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**Introduction**

The project ORCHIS – Orchids researches, conservation and habitats in Strandzha is implemented in the frame of the Interreg-IPA CBC Bulgaria – Turkey Programme 2014-2020. The main objective of the project is improving the capacity for nature protection and management of the common natural resources through cooperation initiatives in the cross-border area.

The project envisions development and implementation of joint conservation activities specifically on the orchid species in the protected areas of Strandzha Mts with the help of an innovative concept – using specialized software to aid the determination of species and assess their habitat status.

A large set of field data were collected during 2017. Here we present some of the new for region data.

**Material and methods**

During the period April – October 28 day of field studies on the territory of Strandzha Natural Park were undertaken. Different types of habitats were investigated. Special attention was devote to the areas with limestone basal rocks. For the all registered localities geographical and habitat data and data about the population size were collected.



*Dactylorhiza incarnata* is a new species for the mountain, as well as for the Strandzha floristic region in Bulgaria. This Euro-Siberian floristic element is an endangered in Bulgaria, with very local distribution in the lowlands. One locality was found in a lowland hay meadow near Bliznak village.

**Results**

There are literature and herbaria data about 37 species of orchids for the region of Strandzha Mts in Bulgaria. Among them, 18 species are included in the Red Data List of Vascular Plants in Bulgaria; 11 species are protected by the law. Localities of 24 species were registered in 2017 on the territory of Strandzha Natural Park. Some of them have numerous populations.



*Himantoglossum jankae*, a species included in Annex IIB of the Directive 92/43 EEC, was documented for the first time for the area of SCI BG 0001007 Strandzha, with 5 localities.



All populations of *Anacamptis coriophora* belong to subsp. *fragrans*. A population with a high percentage of *albiflora* individuals was observed also.



*Serapias vomeracea* is an Endangered species in Bulgaria. It uses to express an annual fluctuation connected with the ability for vegetative propagation. Surprisingly, it is the second numerous species in the Natural park (at least for 2017), with more than 20 000 shoots in 73 location points.



The existing data for *Ophrys mammosa* are very limited. A new locality confirmed the recent distribution in the Natural park.



New localities of rare and protected species: *Anacamptis laxiflora*, *Ophrys apifera* and *Ophrys reicholdii* were found.

Despite the purposive searches, the extremely rare *Orchis provincialis* and *Epipogium aphyllum* were not found.

**Conclusion**

Valuable results for the orchid flora of Stranzha Natural Park were obtained during the field studies. Some of them, for the rarest species will help the more precise evaluation of their conservation status. The most numerous species is *Anacamptis papilionacea*, followed by *Serapias vomeracea* and *Anacamptis morio*.

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*Anacamptis papilionacea* is the most abundant orchid in the Natural Park – more than 48 000 plants were counted (with 145 location's points).



The Red List species *Spiranthes spiralis* is known as a species with significant fluctuations. The 2017 was a very successful, both in Bulgaria and Turkey. In Bulgaria, more than 3000 plants were counted in 44 location points.