Scandosorbus (Rosaceae), a New Generic Name for Sorbus intermedia and Its Hybrid

Author: Sennikov, Alexander N.

Source: Annales Botanici Fennici, 55(4-6) : 321-323

Published By: Finnish Zoological and Botanical Publishing Board

URL: https://doi.org/10.5735/085.055.0413
Scandosorbus (Rosaceae), a new generic name for Sorbus intermedia and its hybrid

Alexander N. Sennikov

Botanical Museum, Finnish Museum of Natural History, P.O. Box 7, FI-00014 University of Helsinki, Finland (e-mail: alexander.sennikov@helsinki.fi); and Herbarium, Komarov Botanical Institute of Russian Academy of Sciences, Prof. Popov Str. 2, RU-197376 St. Petersburg, Russia

Received 27 June 2018, final version received 13 Aug. 2018 accepted 15 Aug. 2018


A new generic name, Scandosorbus Sennikov, is validly published to replace Borkhausenia Sennikov & Kurtto 2017, which is an illegitimate later near-homonym of Borckhausenia Roth 1800. New combinations are provided for the only species of the genus (B. intermedia) and its hybrid with Sorbus aucuparia.

Introduction

While reading an excellent book on the eponymy in generic names, of which the second edition (Burkhardt 2018) has recently been published, I realised that the generic name Borkhausenia Sennikov & Kurtto (Sennikov & Kurtto 2017) is a near homonym of an earlier validly published name, Borckhausenia Roth (Roth 1800). This oversight resulted from my uncritical use of electronic databases (International Plant Name Index, IPNI; Index Nominum Genericorum, ING), in which orthographical variants, when different at least in a single letter, cannot be retrieved using standard requests. Consequently, Borkhausenia is to be treated as a later homonym and an illegitimate name under Art. 53.2 (with Ex. 9) of International Code of Nomenclature for algae, fungi, and plants (Turland et al. 2018) because the two generic names differ in a single letter and commemorate the same person, thus being confusingly similar.

Historical and taxonomic background

Borkhausenia Sennikov & Kurtto (Rosaceae, Malinae) was proposed to accommodate a single apomictic species of Sorbus s. lato, S. intermedia (Ehrh.) Pers., and its only hybrid, S. × liljeforsii T.C.G. Rich (Sennikov & Kurtto 2017). This species is native to Estonia, Denmark, Finland (Åland Islands), Germany, Latvia, Norway and Sweden and has naturalised occurrences in several other countries (Belgium, Czech Republic, mainland Finland, France, Ireland, Netherlands, Russia (Kaliningrad Region), United Kingdom). Its distribution was mapped by Kurtto et al. (2018).

The need for establishing a new genus appeared from the taxonomic disentangling of Sorbus, which was repeatedly found to be polyphyletic in phylogenetic studies (Campbell et al. 1995, 2007, Lo & Donoghue 2012). On the basis of the phylogenetic information and morphological evidence, Sennikov and Kurtto (2017) rec-

Downloaded From: https://bioone.org/journals/Annales-Botanici-Fennici on 12 Feb 2020
Terms of Use: https://bioone.org/terms-of-use Access provided by Helsinki University
ognized four main genera in *Sorbus s. lato*, i.e. *Aria*, *Cormus*, *Sorbus s. stricto*, and *Torminalis*, and two genera that arose from intergeneric hybridization in the past, i.e. *Chamaemespilus* (presumably *Aria × Torminalis*) and *Micromeles* (presumably *Aria × Sorbus s. stricto*). According to that evidence, two pairs of simple-leaved genera (*Aria* and *Torminalis*) and pinnate-leaved genera (*Cormus* and *Sorbus s. stricto*) are distantly positioned on the phylogenetic tree and may not be closely related to each other, although the relationship within the pairs may be truly sister. Since the morphological evidence supports the separation of four segregates, all these entities were accepted at the generic rank by Sennikov and Kurtto (2017), in agreement with the established tradition.

