## Veronica opaca -

### new for Turkey - and new Turkish records of V. hispidula subsp. ixodes

### By Manfred A. FISCHER

Abstract: Veronica opaca was found near Lake Abant in the prov. of Bolu (Bithynia, NW. Turkey). V. hispidula subsp. ixodes, before known in Turkey from two localities only, both in the prov. of Niğde, is now recorded also from two localities in the prov. of Sivas (all four in Cappadocia).

On his excursion through Turkey in 1986, Franz Speta collected two speedwells that turned out to be of greater scientific value, the one gathering representing *V. opaca*, the other *V. hispidula* subsp. *ixodes*. I am thankful to F. Speta for allowing me to study his material.

#### Veronica opaca Fries

Province of Bolu, Fl.-Turkey-Square A3: Hills south of Lake Abant (Abant Gölü); between 1300 and 1650 m s. m.; 5.6.1986, leg. Franz Speta, Hb. LI.

The scant material comprises 5 small complete specimens and 3 fragments, all in flower with immature fruits. They agree well with typical material from Europe (see Tacik & Trzcińska-Tacikowa 1963, Trzcińska-Tacik 1964, Fischer 1987: 126, Fischer 1994: 728, Hūgin & Hūgin 1994). The hairs at the base of the calyx are comparatively short (at the lower margin of the character range) and not so numerous like usual in Europe. The plants are completely eglandular, even the capsule has no glandular hairs, a feature, however, not rare in this species (though erroneously not mentioned in Fischer 1987). The plants are, after 8 years, still dull greenish (evidently due to machine-aided quick drying: Speta/Linz system of economic use of canalized warm air); after some time (years), however, the specimens of this species turn blackish. Mature seeds are lacking in the specimens and thus could not be investigated.

The distribution area of *V. opaca* is situated mainly in the northern and northeastern parts of Central Europe, in southern parts of N. Europe (from where it has been described) and in NE. Europe (central Russia), see Meusel & al. (1978: 397) and Hügin & Hügin (1994). Around Moscow, the species seems to be not rare, the occurence there, considered to be doubtful by Meusel & al. (1978), could be confirmed by revision of herbarium material (M. A. Fischer, unpubl.). In SE. Europe, however, our species is very rare and scattered and absent from large areas, e. g. completely absent from Bulgaria (although mentioned in old Bulgarian Floras), as I could show by intensive study of Bulgarian herbaria and also demonstrate to the Bulgarian competent colleagues. Therefore, it is highly surprising to find the wrong record of *V. opaca* for Bulgaria (the same applies to *V. agrestis*) in the new Excursion Flora of Bulgaria (Andreev & al. 1992: 755), mitigated only by a shy question mark in brackets.

V. opaca occurs also in the central Great Caucasus, where I succeeded to find it in potato fields in several places near Qazbegi (northern Georgia) some years ago (M. A. FISCHER, unpubl.). Up to now, however, it has e. g. never been recorded for SW. Asia, neither for Turkey nor for Armenia (Gabrieljan & al. 1987) nor for the Flora Iranica area (FISCHER 1981).

Throughout its whole range this species grows in man-made habitats. Its very origin, its primary distribution and habitats are unknown; possibly it originated as a weed, one parent being possibly the ill-known *V. bungei* from Hyrcania (see FISCHER 1987: 117). The discovery of this species in the Pontus range (in N. Turkey), therefore, is remarkable, provided it is no recent introduction from Europe. It seems to be rewarding to have a future closer look on the distribution of this species in Turkey, carefully considering also the habitats (the species seems to exhibit a striking preference of potato fields and fields of other hoed crops).

In volume 6 of Davis's Flora of Turkey the new Turkish species is to be included in the account of *Veronica* (FISCHER 1978) in the species key on p. 703 and on p. 721:

Cancel "30" polita" on p. 703 in line 10 from top and add the following instead:

23. Fruiting sepals elliptic to ovate, usually 2.6-3.8 mm wide

30. polita

23. Fruiting sepals linear to oblong, usually 1,5-2,5 mm wide

30b. opaca

On p. 721, after the treatment of V. polita, before V. persica, add the following paragraph:

30b. V. opaca Fries, Nov. Fl. Suec. 64 (1819). - Ic.: Pawlowsky, Fl. Polska 10: Fig. 29, p. 313 (1963); Hügin & Hügin in Flora 189: 8-11, 14 (1994).

