

# History of discovery and typification of *Haberlea rhodopensis* Friv. (Gesneriaceae)

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A lectotype for the name *Haberlea rhodopensis* Friv. is designated from among specimens stored at the Hungarian Natural History Museum in Budapest (BP). Notes on discovery and etymology of the species are provided.

Key words: Gesneriaceae, *Haberlea*, typification

## Introduction

The Gesneriaceae is a large family distributed mainly in tropical and subtropical regions of eastern Asia, Indonesia and South America. In Europe it is represented by five species in three genera. The species are considered Tertiary relicts, four of which occur in the central part of the Balkan Peninsula and one in the Pyrenees. The aim of the present paper is to typify the name *Haberlea rhodopensis* Friv. which was the first species of the Gesneriaceae discovered in the Balkans. *Haberlea rhodopensis* occurs in central and southern Bulgaria in the Stara Planina Mts. and Rhodope Mts. (Markova 1995), and in north-eastern Greece in the Rhodope Mts, Pangeon Mts. and Falakron Mts. (Strid 1991). It grows in shady rock crevices on limestone, at altitudes of 600–1700 m, together with many other relict and Balkan endemic species (Quézel 1968, Vladimirov 2003, Vladimirov & Szeląg 2006).

## History of the discovery of *Haberlea rhodopensis*

Imre Frivaldszky (1799–1870) initiated, organized and financed four scientific expeditions to the Balkan Peninsula in the years 1833–1845, but did not participate in them himself. All the botanical and zoological collections were made by his assistants, who successively transported them to Hungary (Frivaldszky 1835a, 1838, 1846, Nendtvich 1872, Bálint & Abadjiev 2006). It was during the second Balkan expedition (1834–1836), with a starting point in the city of Plovdiv in southern Bulgaria, that *H. rhodopensis* was first discovered in June 1834 “*in montibus Rhodope Rumeliae*”. Unfortunately, more precise locality information was not given on the label (Frivaldszky 1838, 1846). Most probably the locality was situated in the vicinity of the famous orthodox monastery in Bačkovó in the Čepalarska Reka valley (ca. 30 km south of Plovdiv), where *H. rhodopensis* occurs fre-



**Fig. 1.** Reproduction of original illustration of *Haberlea rhodopensis* from Frivaldszky (1835a: table 1).

quently in many places on shaded calcareous rocks.

The 1835 expedition explored the Stara Planina Mts. and *H. rhodopensis* was also found in the Kaloferska Planina Mts. One of the specimens stored at the herbarium of the Hungarian Natural History Museum in Budapest (BP) is labeled “in Alp. Kalophr”. Although the collecting date of this specimen is not indicated, the history of the Balkan expeditions (Frivaldszky 1838, 1846) as well as an unpublished manuscript of Frivaldszky kept in the library of the Hungarian Natural History Museum make it clear that *H. rhodopensis* was collected in the Kaloferska Planina Mts. in 1835 and transported to Hungary later, in September of that year. Therefore, no collection from the Stara Planina Mts. was mentioned in the protologue of *H. rhodopensis* (Frivaldszky 1835a).

The genus *Haberlea* Friv. was named after Karl Konstantin Christian Haberle (1764–1832) naturalist and meteorologist of German origin, who taught botany at the University of Pest in the years 1817–1832 (Sadler 1846). Frivaldszky, who attended the University of Pest in the years

1816–1821, dedicated the new plant genus to his teacher (Frivaldszky 1835a: 249). According to Sadler (1846) Haberle has never been in the Balkan Peninsula, hence the information that Haberle was a finder of *H. rhodopensis*, as mentioned by Weber and Skog (2007), is not correct.

## Typification of *Haberlea rhodopensis*

*Haberlea rhodopensis* was described in 1835 twice: in an extensive paper comprising the results of the Balkan expedition carried out in 1833 and 1834, published in A ‘*Magyar Tudós Társaság*’ Évkönyvei [Annals of the Hungarian Scientists’ Society] (Frivaldszky 1835a) and in a short paper in *Flora oder allgemeine botanische Zeitung* (Frivaldszky 1835b). Both these publications feature the same diagnosis of the genus and description of the species with indication of the type locality. Only the paper in A ‘*Magyar Tudós Társaság*’ Évkönyvei has an excellent illustration of the species (Fig. 1). The results of the 1834 expedition were also discussed in a paper that followed some years later, in which Frivaldszky unambiguously referred to the description of *H. rhodopensis* in the Hungarian periodical, and without mentioning the other paper (Frivaldszky 1838: 159).

