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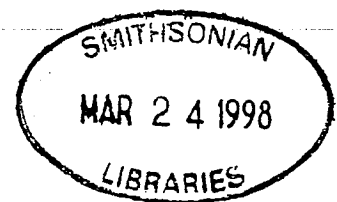
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THE ROYAL HORTICULTURAL SOCIETY

Haberlea rhodopensis: a classic Balkan endemic

JOHN AKEROYD

When I first visited S.E. Europe in 1970, I became fascinated by the Balkan endemic flora. So many plants of astonishing beauty were unique to the area, and were often apparently of great antiquity. Estimates vary with taxonomic circumscription, but it would seem that about a quarter of plant species in the Balkans may be endemic to the peninsula (including Greece). One of the most exotic of these – truly an escape from the tropical forest, if only of a previous era – is *Haberlea rhodopensis* Friv.

This exquisite treasure of the Balkan montane flora is endemic to the mountains of N.C. and S. Bulgaria and N.E. Greece, where its distribution, as the specific epithet suggests, centres on Bulgaria's Rhodope Mountains. These low, rounded mountains form the south-eastern part of the Rhodope Massif, which also includes the botanically famous Rila and Pirin Planina. First described in 1835 by Hungarian botanist Emerich Frivaldsky von Frivald (1799–1870), *H. rhodopensis* is a plant of moist, shady rocks in upland deciduous forests, that sometimes occurs in great abundance so as to form leafy carpets on rock-faces and cliffs.

The name *Haberlea* commemorates Carl Constantin Haberle (1764–1832), Professor of Botany at Budapest. This monotypic genus is one of three small endemic European genera in Gesneriaceae, a large and mostly Old World Tropical family. The most widespread of the European genera, *Ramonda*, is represented by *R. myconae* in the Pyrenees and adjacent mountains of northern Spain, and *R. nathaliae* and *R. serbica* in the mountains of the western part of the Balkan peninsula. Another species, *Jankaia heldreichii*, formerly included within *Ramonda*, is now in its own monotypic genus. It is the

most famous of the 30 or so flowering plants endemic to Mt Olympos on the boundary of Thessalia and Makedhonia provinces of N.C. Greece. Polunin (1980, plate 46) illustrates the three genera nicely side-by-side.

This distinguished group of European gesneriads shares a compact, caespitose habit, neat rosettes of stalked, hairy leaves and solitary or paired, showy flowers on rather short leafless stems. *Haberlea* has a longer corolla-tube than the others. The three genera, all most handsome and greatly prized by gardeners, grow on thick but well-drained mats of moss on ledges and in crevices of shady cliffs and gorges. They exhibit a superficial similarity to the more famous African gesneriad genera of horticulture such as *Saintpaulia*, the African Violets, and *Streptocarpus*, the Cape Primroses.

The European plants are isolated geographically, their nearest relatives living in equatorial Africa, the Indian subcontinent and S.E. Asia. Several Chinese gesneriads, such as *Didissandra sesquifolia* from Szechuan, approach *H. rhodopensis* in general form. This isolation probably dates from the Tertiary period, some 10 million years ago. The Balkans hold several such relics of the Tertiary subtropical forests: these include familiar woody species like Cherry Laurel (*Prunus laurocerasus*) and the Balkan endemic Horse Chestnut (*Aesculus hippocastanum*), which occur with *H. rhodopensis* in the Stara Planina.

Haberlea ferdinandi-coburgii Uromoff is occasionally seen in gardens. Described in 1902 from a small area of the Stara Planina in N.C. Bulgaria, it differs only in having leaves that are almost hairless on their upper surface. The species is not recognized even in some Bulgarian Floras, and should be regarded as at best a variety of *H. rhodopensis*. It is distinct in cultivation and sold by a few nurseries. The

elaborate specific epithet commemorates 'Foxy' Ferdinand I (1861–1948), Czar of Bulgaria, whose ignominious capitulation and abdication in October 1918 hastened the collapse of the Central Powers and the end of World War I. He and his son Boris were noted plantsmen and several Balkan taxa carry the family name, such as *Arabis ferdinandi-coburgi* from the Pirin Planina.

A cultivar of *Haberlea rhodopensis* with white flowers, 'Virginalis', is also grown in gardens.

DESCRIPTION

Tufted perennial herb, sometimes forming extensive patches, with leaves in loose rosettes. Leaves 3–8 × 2–4 cm, with a short, broad stalk, the blade obovate- to ovate-oblong, blunt, coarsely and evenly toothed, dark green, softly and densely hirsute, the hairs brown beneath. Flower-stalks 6–10 cm, erect, pubescent, leafless except for two tiny linear-lanceolate bracts. Flowers usually 3–5, slightly pendent in a small, loose umbel. Calyx 5-lobed, the lobes about as long as the tube. Corolla 15–25 mm, unequally 2-lipped, the cylindrical tube longer than the 5 lobes, pale bluish-violet (slightly darker on the outside of the tube), yellow-spotted and hairy inside. Stamens 4, included; filaments curved, longer than the anthers, which are connate in pairs; staminode 1, small. Stigma 2-lobed. Fruit a 1-locular septicial capsule about as long as the calyx. $2n = 38, 48$. Flowering May–June (-July).

