

## Nomenclature of the fungal family name *Erysiphaceae* revisited

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**Abstract:** Braun, U. 2017: Nomenclature of the fungal family name *Erysiphaceae* revisited. *Schlechtendalia* **32**: 75–77.

The fungal family name *Erysiphaceae* was proposed to be conserved against the older family name *Oidiaceae*, and this proposal attracted broad support by the Nomenclature Committee for Fungi. However, the nomenclature of the name *Erysiphaceae* is in need of a more detailed explanation and discussion.

**Zusammenfassung:** Braun, U. 2017: Nomenklatur des Pilzfamiliennamens *Erysiphaceae* erneut aufgegriffen. *Schlechtendalia* **32**: 75–77.

Der Name der Pilzfamilie *Erysiphaceae* wurde zur Konservierung gegenüber dem älteren Familiennamen *Oidiaceae* vorgeschlagen, ein Vorschlag, der seitens der Nomenklatur-Kommission für Pilze auf breite Zustimmung gestoßen ist. Die Nomenklatur des Namens *Erysiphaceae* bedarf jedoch einer näheren Erläuterung und Diskussion.

**Key words:** Powdery mildews, *Erysiphales*, nomenclatural discussion.

Published online 1 Nov. 2017

Powdery mildews cause diseases on a wide range of wild and cultivated plants worldwide, and owing to the economical relevance of this fungal group, they are permanently within the focus of phytopathology. Powdery mildews are assigned to an order and to a family of its own (Braun & Cook 2012). For a long time, the family name *Erysiphaceae* was attributed to Léveillé (1851), e.g. in Ellis & Everhart (1892), Salmon (1900), Jaczewski (1927), and Blumer (1967), but this name is not valid since it was published as “Erysiphés”, i.e., without Latin termination (Art. 18.4), and this name was not explicitly referred to as family in Léveillé’s (l.c.) publication. Tulasne & Tulasne (1861) introduced the name *Erysiphei*, supplemented by a detailed discussion and description, which was later interpreted as family name and used in the taxonomic literature of powdery mildews (Braun & Cook 2012). However, a designation of *Erysiphei* as family is lacking in Tulasne & Tulasne (1861). Therefore, the question arises which status was intended by the latter authors. Tulasne & Tulasne (1861) referred to Montagne’s (1856) “Ordo III. *Perisporiacei*” (p.p.), i.e., they intended to exclude the powdery mildews from the *Perisporiacei* and to divide this taxon into two taxa, viz., *Perisporiacei* and *Erysiphei*. According to Art. 18.2, names intended as names of families, but published with their rank denoted by one of the terms “order” (ordo) or “natural order” (ordo naturalis) instead of “family”, are treated as having been published as names of families. Thus, it can be presumed that Montagne’s (l.c.) *Perisporiacei* and, accordingly, the segregated *Erysiphei* have to be regarded as family names. However, Montagne (l.c.) assigned his “order *Perisporiacei*” to “family *Pyrenomyces*”, i.e., he used the term family in his work simultaneously for another taxon, so that his *Perisporiacei* cannot be considered to be a family name (according to Art. 18.2, Note 3). Hence, this name is just an unranked suprageneric taxon, which also applies to *Erysiphei* (Tulasne & Tulasne 1861). Doweld (2014) figured out that Sredinsky (1873) published the name “*Erysiphei*” with clear denomination as family (Fig. 1). A description is lacking in Sredinsky (l.c.), but he cited Tulasne & Tulasne (1861), i.e., he referred to the description of *Erysiphei* in the latter work, which validated the new family name. Since the family name *Erysiphaceae* was threatened by the older forgotten anamorph-typified family name *Oidiaceae*, Doweld (2014) proposed to preserve *Erysiphaceae* against *Oidiaceae*, a proposal that has recently been supported by the Nomenclature Committee for Fungi (May 2017a,b). A search for an earlier validation of the family name *Erysiphaceae* failed. Several early authors, including de Bary (1970), Cooke & Peck (1872) and Voss (1876), used the name *Erysiphei*, but without any specification of its status. Karsten (1873) treated powdery mildews as a subfamily of *Sphaeriaceae*.

The affiliation of the powdery mildews at higher level can be summarised as follows:

***Erysiphales*** E. Warming, Haandbog i den Systematiske Botanik, Ed. 2: 63, 1884.  
= *Erysiphales* Gwynne-Vaughan, Fungi: 78, 1922.

