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## AN EMENDED DESCRIPTION FOR RHODOTHAMNUS SESSILIFOLIUS P.H. DAVIS (ERICACEAE)

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Rhodothamnus sessilifolius P.H. Davis (Ericaceae) was until recently known only from two gatherings from NE Turkey, and had not been seen since 1960. The type locality was re-found in 2000, together with two new populations. An emended description of this rare species is provided, including details of the first fruiting material and seeds to have been collected, and notes on its ecology.

Keywords. Davis, Ericaceae, flora, Rhodothamnus chamaecistus, Turkey.

## Introduction

An emended description for *Rhodothamnus sessilifolius* P.H. Davis is given, based upon specimens collected from NE Turkey during 2000, the first gatherings of this species since 1960. *R. sessilifolius* was first collected on Tiryal Dağı above Murgul on 23 June 1957 by Davis and Hedge (*Davis & Hedge D.* 29974), and then again on an adjacent mountain range (Savval Tepe) in July 1960 (*Stainton & Henderson* 6037 (E)). The species has since then been known only from these two localities in the NE corner of Turkey. The only other species in the genus, *R. chamaecistus* (L.) Rchb., is confined to the eastern Alps of southern Europe. In the original description of *R. sessilifolius*, seed and fresh capsules were unknown, and measurements were based only on herbarium material of the two gatherings available. The emended description and illustration (Fig. 1) provided here are based upon extensive measurements in the field, and the first fruiting gatherings of this species to have been made.

This species is known only from Coruh (Artvin) province. The type locality is a large rock at 2150m on Tiryal Dağı. Two large populations were found in this vicinity by the authors, one ranging from 2300 to 2350m (*R. Milne* TD-RT-2) and the other from 2375 to 2450m (*R. Milne* TD-RT-3), thus extending the altitudinal range of the species slightly to 2150–2450m. According to local shepherds, further localities exist in this area. The authors also searched for *R. sessilifolius* in the second locality, Savval Tepe, but were unable to re-find it there.

The original description gave the height of *R. sessilifolius* as 10cm (Davis, 1962; Yaltirik, 1971; Stevens, 1977). However, some specimens encountered were considerably taller, prompting us to re-check all the original measurements in the field. Where

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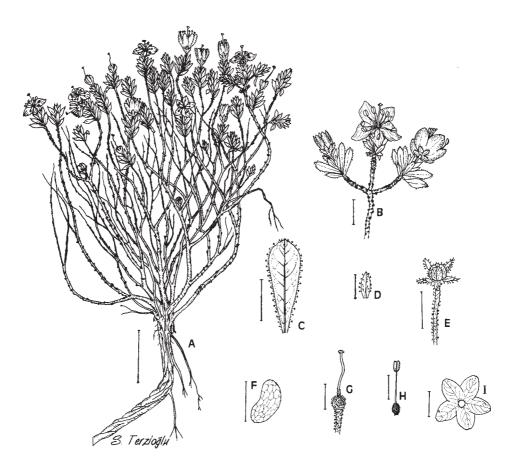


Fig. 1. A, whole plant; B, flowering stem; C, leaf; D, sepal; E, fruit; F, seed; G, gynoecium; H, stamen; I, corolla. Scale bars: A=4cm; B, C, E, G, I=1cm; D, H=0.5cm; F=0.05cm.

a notable difference exists, the measurements from the original description are given in square brackets.

Rhodothamnus sessilifolius P.H. Davis in Hooker, Ic. Pl. 36: t. 3575 (1962), emend. S. Terzioğlu & R.I. Milne. Type: Coruh (Artvin): P.H. Davis & I.C. Hedge D. 29974 (holo. K; iso. ANK!, BM, E!).

Evergreen shrublet to 20(25)cm [10cm] with unicellular and glandular hairs. Leaves congested, sessile, obovate,  $0.7-2.2(2.5)\times0.3-0.7(0.8)$ cm [ $0.7-1.2\times0.3-0.5$ cm], ciliate. Inflorescence 1(-3)-flowered; pedicel 0.5-1.4cm [0.5-1.0cm]; bracts leaf-like, 5-9mm; bracteoles ovate, c.3mm. Sepals 4.5-6mm. Corolla lilac-pink,  $\pm$  rotate, 1.6-2.6cm across, glabrous, tube 2-3mm. Stamens 10; filaments pinkish-white, 8-11mm; anthers 2-2.5mm [2mm]. Ovary with glandular hairs; style 0.9-2.1cm [0.9-1.3cm], with simple hairs at base. Capsule 4mm, 5-valved, reddish brown; valves

bifid above; many-seeded; *seeds* brown, with reticulated surface, kidney-shaped, c.0.6mm long.

Additional specimens examined. Coruh (Artvin): Stainton & Henderson 6073 (E!); Same population as D. 29974, 2150m, 22 vi 2000, Terzioğlu & Milne 13360 (KATO!); Tiryal Dağı above Murgul, one valley to right (SW) of Golbasi Yayla, very crumbly rock, abundant on this rock type where it outcrops (two small ridges from 2300 to 2450m), almost absent on all other habitats, 27 vi 2000, R.I. Milne TD-RT-02 (E!); Tiryal Dağı, one valley to right (SW) of Golbasi Yayla, outcrops of red very crumbly rock, abundant on this rock type, absent off it, also occasional where this rock forms screes, but does not compete well with other shrubs, 2330m, 27 vi 2000, R.I. Milne TD-RT-03 (E!); Same population as TD-RT-02, but fruiting, 2 x 2000, Milne & Terzioğlu RT-04 (E!); Same population as TD-RT-03, but fruiting, 2 x 2000, Milne & Terzioğlu RT-05 (E!).

The other species of *Rhodothamnus*, *R. chamaecistus*, is confined to crevices in calcareous (limestone or dolomite) rocks (Davis, 1962), whereas at Tiryal Dağı *R. sessilifolius* grows on dacite rock outcrops forming cliffs or ridges. Both species appear to favour habitats where there is little competition. The seeds of the two species are very similar in size and appearance, except that those of *R. chamaecistus* are slightly broader, tending therefore to be more ovate than kidney-shaped. Both are covered by a reticulum of raised ridges c.0.1mm wide. The lesser 'sturdiness' of *R. sessilifolius* compared with its relative, noted by Davis (1962), is less pronounced in the newly discovered populations, where larger plants occur than in the type locality. However, in such large plants the diagnostic confinement of leaves to the shoot tips is particularly apparent (Fig. 1A).

The following woody taxa were growing in association with *R. sessilifolius* at one or more of its sites on Tiryal Dağı:

Rhododendron smirnovii Trautv.

Rhododendron caucasicum Pall.

Rhododendron × davisianum R. Milne (R. caucasicum Pall. × smirnovii Trautv.)

Vaccinium myrtillus L.

Vaccinium uliginosum L.

Empetrum nigrum L. subsp. hermaphroditum (Hagerup) Böcher

Daphne glomerata Lam.

Sorbus aucuparia L.

Juniperus communis L. subsp. alpina (Sm.) Čelak.

And on neighbouring slopes:

Epigaea gaultherioides (Boiss.) Takht.

Salix apoda Trautv.

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