 721) from Fiji; _S. hawaiiensis_ (p. 722) from Hawaii; and _S. spin osus_ (p. 723) from New Zealand. He did not designate any of these species as the type. No later author has referred to Dana’s material, which was believed lost when the ship Peacock, carrying most of the Dana types, sank off the mouth of the Columbia River, Oregon, in the last century (in litt., Dr Brian Kensley, Smithsonian Institution, Washington).

2. Budde-Lund (1904) widened the concept of _Spherillo_ to include 65 species including Dana’s four original species; he grouped these 65 species into 13 un-named sections, nominating a type for each section. _Spherillo monolinus_ and _S. vitiensis_ were placed in Section VIII, with _S. bifrons_ Budde-Lund, 1885 as the type of that section. Such designations have no validity under the Code, and do not constitute a type species designation for _Spherillo._

3. Verhoeff (1926, p. 250) split Dana’s genus _Spherillo_ into several genera, but did not designate a type species for any of them. He renamed the genus _Sphaerillo_ on the grounds that the name was derived from the Greek _Sphaira_ (a ball), referring to its shape and ability to roll up. Under Article 33b(iii) of the Code _Sphaerillo_ is an unjustified emendation (replacement name) and a junior objective synonym of _Spherillo_. He did not designate type species for _Spherillo_ or _Sphaerillo_. Considerable
confusion has resulted from widespread disagreement on the validity of Verhoeff’s renaming of the genus, and the two spellings Spherillo and Sphaerillo have been extensively used, sometimes as synonyms and sometimes, contrary to the Code, for different taxa. Jackson (1941, p. 3) wrote: ‘Past and present workers on the assemblage of terrestrial isopods under consideration have so consistently neglected to apply the International Rules of Nomenclature that it is too late to do more than protest formally and, in the interest of clarity, accept the status quo. On these grounds it is suggested that Sphaerillo Verhoeff be retained as the generic name of the forms included under Budde-Lund’s section XIII and that Spherillo should be allowed to die out, as its species are absorbed into new or already existing genera’. However, Jackson used Spherillo for 21 species and Sphaerillo for 13, with the former name as the overall heading. Vandel (1973, p. 131) proposed to resolve the problem by interpreting Spherillo Dana as a nomen nudum — an action at variance with Dana’s quite detailed description of the genus (1852) and his inclusion (1853) of well characterized species. Both spellings have been used by recent authors; Spherillo has been used by Green, Ferrara & Taiti (1990) and by Kwon & Taiti (1993) and Sphaerillo has been used by Nunnomura (1991) and by Yamamoto, Nakane & Takahashi (1992). To resolve this confusion we propose that the name Sphaerillo Verhoeff, 1926 be placed on the Official Index as an unjustified emendation of Spherillo Dana, 1852.

4. The first indication of type species for named genera, rather than Budde-Lund’s ‘sections’, was by Jackson (1941, p. 19). He listed ‘Type, ? Spherillo vitiensis Dana’ for the genus Spherillo Dana, and ‘Type, Spherillo danae Heller’ for Sphaerillo Verhoeff; the designation of S. danae is not valid under Article 67h because it was not one of the four species first included in Spherillo. Jackson’s listing of Spherillo vitiensis with a question mark is not a valid type species designation under Article 67c(3). Green (1961, p. 352) designated Sphaerillo pygmaeus Verhoeff, 1926 (p. 296) as the type species of Sphaerillo Verhoeff, but specifically excluded Spherillo Dana from the synonymy.

5. To achieve stability in the nomenclature of this group we propose that the Commission should designate Spherillo vitiensis Dana, 1853 as type species of Spherillo Dana, 1852; it was one of the nominal species first included in the genus (para. 1 above), and was tentatively given as the type by Jackson (1941; see para. 4 above). We also herewith designate as neotype for S. vitiensis the female holotype of Melanesillo scamnorum Verhoeff, 1938 (p. 2) from Fiji Island, Viti Levu, Kaba, barrier reef, 10.VIII.1917, leg. S. Bock, coll. no. 7635, Naturhistoriska Riksmuseet, Stockholm. This action serves to make Melanesillo scamnorum a junior objective synonym of Spherillo vitiensis. The specific name scamnorum has not been used since its establishment except for its mention in a check-list (Jackson, 1941, p. 18).

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

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus Spherillo Dana, 1852 and to designate Spherillo vitiensis Dana, 1853 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name Spherillo Dana, 1852 (gender: masculine), type species by designation in (1) above Spherillo vitiensis Dana, 1853;
(3) to place on the Official List of Specific Names in Zoology the name *vitiensis* Dana, 1853, as published in the binomen *Spherillo vitiensis* and as defined by the neotype designated by Lehtinen, Taiti and Ferrara in para. 5 above (specific name of the type species of *Spherillo* Dana, 1852);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Sphaerillo* Verhoeff, 1926 (an unjustified emendation of *Spherillo* Dana, 1852);

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *scamnorum* Verhoeff, 1938, as published in the binomen *Melanesillo scamnorum* (a junior objective synonym of *Spherillo vitiensis* Dana, 1853).

References


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