

grow in holes, cracks, and occasionally between grass in soft tufa at the base of a cliff. They sometimes grow together with the beautiful *Ramonda pyrenaica* and *Saxifraga* species.

Plants found in the Bujaruelo Cañon (1160 m. alt.) are generally somewhat smaller in size (aver. size 120-160 mm. long), and colonies are not as large as those found in the Añisclo Cañon. One colony inhabits a small cave and four plants were found still in flower, while on an earlier visit (late April '95) all colonies here were in full bloom.

On two locations in this canyon hybrids with *P. grandiflora* were found growing in open swampy places with water running through. They grow in very small groups or scattered around on low waterlogged ridges and grassy hummocks together with the tall *Dactylorhiza elata*, whereas *P. longifolia* ssp. *longifolia* inhabits the cliffs alongside. Although the hybrids outnumber *P. grandiflora*, only few were clearly of interspecific cross and many others have been backcrossed mainly with *P. grandiflora*. Some of them were vigorous and look like the latter in the shape of rosette, but with leaves up to 150 mm. long, and 45 mm. wide. The flowers generally are of *P. grandiflora* size with a somewhat paler colour, but lack the dark veining in the throat. Instead they have a light coloured brown-reddish mark in the centre of the throat.

Exploration of the published localities of *P. longifolia* ssp. *longifolia* between Gédre and Gavarnie, and towards the Spanish border in the French Pyrenees (Casper 1966) was without result. Instead, long and narrow-leaved *P. grandiflora* were found amongst normal sized plants on two locations at the base of a steep slope near Gavarnie. No flowers were seen so we could not confirm suspicions that these too were hybrids. Since the only suitable gorge where *P. longifolia* ssp. *longifolia* may, or perhaps did occur, lies between the two villages, there might be a

possibility. A similar case occurs in the Spanish Pyrenees near Torla, *P. longifolia* ssp. *longifolia* was not found anywhere in the vicinity. In two directions from Gavarnie towards the Spanish border, at altitudes of 1400 m. and higher, only *P. grandiflora* had been found (some of them with extreme dark brown-reddish leaves). Due to the absence of suitable gorges at this altitude, which seem to be the only niche in which *P. longifolia* ssp. *longifolia* thrives, I wonder if the latter still exist in the French Pyrenees or indeed ever did.

I hope to hear from any of the I.P.S.G. members who have had the opportunity in finding *P. longifolia* ssp. *longifolia* at or near the mentioned localities in the French Pyrenees.

Literature cited:

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Some Comments On Recently Described New Species from the Iberian Peninsula.

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The main purpose of this article is to correct an error which appeared in an editorial note in IPSG Newsletter No. 8 as well as attempting to clear up some of the current confusion surrounding the taxonomy of some of the Spanish *Pinguicula* mentioned in recent IPSG articles (Refs. 1, 2).

Zamora et al (Ref. 3) published two new species of *Pinguicula* in 1996. The species named *P. mundi* is the plant from the Sierra del Calar del Mundo also referred to as *P. Rio Mundo*. This plant is now widely accepted as a valid new species and appears to be confined to the River Mundo area where it is locally abundant. However the proposed *P. submediterranea* is a more

controversial species with matters further confused by the editorial association of the Hoz de Beteta *Pinguicula* with this Taxon.

The plants considered by Zamora et al to be *P. submediterranea* were originally described by Canigüeral in 1957 as *P. grandiflora* var *deretosensis* from Puertos de Beceite. Unfortunately for Zamora and Co, Schlauer was also reviewing the plants from Pto. Beceite and Pto. Tortosa. Schlauer came to the conclusion that the plants had nothing to do with *P. grandiflora* and instead elevated them to the status of *P. longifolia* ssp. *deretosensis*. Zamoras study included the Pto. Beceite and Tortosa plants together with further populations in Granada (Sierra Tejeda) and Jaen (Sierra de Carzorra and Sierra Segura) not investigated by Schlauer. Neither Schlauer nor Zamora and Co considered the Hoz de Beteta plants in their studies.

Zamora et als *P. submediterranea* is thus controversial and not totally accepted as Schlauers 1994 preceded their 1996 paper. In addition although Zamora et al applied many techniques to compare their proposed new species to the other Iberian *Pinguicula* (*P. grandiflora longifolia* ssp *longifolia*, *nevadensis* and *vallisneriifolia*), the authors did not broaden their study to include other European species particularly *P. longifolia* ssp *caussensis* and *P. l. ssp reichenbachiana*. One potential weakness in the study was the comparison to *P. l. ssp longifolia*, as this species may intergrade with *P. grandiflora*. Thus differences noticed between *P. submediterranea* and *P. longifolia* ssp *longifolia* could be attributable to the influence of *P. grandiflora* in the latter.

Thus the Hoz de Beteta plants were not considered by either Zamora et al or Schlauer. However these plants are similar to Zamora and Co's *P. submediterranea* / Schlauer's *P. l. ssp deretosensis* so the editorial may ultimately have been 'right for the wrong reasons'.

Clearly the publications of the mid 90's have left matters unresolved and perhaps rather than focusing on part of the taxo-

nomic puzzle, at some stage someone will have to take on the task of reviewing the genus across Europe.

References.

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4. Schlauer J. Auf der Suche nach den Fettkrautern (*Pinguicula* L., Lentibulariaceae) der Abruzzan - nebst einigen Anmerkungen zur systematik von *Pinguicula* im Mittelmeerraum. Palmengarten, 1994. Vol 58: p. 60-67.

Back From The Roots

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Although many plants may be propagated by means of root cuttings, *Pinguicula* with their modest and delicate root systems would seem unlikely candidates. However experience with three quite different species has shown that under some circumstances some *Pinguicula* may regenerate from their root stock.

During the winter of '95/'96 amongst others I 'lost' specimens of *P. alpina* and *P. crystallina* ssp. *hirtiflora*. The hibernacula of the *P. alpina* started to rot and rather than removing the whole pot, I removed the infected bud. Due to the perennial root system of this species I needed to sever the diseased hibernacula from the still health roots which remained in the pot. With the *P. crystallina* ssp *hirtiflora* the plant stopped growing and gradually one by one the leaves became infected with botrytis until the growth point also succumbed.