

**SECOND LOCALITY OF *Ophrys apifera* (Orchidaceae)
IN BULGARIA**

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***Second locality of Ophrys apifera* (orchidaceae) in Bulgaria; Proceeding of 6th
Symposium on Flora of the Southeastern Serbia, Sokobanja, 2000: 73-75.**

A new locality, the second one for Bulgaria, of *Ophrys apifera* Hudson was found in Ouzounboudzhak Biosphere Reserve (Strandzha Mt.). Short discussion on the distribution of Bee Orchid and ecological conditions in the area of the established population are given.

INTRADUCTION

In the Summer of 1998, during field investigations of the flora of Ouzounboudzhak Biosphere Reserve a new locality of one of the rarest for Bulgaria orchids, *Ophrys apifera* Hudson, has been found.

This species is an Euromediterranean geoelement. It is comparatively widely distributed in Europe – South of the Scandinavian Peninsula. Its areal reaches East to Kavkaz Mt. and South to North Africa (Delforge, 1994). It inhabits from light to shady, from dry to moist meadows or light forests, up to 1800 m alt. (Delforge, op.c.). The wide distribution of *Ophrys apifera* in Europe and the Mediterranean basin has presumed its founding in Bulgaria as well. Recently, the species has been found in Bulgaria only in one place, with 6 individuals in the Eastern Rhodopes, Ivailovgrad region, Likan Cheshma locality, between villages of Svirachi and Mandritsa (Gerasimova et al., in press).

NEW RECORD

5770.23455. *Ophrys apifera* Hudson, NG-64, SC (SB, DD, CD), SOM 155
152. Strandzha Mt., Ouzounboudzhak Biosphere Reserve, 11.VI.1998 (Figs. 1, 2).

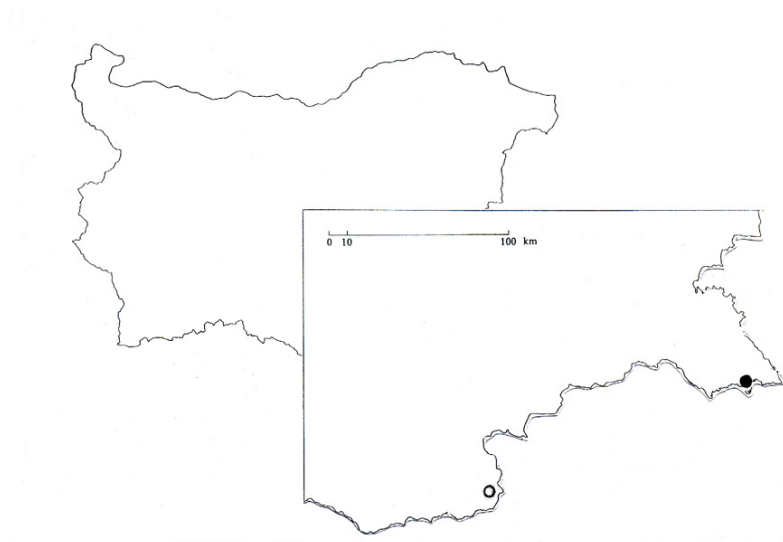


Fig. 1. Distribution map of *Ophrys apifera* Hudson in Bulgaria:

● – new locality; ○ – known locality.



Fig. 2. *Ophrys apifera* Hudson. Photo: C. M. Denchev

The newly discovered population has been situated on a meadow that is hay-made yearly. The population has been of two little groups of plants. The bigger group, situated on area about 18 square meters, was enumerating 16 individuals, while the smaller group was of 2 individuals. The plants have been counted in a generative phase.

The following herb and shrub species were associated with *Ophrys apifera*: *Pteridium aquilinum* (L.) Kuhn., *Rumex tenuifolius* (Wallr.) A. Löve, *Dianthus armeria* L., *Lychnis coronaria* (L.) Desr., *Moenchia mantica* (L.) Bartl., *Petrorhagia prolifera* (L.) Ball & Heywood, *Hypericum perforatum* L., *Crataegus monogyna* Jacq., *Fragaria moschata* Duchesne., *Potentilla argentea* L., *Ornithopus compressus* L., *Sanguisorba minor* Scop., *Trifolium angustifolium* L., *T. arvense* L., *Cistus salvifolius* L., *Polygala supina* Schreb., *Eryngium campestre* L., *Oenanthe pimpinelloides* L., *Asperula arvensis* L., *Ajuga laxmanii* (L.) Benth., *Origanum vulgare* L., *Prunella laciniata* (L.) L., *Teucrium chamaedrys* L., *Echium italicum* L., *E. vulgare* L., *Digitalis lanata* Ehrh., *Kickxia spuria* (L.) Dum., *Linaria pelisseriana* (L.) Mill., *Veronica officinalis* L., *Plantago lanceolata* L., *Achillea millefolium* L., *Carlina vulgaris* L., *Aira elegantissima* Schur, *Anthoxanthum odoratum* L., *Brachypodium sylvaticum* (Huds.) Beauv., *Bromus arvensis* L., *Cynosurus cristatus* L., *C. echinatus* L., *Holcus lanatus* L., *Lolium perenne* L., *Vulpia myuros* (L.) Gmel., *Muscari comosum* (L.) Mill., *Orchis coriophora* L., *O. papilionacea* L.

The Bee Orchid has been included in the CITES Convention as an endangered species which is or may become the object of trade. It is necessary to include it in the new, upgraded issue of the Red Data Book of the Republic of Bulgaria, as well as in the List of the protected plants in Bulgaria. The population of *Ophrys apifera* is situated in a protected territory, biosphere reserve. The survival of the population, however, is necessary to be supported by hay-making regime. The hay-making of the meadow should be done yearly, after the dispersing of the Orchid seed.

In the same meadow two other rare and protected orchids are growing - *Orchid papilionacea* and *O. coriophora*.

REFERENCES

1. Delforge, P., 1994: Guide des Orchidées d'Europe, d'Afrique du Nord et du Proche-Orient. Delachaux et Niestlé, Lausanne.
2. Gerasimova, I., A. Petrova, D. Venkova, In press: *Ophrys apifera* Hudson reestablished in the Bulgarian flora. Phytol. Balcan.

