

Lady's Slipper Orchid (*Cypripedium calceolus*)

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The term biodiversity includes assembly of all plant and animal life forms and ecosystems of which they are interacting with each other and with the Abiotic components of the environment. As the result of dynamic processes occurring in the biotic layer spatial-temporal scale, the biodiversity of a region in turn has a dynamic character [1,2].

Biodiversity is a basic feature of a Biocoenosis structure or ecosystem, ecosystem disturbance/Biocoenosis by various stress factors (natural disasters, agricultural, industrial, mining, tourist activities, etc.), result to a considerable reduction of biodiversity. Which especially in affected areas requires concrete measures of protection and conservation [3,4]. Conservation of biodiversity must be addressed as a new multidisciplinary field of research, developed in response to crises facing world today living [5,6].

In Romania there has been identified in the Iron Gates Natural Park [Parcul Natural Porțile de Fier] (21°21'-22° 36' eastern longitude, 44°51'-44°28'30" northern latitude).

Cypripedium is a genus of 47 species by orchid family (Orchidaceae) and sole genus of sub tribe Cypripediinae. List of species of orchids in south-western Park encompasses a few species of which six taxons are endangered, eight very rare and five taxons are rare (Figure 1).

Romanian name: "Papucul Doamnei" or "Babornic". Other names: Lady's Slippers, moccasin flowers, camel's foot, squirrel foot, steeple cap, Venus' shoes and whippoorwill shoes. *Cypripedium calceolus* was spread to widespread from Asia to Europe and the Pacific Ocean. However, plant in Europe has become increasingly rare and in some places has completely disappeared. For this reason, in many countries, currently is considered a Protected Plant. In Romania, lady slipper is a protected plant yet from 1938. There are organizations that carried the propagating projects "in vitro" for repopulation of the areas where this plant had been destroyed. *Cypripedium calceolus* is a flower of great beauty. "When you see her for the first time, you stop in front of her as in front of an famous painting, wanted to see it really happen. Suddenly the not you realize: is a gem of sapphires, rubies and diamonds, as it looks when the drops of dew corolla stops them or a rare butterfly, or any the hummingbird wandered our lands?" This is the description that made

a Romanian scientist "Ion Simionescu" the sensitive orchid known as lady slipper. Under the warm sun of spring, after the snow has melted, elegant orchid rises from the earth.

Cypripedium calceolus is an annual plant the rising spring. The plant grows until it reaches a maximum height of 20-30 cm. Orchid blooms from July to September. Flower usually occurs towards the end of spring and early summer. After flowering, the plants go into hibernation process. Lady slipper is considered one of the most charming plants but is rarely seen in gardens. Flower is good to be relocated because of the risk of destroying it.

Therefore, it is recommended to be left to grow undisturbed in the place where he grew up. The plant prefers to be fully or partially exposed to the sun, but resist something shady areas. It is good to enjoy the sun flower cooler hours of the day, but to have some shelter.

The plant can be grown directly in the garden, being resistant to temperatures outside. The flower grows especially in areas with calcareous soils, slightly acidic in sunny regions or near beech forests. The flower grows both in the lowlands close to the sea, and in the highland regions. The plant was found in areas neutral soil pH, and acid. For maintenance orchid needs a soil with moisture content for wet environment. Growth occurs slowly.

The stem grows 4-5 leaved, with prominent veins. On top of it, a single flower, incomparable delicacy. Sounds like with a slipper velvet, perceived in for a princess from fairy tales. Plants form a small group of green leaves. Strain gate on top the flower an intense yellow. The lower lip of the flower is a yellow balcony, sprinkled with dots and dashes inside ruby. Inside of is hidden sweet nectar, much sought after by insects and which pollination is possible. On hogwash is surrounded by four petals.

This species of plants grow in the shadow beech forest or sunniest places and calcareous. *Cypripedium calceolus* contents Phenanthrene quinones; volatile oil and tannins. Active compounds are not water soluble [7,8] (Figure 2).

Because of her beauty, was collected without mercy. The number of plants has diminished, disappearing in many regions of the country. Biodiversity conservation has three objectives:

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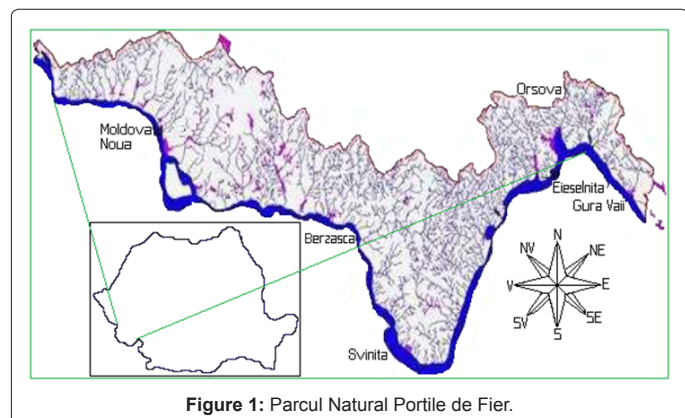


Figure 1: Parcul Natural Portile de Fier.



Figure 2: *Cypripedium calceolus*.

- Investigate and describe the diversity of the living world,
- Understanding the effects of human activities on species,
- Communities and ecosystems and Development of interdisciplinary methodologies to protect and restore biological diversity.

Biodiversity conservation has emerged as scientific field, as none of traditional disciplines is not comprehensive, enough to be able to read and reduce the dangers that threaten living organisms and their living environments [8,9]. As a field of research, biodiversity conservation / biodiversity areas completed applications (agriculture, forestry, protected area management, fisheries etc.) which, although they began to place considerable emphasis on conservation, an approach as an alternative aspect other programs.

It is a monument. Do not break this beautiful flower, when you meet, give others the opportunity to admire the wonders of nature.

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