Differs from *V. polita* by leaves and (leaf-like) bracts suborbicular, shallowly serrate with 2-4 distinctly shorter teeth per side and margin not revolute, lower side not or but slightly more densely pubescent than upper side (in *V. polita* the leaves are much more densely pubescent beneath than on upper side); fruiting sepals (= calyx lobes) linear to oblong, (1.5-) 2-2.7(3.2) mm wide, usually 2.3-3 times (in *V. polita* usually 1.3-2 times) as long as wide, veins not or scarcely prominent, lower (outer) side loosely pubescent with hairs 0.2-0.8 mm long (in *V. polita* much shorter: 0.05-0.2 mm and mainly on the veins and on the margin, otherwise often subglabrous), hairs at base of calyx conspicuously longer: (0.5)0.7-1.3 mm (in *V. polita*: 0.2-0.7 mm); keel of capsule distinct, seeds less numerous: usually 10-12 per capsule (16-24 in *V. polita*) and larger: 1.5-2.1x1.1-1.5 mm (0.9-1.6x(0,5)0.8-1.3 in *V. polita*). - *Fl. 4-6 (?). Cultivated land (?), c. 1300-1600 m (?)*.

Described from Sweden.

Very rare. So far known only from one locality in NW. Anatolia. A3 Bolu: near Abant Gölü,

between 1300 and 1650 m, 5 vi 1986, F. Speta!

N.C. and NE. Europe, Great Caucasus. Euro-Sib. element.

V. hispidula Boiss. & Huet subsp. ixodes (Boiss. & Bal.) M. A. Fischer

This subspecies has been known so far in Turkey (FISCHER 1978: 709) from two records: from the type locality ((C5) prov. Niğde: "Masmeneu Dagh" = Masmili Dağı, leg. BALANSA) and from (B5) prov. Niğde: "Dirmussundagh" = Hançerli Dağı above Niğde, 1900 m s. m., leg. SIEHE 1913: 496 p. p.

The following herbarium record in hb. K, not mentioned in Flora of Turkey, probably also belongs to this taxon: (B6), prov. Sivas: between Pinarbaşi and Gürün, on dried mud on limestone, 1700 m s. m., leg. 27.5.1960, STAINTON & HENDERSON 5195.

The new record:

(B6), prov. Sivas: NW of Yıldızeli, 1360 m s. m., leg. 16.6.1986, Franz Speta, hb. LI.

This gathering consists of 9 specimens, flowering and with some almost mature fruits.

They fit well to the specimens of this subspecies known so far, although the corolla seems to have been bluish in the living state (allegedly white in typical material). Some relevant characters of the material collected by F. Speta:

Plant 6-12 cm tall; large specimens strongly branched; 1-2(3) pairs of leaves; leaves lanceolate to narrowly rhombic or subspathulate, 8-12 mm long, 3-5 mm wide, sparsely glandular-pubescent and also with glandless hairs; racemes 12-25-flowered, glandular-pubescent with hairs 0.4-0.5 mm long; fruiting pedicels 4-6 mm long, 0.7-1x as long as bracts; calyx with 0.5-0.6 mm long glandular hairs; fruit (capsule) 3.4-4.3 mm long, 3.8-4.7 mm wide, sinus very narrow, half of the capsule length, sparsely glandular-pubescent; style 0.7-1.0 mm long, half the length of the sinus; seeds (0.9-)1.0x0.5-0.6 mm, almost smooth.

The populations growing in the mountains of Cyprus usually are, though sligthly differing, also considered to belong to this taxon, an opinion put forward in recent times by Meikle (1985: 1218) who even maintains this taxon in the rank of a separate species. In my opinion, more detailed study of Turkish and Cyprus populations seems necessary in order to decide on this point.

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Veronica opaca etc. 87

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<u>ixodes 85-88</u>