

Short communication

A NEW HABITAT OF *DACTYLORHIZA INCARNATA* (L. 1755) SOÓ 1960
IN HUNGARY

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Dactylorhiza incarnata (L) Soó is not one of the most rare plant species in Hungary, but at the south-eastern part of the Great Hungarian Plain it is rather rare or is known from few places. In 1989 we discovered a new habitat of this plant which is out of its known area at the Plain, and which may increase that area, respectively.

Synonyms: *D. strictifolia* RAUSCHERT — *Dactylorchis incarnata* VERMLN. — *Orchis incarnata* L. — *O. impudica* CR. — *O. lanceata* DIETR. — *O. strictifolia* OPIZ. — *O. latifolia* PUGSLEY, NEWSKI.



Fig. 1. *Dactylorhiza incarnata* (L. 1755) Soó 1960

Dactylorhiza incarnata (L) Soó is an Eurasian, Erosiberian element of flora from the Atlantic ocean to the Trans-Baikalian region. The northern border of its

area is 65—70 degree of latitude, it is absent in the Mediterranean, but ranges to North Afrika dissolving in *D. elata* (POIR.) Soó formcircle (BORSOS, 1960).

It occurs mainly on lowlands, but also on collin-submontanic, and sporadically on alpin regions.

Its demand on habitat: calciphilous, wet or changing moisture content, rich in nutrients, neutral humous clay, abode or sandy soil.

Molinion character species (Soó, 1973).

Detailed description of the area of *Dactylorhiza incarnata* (L) Soó can be found in BORSOS (1960) and Soó (1960). Its appearance is sporadical or rare in the Pannonicum and Carpathicum in the Mountain region and in the Carpathians, and frequent at the Plain.

The appearance at the Great Hungarian Plain can be located mainly at the north-western part of the area between Danube and Tisza, and at the Mezőföld, and sporadically at the southern region of Danube valey and Nyírség (the map of its area is in BORSOS, 1960).

The known habitats nearest to Szeged are as follows:

At the area between Danube and Tisza: Szabadka „Ludaspuszta” (Prodan), Kalocsa, Kecel (Boros), Bugac (Soó), Kiskőrös „Kiscsengődi forest”, „Szücsi forest”, Tabdi (Boros), at the South Zombor-Gombos-Szond (Prodan), and Bácska (Slavnic), (cit. in Borsos 1960).

Only two data is known from the eastern region: Makó (Soó and MATHÉ, 1938) and Temesvár (TÖKÉS, cit. in BORSOS, 1960).

The nearest data to the new habitat came from Makó (40 km) from the beginning of this century, and has not been confirmed since that time. The distance from the habitat near Szabadka is about the same, that from Bugac is 55 km, and from Kecel is 65 km.

The new habitat of *Dactylorhiza incarnata* was discovered at May 1989. It is situated 10 km north-west from Szeged, near Domaszék, north from the village (Fig. 2.). It is about a 5 ha part of a 15 ha marsh-meadow, surrounded by ploughlands. We estimated about 1000 individuals in 1989, but 3000 individuals in 1990 on the basis of several counts.

The soil of the habitat is fenny meadow soil developed on chalky sand. It is covered with *Molinetum caeruleae* (ALLORGE 22) W. KOCH 26 association, species composition of which is the following, with dominance classes:

D3: *Carex distans*, *Rhinanthus angustifolius*; D2: *Centaurea jacea*, *Dactylorhiza incarnata*, *Equisetum palustre*, *Festuca arundinacea*, *Iris sibirica*, *Molinia caerulea*, *Phragmites australis*, *Poa pratensis*, *Poa trivialis*, *Sanguisorba officinalis*, *Serratula tinctoria*; D1: *Carex acutiformis*, *Dactylis glomerata*, *Galium palustre*, *Koeleria javorkae*, *Lithrum salicaria*, *Orchis laxiflora* ssp. *palustris*, *Potentilla reptans*, *Ranunculus repens*, *Ranunculus sardous*, *Mentha aquatica*, *Trifolium pratense*, *Vicia cracca*; D+: *Achillea asplenifolia*, *Asperula cynanchica*, *Caltha palustris*, *Genista tinctoria*, *Linum perenne*, *Lotus corniculatus*, *Plantago lanceolata*, *Polygala comosa*, *Scorzonera parviflora*, *Taraxacum palustre*, *Thalictrum flavum*.

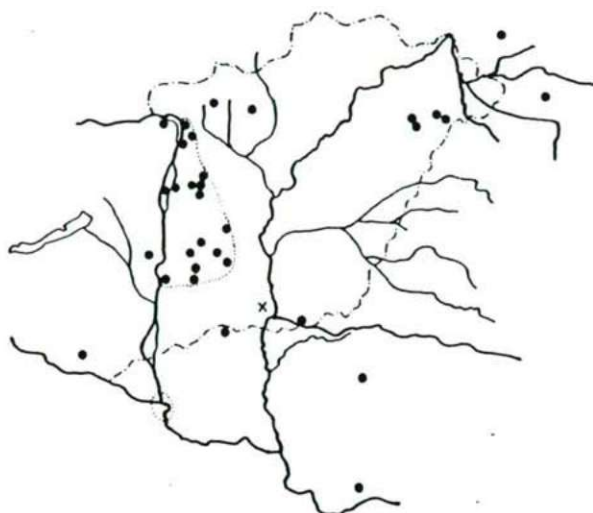


Fig. 2. Map of the distribution of *Dactylorhiza incarnata* (L. 1755) Soó 1960 at the Great Hungarian Plain. x marks the new habitat

Four plant species are rare and protected from the 40 species found at the above mentioned association. These are *Dactylorhiza incarnata*, *Iris sibirica*, *Koeleria javorkae*, *Orchis laxiflora* ssp. *palustris*, but latter is frequent at the Plain.

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