Reassessment of the nomenclature of *Puccinia* on *Bunium bulbocastanum*

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Abstract: Braun, U., Thiel, H. & Raabe, U. 2026: Reassessment of the nomenclature of *Puccinia* on *Bunium bulbocastanum*. Schlechtendalia **43**: 9–11.

In the nomenclature data bases, the name *Puccinia bulbocastani* is currently considered a combination based on *Aecidium bulbocastani*, published in 1805 by U. Cumino. However, *P. bulbocastani* must be considered a combination (comb. et stat. nov.), introduced by Fuckel, 1870, with indirect reference to its basionym – *Puccinia umbelliferarum* f. *bulbocastani* (Art. 38.15 and 41.3, Madrid Code). *A. bulbocastani* is the oldest name for this *Puccinia* but blocked in the latter genus by Fuckel's name *P. bulbocastani*. *Aecidium bunii*, introduced in 1806, is the next available name for this species, so that the combination *Puccinia bunii*, based on *A. bunii*, constitutes the correct valid name for the *Bunium bulbocastanum Puccinia*.

Zusammenfassung: Braun, U., Thiel, H. & Raabe, U. 2026: Neubewertung der Nomenklatur der *Puccinia* auf *Bunium bulbocastanum*. Schlechtendalia **43**: 9–11.

In den Nomenklaturdatenbanken wird der Name *Puccinia bulbocastani* derzeit als eine Kombination angesehen, die auf *Aecidium bulbocastani* basiert, veröffentlicht 1805 von U. Cumino. *P. bulbocastani* muss jedoch als Kombination (comb. et stat. nov.) angesehen werden, eingeführt von Fuckel, 1870, mit indirektem Verweis auf das Basionym – *Puccinia umbelliferarum* f. *bulbocastani* (Art. 38.15 and 41.3, Madrid Code). *A. bulbocastani* ist der älteste Name für diese *Puccinia*, wird jedoch in der letzteren Gattung durch Fuckels Namen *P. bulbocastani* blockiert. *Aecidium bunii*, eingeführt 1806, ist der nächste verfügbare Name für diese Art, sodass die Kombination *Puccinia bunii*, basierend auf *A. bunii*, den korrekten gültigen Namen für die *Bunium bulbocastanum Puccinia* darstellt.

Key words: Great Pignut, *Puccinia bunii*, valid name.

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The *Puccinia* on *Bunium bulbocastanum* L. (Great Pignut) is currently listed in the nomenclature databases for fungi under the name "*Puccinia bulbocastani* (U. Cumino) Fuckel," i.e., it is considered a combination based on *Aecidium bulbocastani* U. Cumino (Cumino 1805) as the basionym. This interpretation can only be understood by referring to Art. 41.3 (Madrid Code), i.e., it must have been considered a combination with indirect reference to the basionym. However, Art. 41.3 cannot be applied in accordance with Art. 38.15. The latter article states that "An indirect reference is a clear (if cryptic) indication, by an author citation or in some other way, that a previously and effectively published description or diagnosis applies." This is, however, not the case with *P. bulbocastani*.

Fuckel (1870) introduced the name "*Puccinia bulbocastani* †" and cited "Fungus teleutosporiferus. F. rh. 357. III," which is an indirect reference to the valid name *Puccinia umbelliferarum* f. *bulbocastani* Fuckel in the sense of Art. 38.15 (names of formae of plant pathogenetic fungi are regarded to be valid by the Code, even without any descriptions, i.e., the distinguishing host is sufficient for the introduction of a valid new forma). Therefore, *P. bulbocastani* can be considered a combination (comb. et stat. nov.) based on Fuckel's *P. umbelliferarum* f. *bulbocastani*. In addition, Fuckel cited *Aecidium bunii* DC. (de Lamarck & de Candolle 1806) as an anamorphic ("fungus hymeniiferus") synonym. Since he introduced *P. bulbocastani* as species name and did not use the epithet "*bunii*," it is clear that Fuckel (l.c.) had a new name for the teleomorph in mind (Art. F.8.1), as in other cases in his publications. The older name *Aecidium bulbocastani* (Cumino 1805) does not appear in Fuckel (1870), so he was undoubtedly unaware of it. This means that the conditions for the application of Art. 38.15 are not met in the case of *A. bulbocastani*. In order to clarify the name *P. umbelliferarum* f. *bulbocastani*, the basionym of *P. bulbocastani*, it is necessary to designate a duplicate of "Fuckel, Fungi Rhen. 357," which pertains to the protologue of Fuckel's forma, as lectotype.

Since the name *P. bulbocastani* must be attributed to Fuckel (l.c.), there are nomenclaturally significant consequences. *A. bulbocastani* (Cumino 1805) is the oldest name for the *Bunium bulbocastanum Puccinia*, but it cannot be used because it is blocked in the genus *Puccinia* by Fuckel's *P. bulbocastani*, meaning that combining the two would result in a homonym. Therefore, the next oldest name, *Aecidium bunii* (de Lamarck & de Candolle 1806), which Winter (1880) assigned to *Puccinia*, constitutes the correct, Code-compliant name for this rust fungus. Winter (l.c.) added "*Puccinia bunii* (DC.)" to a list of rust names, which constitutes a valid combination. The reference to "(DC.)" fulfils the requirements

of Art. 38.15 for a new combination with indirect reference to the basionym. The denomination of the *Puccinia* on *Bunium bulbocastanum* is summarized in the following nomenclator:

Puccinia bunii (DC.) G. Winter, Hedwigia **19**(3): 35, 1880.