In the BP herbarium there are two sheets of *H. rhodopensis* labeled by Frivaldszky himself. The first (BP 301409 *ex herb.* L. Haynald) has a label that reads: “*Exemplar typicum quod Clarissimus Frivaldszky herbario meo intulit*” in Archbishop Haynald’s handwriting, and it consists of specimens from two different localities. The specimen on the upper half of this sheet is labeled “*Haberlea rhodopensis mihi, Rumelia, Frivaldszky*” and the specimen on the lower half: “*Haberlea rhodopensis Frivald., in Alp. Kalophr, Frivaldszky*”. It is most probable that the upper specimen from “Rumelia” was collected in the Rhodope Mts. and thus belongs to the original material. However, in the subsequent paper Frivaldszky (1846) regarded the Kaloferska Planina Mts. and neighbouring mountain ranges of the Stara Planina Mts. as belonging to Rumelia. Therefore, as the lectotype of *H. rhodopensis* we have selected a specimen from the second sheet (BP 301370)

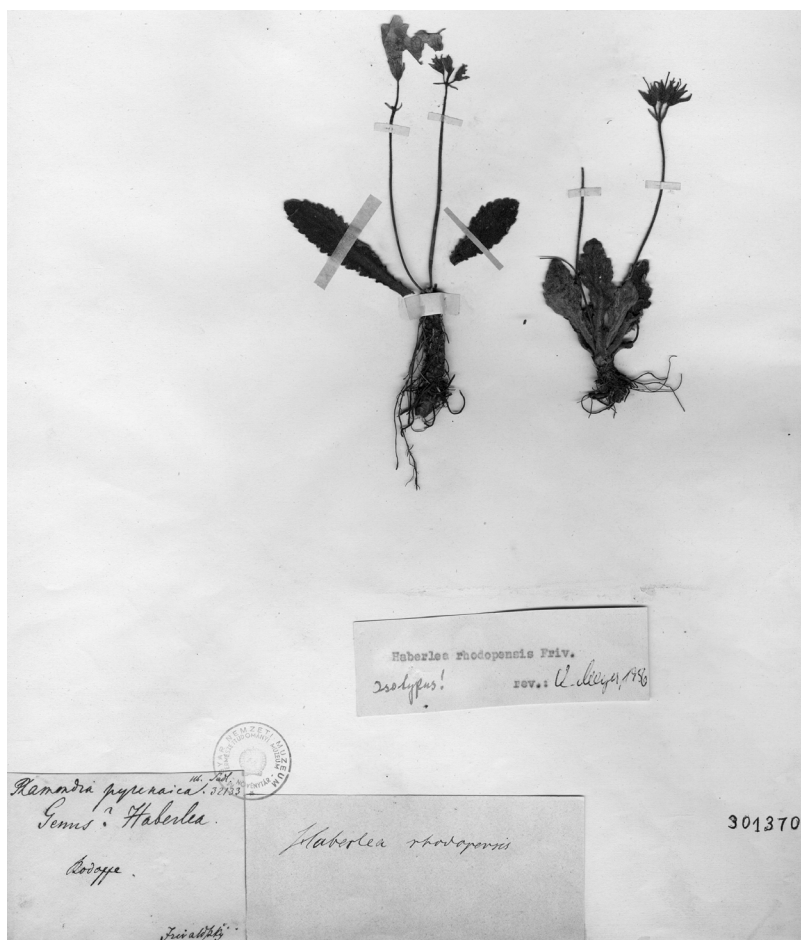


Fig. 2. Lectotype of *Haberlea rhodopensis*.

labeled “Rodoppe, Frivaldszky” which is explicitly referred to in the protologue.

### *Haberlea rhodopensis* Friv.

Magyar Tud. Társ. Évk. 2: 249. 1835. — Ind. loc.: ‘Rumeliában a ‘Rhodope’ közép magosságú hegyein virágzik, Juniusban [It is in bloom in June on medium high mounts in the Rhodope Mts. in Rumelia]’ — LECTOTYPE (designated here): [Bulgaria] *Ramondia pyrenaica* Genus? *Haberlea* Rodoppe Frivaldszky [original label in Frivaldszky’s own handwriting] *Haberlea rhodopensis* [manu Janka] (BP 301370! ex herb. J. Sadler) (Fig. 2).

*H. ferdinandi-coburgi* Urum., Period. Spis. Bulg. Kniž. Druž. 63: 573. 1902, synonymized by Strid 1991: 260. — LECTOTYPE (Markova 1995: 290): [Bulgaria] ad Loveč, Urumov (SOM 69796!).

*Haberlea ferdinandi-coburgi* was described

on the basis of specimens with sparsely hairy leaves on the upper surface, which were collected near Loveč in the Predbalkan region (the Stara Planina Mts. foothills) in Bulgaria. We have seen numerous herbarium specimens of *H. rhodopensis* from the whole range of its distribution, as well as many living in the wild, and the density of the indumentum of the leaves is variable within the species and does not have taxonomic significance.

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