- Erysiphaceae** N.K. Sredinsky (as *Erysiphei*), Zap. Novorossiisk. Obshch. Estesvoisp. 2(1): 106, 1873, nom. cons. prop.  
 = *Oidiaceae* Link (as *Oideae*), Abh. Phys. Kl. Königl. Akad. Wiss. Berlin 1824: 165, 1926, nom. rej. prop.  
 = *Erysiphés* Lév., Ann. Sci. Nat., Bot., Sér. 3, 15: 135, 1851, nom. inval. (Art. 18.4).  
 = *Erysiphei* Tul. & C. Tul., Select. Fung. Carpol. 1: 191, 1861, unranked suprageneric name.  
 = *Sphaeriaceae* subfam. *Erysiphoideae* P. Karst. (as *Erysipheae*), Bidrag Kännedom Finlands Natur Folk 23: 190, 1873.  
 = *Erysibaceae* Lindau, in Engler, Nat. Pflanzenfam., Teil 1, Abt. 1: 328, Leipzig 1897.  
 = *Cystothecaceae* Henn., Bot. Jahrb. Syst. 28: 271, 1901.  
 = *Lanomycetaceae* Gäum., Die Pilze. Grundzüge ihrer Entwicklungsgeschichte und Morphologie, Ed. 2: 183, Basel 1964.  
 = *Blumeriaceae* Heluta, Biol. Zhurn. Armenii 41(5): 356, 1988.  
 = *Leveillulaceae* Heluta, l.c.: 357.

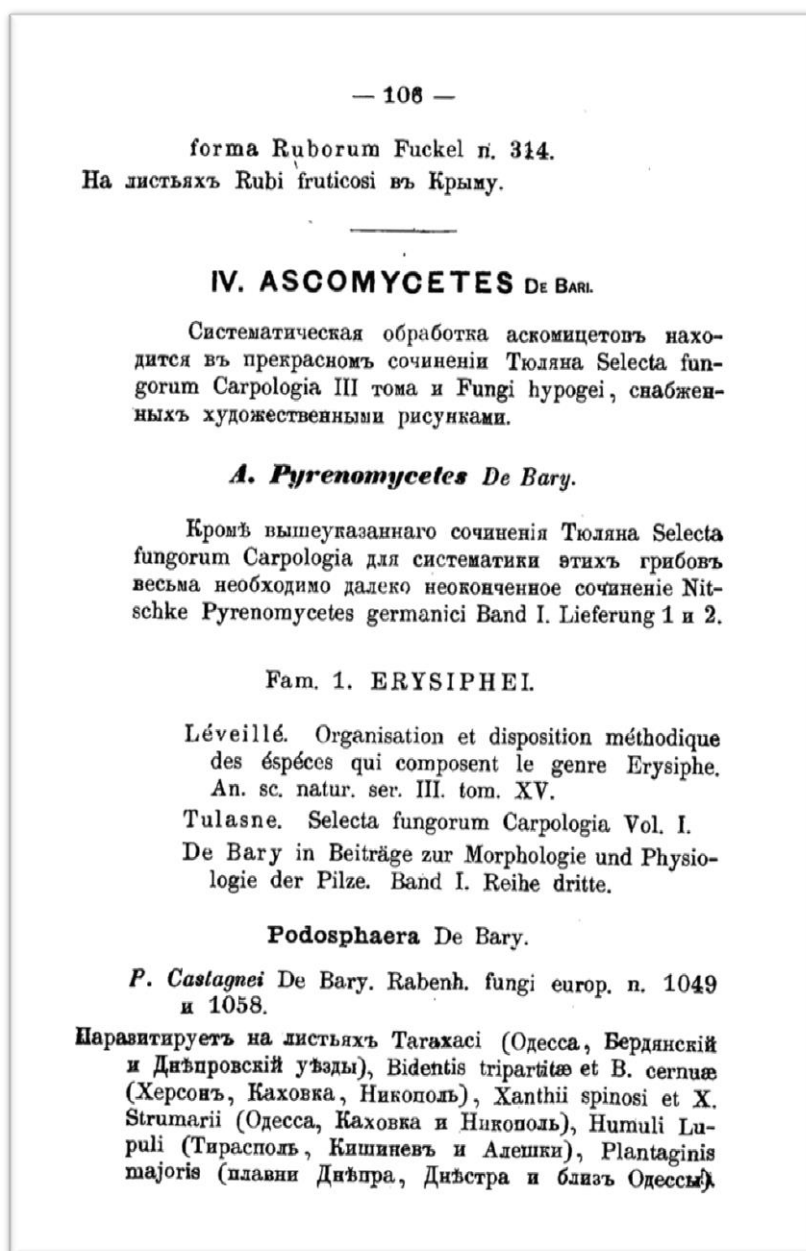


Fig. 1: *Erysiphaceae*, original publication in Sredinsky (1873).

## Acknowledgments

I am grateful to A. A. Doweld, Moscou, Russia, for providing me the publication of N. K. Sredinsky.

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