≡ *Aecidium bunii* DC., Syn. Pl. Fl. Gall.: 51, 1806.

[≡ *Caeoma umbelliferarum* Schltdl., Fl. Berol. 2: 115, 1824; nom. illeg. (superfl.), Art. 52.1.]

[≡ *Caeoma buniatum* Link, Sp. pl., ed. 4, **6**(2): 53, 1825; nom. illeg. (superfl.), Art. 52.1.]

≡ *Dicaeoma bunii* (DC.) Kuntze, Revis. Gen. pl. **3**(3): 468, 1898.

= *Aecidium bulbocastani* U. Cumino, Mém. Acad. Imp. Sci., Litt. Beaux-Arts Turin, Sci. Phys. Math. [**14**] (Mém. Présent. Acad.): 260, 1805; non *Puccinia bulbocastani* (Fuckel) Fuckel, 1870.

= *Puccinia umbelliferarum* f. *bulbocastani* Fuckel, Fungi Rhen. Exs., Fasc. **4**: no. 357, 1863.

Lectotype (designated here, MycoBank, MBT10031655): Germany, as *Puccinia umbelliferarum* f. *bulbocastani*, "P. propria. Ad Cari B. radicalia, raro. Vere. Ca. Hostricham." {nowadays – Oestrich-Winkel, urban district Oestrich, Rhein-Taunus-Kreis, Hessen} [Fuckel, Fungi Rhen. Exs. 357] (HAL, s.n.). Fig. 1.

≡ *Puccinia bulbocastani* (Fuckel) Fuckel, Jahrb. Nassauischen Vereins Naturk. **23-24**: 71, [1869-1870] 1870.

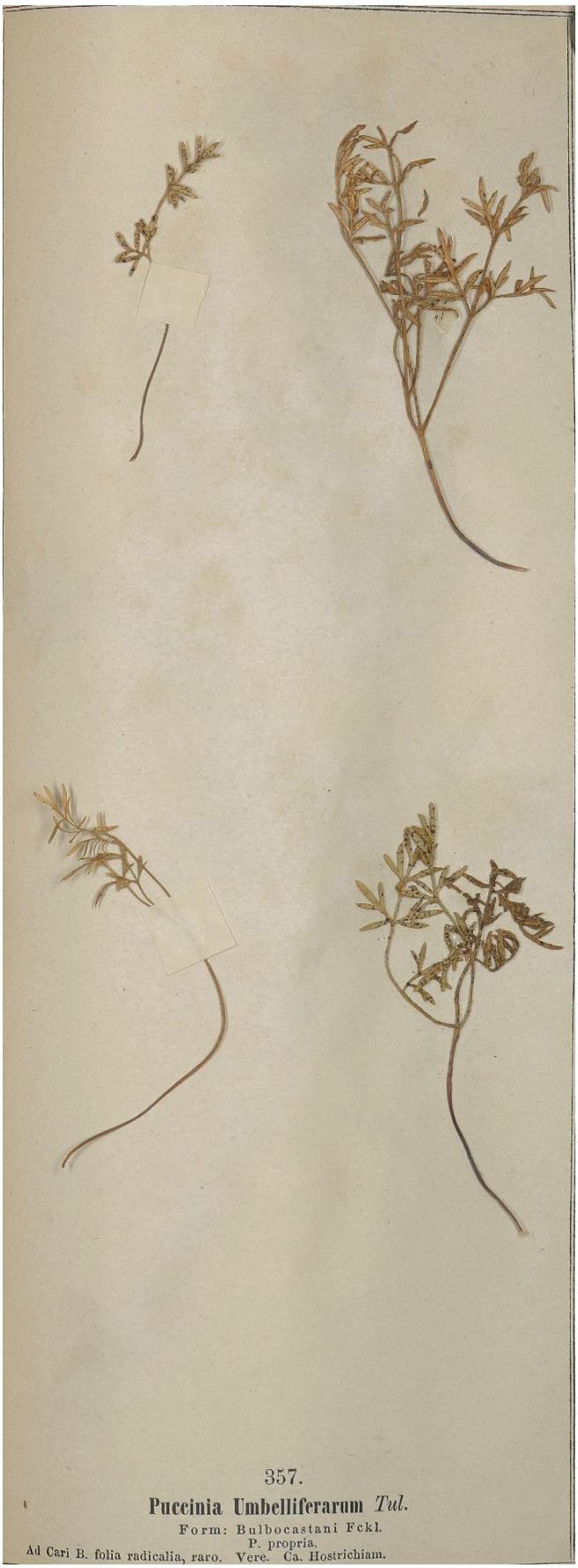

Fig. 1: *Puccinia umbelliferarum* f. *bulbocastani*, Fuckel Fungi Rhen. Exs. 357, lectotype deposited at HAL.

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