Intergeneric hybridization within the tribe *Malinae* is extensive. According to Robertson et al. (1991), it affects 24 of 28 genera they recognized in the tribe. As they stated, this hybridization “seems to reflect weak overall barriers to hybridization rather than indicate evolutionary relationships”. Among the generic segregates of *Sorbus s. lato*, all but *Cormus* are capable to spontaneously hybridize. These hybrids have been traditionally described and classified under *Sorbus s. lato* until Mezhensky (in Mezhensky et al. 2012) provided nothogeneric names with selected species-level combinations. However, nothogeneric nomenclature need not be applied to established taxa of hybrid origin, such as apomictically stabilized hybridogenous species of *Sorbus s. lato* (Art. H.3.3, Note 1 in Turland et al. 2018). This is a practical consequence of the rule (Art. H.4.1 in Turland et al. 2018), which requires that a nothotaxon has to be circumscribed so as to include all individuals that are derived from crosses between particular parent taxa. Since many apomictic taxa at the level of species share the same parents, designating them as nothotaxa would lead to the collapse of their nomenclature and potentially to synonymization of many of these entities (as advocated e.g. by Zieliński & Vladimirov 2013) in spite of their morphological recognizability and biological separation. For this reason, a new generic nomenclature was established for hybridogenous genera of *Sorbus s. lato* by Sennikov and Kurtto (2017).

Sennikov and Kurtto (2017) established hybridogenous genera for each group of spontaneous, stabilised apomictic species that arose from hybridization between segregate genera of *Sorbus s. lato*. One of these, *Borckhausenia*, was a product of crosses between species of three genera (*Aria × Sorbus × Torminalis*); its name was dedicated to Moritz Balthasar Borkhausen (1760–1806), a German dendrologist who contributed to the development of the early system of *Malinae*. Borkhausen’s name was spelled differently, shifting with time from the archaic “Borckhausen” to more simplistic “Borkhausen” (Stafleu & Cowan 1976). Two early eponyms honoured Borkhausen, *Borckhausenia* Roth (Roth 1800) and *Borckhausenia* G. Gaertn., B. Mey. & Scherb., *nom. illeg.* (Gaertner et al. 1801). Reichenbach (1841) attempted to correct the spelling of the latter to “Borkhausenia” but that correction was not effective and the later spelling variant cannot be treated as validly published under Art. 61.1 in Turland et al. (2018).

This orthographic variant was not recorded in *Index Kewensis* but was noted in Stafleu and Cowan (1976).

Since the illegitimacy of *Borckhausenia* Sennikov & Kurtto went slipping through the cracks, this name was accepted in *Atlas Florae Europaeae* (Kurtto et al. 2018), *Plants of the World online* (http://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:77164940-1) and Finnish Biodiversity Information Facility (https://laji.fi/taxon/MX.4976857). Hereby a new generic name with new combinations is provided to establish legitimate nomenclature for monophyletic taxa in *Sorbus s. lato*.

# Nomenclature

**Scadosorbus** Sennikov, nom. nov.


**Etymology.** The generic name is derived from ‘Scandinavia’ and ‘Sorbus’, thus indicating a group of *Sorbus s. lato* whose distribution is centred in (southern) Scandinavia. The gender of the generic name is necessarily feminine (Art. 62.2, Turland et al. 2018).
**Phylogenetic origin.** Aria (Pers.) Host × Sorbus L. × Torminalis Medik. (Robertson et al. 2010).

**Scandosorus intermedia** (Ehrh.) Sennikov, *comb. nova*


**Note.** The lectotype collection of _Pyrus intermedia_ was distributed as part of Ehrhart (1787–1793).

**Scandosorus × liljeforsii** (T.C.G. Rich) Sennikov, *comb. nova*


**Origin.** _Scandosorus intermedia × Sorbus aucuparia_ (Rich 2008).

Further synonymy and notes on type designations and nomenclature may be found in Sennikov and Kurtto (2017).  

**References**