The bilaterally symmetrical, 2-lipped corolla, the tube longer than the lobes, and the short, connate anthers distinguish *Haberlea* from the other two European genera of Gesneriaceae.

Other illustrations of *H. rhodopensis* can be found in *Curtis's Botanical Magazine*, t. 6651 (1882) and *Wild Flowers of Greece*, p. 99 (Goulandris *et al.* 1968).

CULTIVATION AND PROPAGATION

Haberlea rhodopensis is only half-hardy and is best grown in the alpine house. However, it will

survive out-of-doors in gardens in western Britain and in Ireland, especially on sheltered vertical faces. It has been grown outdoors for many years at the Cambridge Botanic Garden on the side of an artificial Balkan doline or limestone hollow – where predation by unscrupulous visitors has proved a bigger hazard than frost.

Good drainage is, above all, essential lest the cushions of leaves should rot, especially during the winter months. In the glasshouse *H. rhodopensis* grows easily in gritty soil in clay pans or on tufa. The plant is able to dry out completely in summer – as it often does for up to three months in the wild – but soon resuscitates on watering in the autumn.

Propagation is by seed in spring or autumn, or by leaf-cuttings. Cuttings are best taken in spring or late summer. One just pulls mature leaves gently from the parent plant and then inserts the petiole into damp sandy compost, where they will root.

CONSERVATION

Happily today, *Haberlea rhodopensis* seems to be holding its own in the wilds of its Balkan homeland. It is locally common in Bulgaria, on damp rocks in the great beech forests of the Rhodope Mountains and central Stara Planina. One of its headquarters in the Rhodope Mountains is Cervenata Stena [Red Wall], a protected area of woodland of dense beech and other deciduous trees, pines and firs, dissected by marble cliffs and ravines. This site, so evocatively described by the late Oleg Polunin and Bulgarian botanist Stefan Stanev (Polunin 1980), lies some 30 km south of Plovdiv. In N.E. Greece, *H. rhodopensis* has a number of stations where the Rhodope Mountains extend southwards across the Bulgarian frontier.

Just to the south-west in Greece, the plant is apparently widespread on Mt Falakron in eastern Makedhonia (sometimes known as Boz Dag of Drama; another Boz Dag rises above

Haberlea rhodopensis. Painting by Pauline Dean of a plant growing at the Royal Horticultural Society's Garden, Wisley

Serres). Here in 1977, Chris Preston and I found its dense mats thriving abundantly on shady limestone rocks at c.1,000 m. Material from this locality is still in cultivation at Cambridge University Botanic Garden. Constantinos Goulimis (in Goulandris *et al.* 1968) also recorded it near the summit at 2,100 m, at a place called Chionitripa, a huge snow-filled natural pit or doline (chion, as in *Chionodoxa*, is ancient Greek for snow). The rocks around the mouth of the pit are home to a rich community of mountain plants, notably several Balkan endemics and Mountain Avens (*Dryas octopetala*) at the southern edge of its range. Several botanists, including Goulimis (*loc. cit.*), have also reported *H. rhodopensis* from Mt Pangeion further south, just to the north-east of the Chalkidhiki peninsula.

Forest clearance remains a threat to individual populations of *Haberlea rhodopensis*, but the construction of a network of new roads in recent decades may in fact have helped the species by extending its habitat on to new cuttings and rock exposures. Even in the 1920s, Kew's W.B. Turrill had observed it in the Rhodope Mountains, "flourishing and

spreading on rock exposure along newly-formed paths and roads", noting that it was apparently extending its range in Bulgaria and Greek Thrace (Turrill 1958).

Haberlea rhodopensis is one of those symbolic plants, like some orchids, that are not themselves in danger of extinction but nevertheless indicate good habitats that should be conserved.

REFERENCES

- GOULANDRIS, N.A., GOULIMIS, C.N. & STEARN, W.T. (1968). *Wild Flowers of Greece*. The Goulandris Botanical Museum, Kifissia.
- POLUNIN, O. (1980). *Flowers of Greece and the Balkans*. Oxford University Press, Oxford.
- TURRILL, W.B. (1958). The evolution of floras with special reference to those of the Balkan Peninsula. *Journal of the Linnean Society, Botany*, 56: 136-152.

Dr John Akeroyd, Lawn Cottage, Fonthill Gifford, Tisbury, Salisbury, Wiltshire SP3 6SG UK

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