Memoranda Soc. Fauna Flora Fennica 96: 29–31. 2020
Helsinki 16 September 2020

ISSN 0373-6873 (print)
ISSN 1796-9816 (online)

Euphrasia wettsteinii var. *botniensium*, comb. nov. (Orobanchaceae)

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For updating the checklist of vascular plants of Finland, one new nomenclatural combination is proposed: *Euphrasia wettsteinii* G.L.Gusarova var. *botniensium* (Brenner) Piirainen.

A checklist of Finnish vascular plants, including all native and alien taxa, was published recently (Kurtto et al. 2019a). In addition to the printed checklist, the vascular plant data was used for the official version of the digital national checklist of all Finnish species (FinBIF 2019, and its later online versions) as Kurtto et al. (2019b), and the name data will be constantly updated there. As only validly published names and nomenclatural combinations will be accepted in the updates of the checklist, new combinations might be needed, as for the checklist (see Kurtto & Uotila 2019, Piirainen & Nurmi 2019). In the present article one new combination is proposed.

The Bothnian Sea seashore race of *Euphrasia wettsteinii*

The geographical and ecotypic variation within *Euphrasia wettsteinii* G.L.Gusarova (*E. frigida* auct., *E. latifolia* auct., *E. minima* auct., non DC.) is known to be wide. One of the local races is distributed along seashore meadows and stony grounds of the Gulf of Bothnia, south to Norrtälje (Uppland) in Sweden and the northernmost archipelago of the Aland Islands at Kumlinge and Brändö in Finland (e.g. Karlsson 1976, Jalas 1980, Hinneri 2009, Jonsell 2010, Mossberg & Stenberg 2018). Jonsell (1988) and Jonsell & Karlsson 2004) demonstrated it as a case of local microendemism. In Sweden, this race is usually known as *E. frigida*/*E. wettsteinii* var. *baltica* Hyl. & Nannf. ined., a name used *in schedae* (as *E. baltica*) but never validly published. Though invalid, the variety name is used in the checklist of North European vascular plants (Karlsson & Agestam 2019) and the Swedish taxonomic database (Dyntaxa 2020), as well as in several national or local floras (e.g. Jonsell 2010, Stenberg 2010, Mossberg & Stenberg 2018).

Karlsson & Agestam (2019) and Dyntaxa (2020) give the name *Euphrasia latifolia* var. *botniensium* Brenner in synonymy under *E. wettsteinii* var. *baltica*. Suominen & Karlsson (1998) mention the ”non-uniform race in seashore meadows and stony grounds along the Bothnian Bay (?incl. *E. latifolium* var. *botniensium* Brenner)” [orig. in Finnish]. It was characterized as having leaves hairy, with a narrow base and capsules that are only little longer than the calyx. Brenner’s (1900) original description does not include these characters and is also otherwise insufficient. Examination of herbarium material (H) of *E.*

