

Epipactis exilis (Baumann and Baumann) Delforge a new species for Auvergne and France

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Abstract

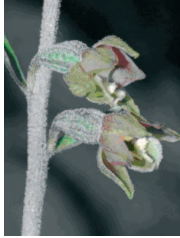
The authors describe and discuss the discovery of an *Epipactis* species new for the french flora.

Epipactis species in Auvergne before 2007

6 species have been described in Auvergne. A 7th species (*Epipactis atrorubens*) has been indicated but not confirmed.



Epipactis helleborine



Epipactis macropetala



Epipactis ovulata



Epipactis pubescens



Epipactis purpurata



Epipactis rhodanensis



Epipactis atrorubens

2007 discovery in Puy-de-Dôme district

On June 30th 2007, Chantal Riboulet and Jean-Louis Gatién, from SFO-Auvergne, searching for *Corallorrhiza trifida* in Puy-de-Dôme, were exploring ravines in beach groves in borough of Saint-Diéry, in Couze Pavin basin. They observed individual plants still in vegetative state from an *Epipactis* very distinct from *Epipactis helleborine*, which can be observed on the same site. Despite lack of opened flowers, it was obvious that it belonged to a species from *phyllanthus* group, new for Auvergne. Plant was at first identified as *Epipactis fageticola* (Hermosilla) Devillers-Terschuren and Devillers, which can be found from beach groves in south France.

In July, flowering plants were found during new searches by Auvergne orchid group: 200 plants were counted over 6 closely situated locations within a rectangle from 3 X 4 km. Species was finally determined as *Epipactis exilis* (Baumann et Baumann) Delforge, identification confirmed by Alain Cévaudan, French specialist of the botanical group *Epipactis* who visited the site on August 28th.

Discovery in Gard district

At the same time, Alain Cévaudan found 5 locations from the same species in the Cevennes (boroughs from Malons and Elze). A Cévaudan had been observing for several years some plants identified at first as *Epipactis fageticola*, but considered as aberrant. Presence of a larger amount of plants allowed him in July 2007 to identify them as *Epipactis exilis*. Before those simultaneous discoveries in Massif Central, *E. exilis* was unknown in France. Its distribution area included Balkans, Italian Apennin and Sardinia.

Epipactis exilis ecology in Puy-de-Dôme district:

- altitude : 800 to 950 m
- granitic substratum (pH about 5,5)
- Under beach groves, on very thick and little rotten leaves litter, in the talweg of ravines steeply sloping, facing North.
- Close to important moisture (water streams at talweg bottom)



Aire géographique d'*Epipactis exilis*



Epipactis exilis



Epipactis exilis



Sub-section *Phyllanthus*

- Is characterised by :
- rare and small oval and acuminate leaves
 - low hairiness of rachis and ovary
 - green to yellowish (never purple) floral peduncles
 - long and irregular leaves edge serration

Species to be found in France: *E. phyllanthus* (Atlantic coast), *E. fageticola* (south France beach groves), *E. fibrifera* (Rhône valley)

Distinction between Saint-Diéry species and *Epipactis fageticola*

- slender but rigid stem of Saint-Diéry's species
- leaves number generally 3 (3 to 7 for *E. fageticola*)
- leaves shorter than internodes
- red brown hypochile (lighter colour of the hypochile of *fageticola*)
- epichile presenting 2 thick pink green callosities
- never sideways rolled epichile
- preference for acid soils

Questions

Why had this species not been described yet in Puy de Dome district?

- because of recent introduction? (climatic warming)
- more probably because it remained unobserved, not flowering on dry years, growing in poorly accessible ravines, in areas showing little interest for walkers, hunters, and even botanists

What about the future of *Epipactis exilis* in these sites?

- In 2008, all 2007 sites have been seen again, and in addition a new site with 60 plants in the same restricted area
- plants are autogamous and give lot of fructifications
- Species seems not endangered but it may not flower every year.