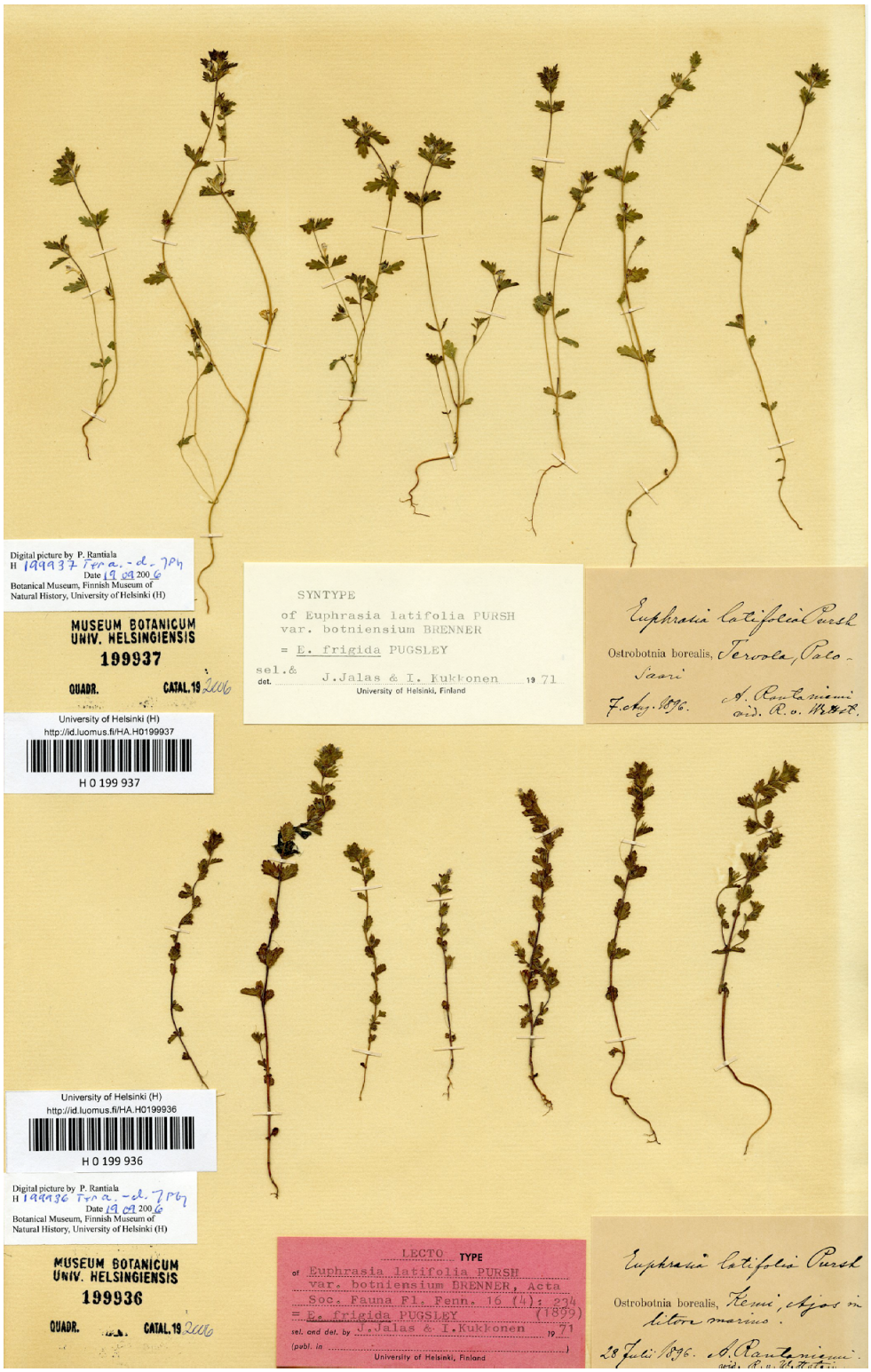

Fig. 1. Herbarium sheet with lectotype of *Euphrasia latifolia* var. *botniensium* Brenner [= *E. wettsteinii* var. *botniensium* (Brenner) Piirainen] (lower specimen, H-199936) and one of the syntypes (upper specimen, H-199937).

wettsteinii collected from shores of the Bothnian Bay (including the type material of var. *botniensium*) and the inland of northern Finland, confirmed that there are small differences between plants from these two areas. In the inland plants, the lowermost stem leaves tend to be at the 1st to 3rd (or 4th node) above the cotyledons, and mature capsules are usually ca. 5.5–7 mm long and clearly longer than the calyx, while in the seashore plants the lowermost leaves are usually at the 4th or 5th node and capsules are ca. 4–5.5 mm long and shorter to slightly longer than the calyx. On the other hand, leaf shape and hairiness seem to vary too much within both areas to be used as a reliable character. The seashore plants have often somewhat thickened leaves.

It seems that Brenner's *Euphrasia latifolium* var. *botniensium* is the only validly published name for this seashore race at the variety level. If it is accepted as a variety, a new combination is needed under the taxonomically correct species name, i.e. *E. wettsteinii*. Lectotype of Brenner's variety is illustrated in Fig. 1.

Euphrasia wettsteinii G.L.Gusarova var. ***botniensium*** (Brenner) Piirainen, comb. nov.

Basionym: *Euphrasia latifolia* Pursh var. *botniensium* Brenner in Acta Soc. Fauna Fl. Fenn. 16(4): 234. 1900. – Lectotype designated by Jalas & Kukkonen 1973; they cited the collecting date erroneously as 28. VI.1896: [Finland] Ostrobotnia borealis, Kemi, Ajos, in litore marino, 28.VII.1896 *A. Rantaniemi* [s.n., H-199936!].

= *E. baltica* Hyl. & Nannf. ined. (*in sched.*)

= *E. frigida* var. *baltica* Hyl. & Nannf. ined.

= *E. wettsteinii* var. *baltica* Hyl. & Nannf. ined.

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