POLYPOMPHOLYX

By Allen Lowrie 6 Glenn Place Duncraig, 6023 Western Australia

Polypompholyx is represented in the plant world by two plants. P. multifida and the smaller plant P. tenella, both which grow sometimes together here in Western Australia. P. tenella is also found in Victoria and South Australia, but P. multifida grows only in Western Australia.

P. multifida is a plant that loves to grow in very wet places and it doesn't seem to favour any particular soil type. I've found it growing in peat, clay, moss, and

P. multifida (I'm not sure of P. tenella) seems to be an annual, growing the following season from seed produced this season. The wet areas these plants grow in are mostly wet all year.

Polypompholyx are not self-pollinating. I do not know what insect pollinates the flower, but in the glasshouse they must be pollinated by hand. The flower parts are very similar to those of Pinguicula; they can be pollinated the same way as the latter.

P. multifida has bladder traps about 4 mm long just under the soil surface, with small green leaves (turning red with age) about 5 cm long pressed flat to the ground, forming a small rosette. The flower spike can be anywhere from 6 to 20 cm tall, terminating in two to six flowers. Polypompholyx flowers come in all shades of pink; some are even bicoloured. Occasionally I have come across plants (Please see POLYPOMPHOLYX, p. 47)

THE CZECH BUTTERWORT PINGUICULA BOHEMICA

By M. Studnička Liberecka 36, 466 01 Jablonec n.N. Czechoslovakia

Pinguicula bohemica Kraj. (syn. P. vulgaris ssp. bohemica) Domin) is a Czechoslovak endemic (Holub, Procházka and Čeřovský, 1979). A Czech professor of botany, now a university professor in Vancouver, described the plant in 1927 (Krajina, 1927). Pinguicula alpina and P. vulgaris, the nearest relative of P. bohemica, also occur in Czechoslovakia.

According to Hadač (1977), P. bohemica originated at the start of the postglacial period through the isolation of a small number of P. vulgaris in the central part of our country. Nine thousand years ago a very dry and warm climate set in in Europe and the remains of glacial flora receded to the mountains. P. vulgaris also receded from the plains to the mountains but a part stayed on a small marshy piece of land near the river Elbe (figure 1). It adapted itself to the warm climate in the plain and the specific soil rich in mineral salts.

At the end of the warm, dry period P. vulgaris spread back again from the mountains to the hills and plains. In some localities it met with the already different P. bohemica. Hybrids are rare, however. In some localities there remained a genetically pure growth of the Czech butterwort.

Pinguicula bohemica is more robust than its sister P. vulgaris and reaches up to a height of 30 cm. The leaves are conspicuously veined. The relatively large (Please see CZECH, p. 40, 44)



Polypompholyx multifida in habitat.

POLYPOMPHOLYX

Photos by Allen Lowrie



Close up of cluster of flowers.



Plate 1. The flower of Pinguicula bohemica.



Plate 2. *P. bohemica* in habitat in northern Czechoslovakia. Photos by author.



White form of Polypompholyx multifida. Photo by A. Lowrie.

CZECH

(Continued from p. 44)

capsule. The capsule is remarkably short, almost spherical or slightly pear-shaped.

Very few botanists have had the opportunity to study a good specimen of this plant and so P. bohemica is practically unknown. Ernst, monographer of the genus Pinguicula, gives the name of P. bohemica without comment (Ernst, 1961). Casper, monographer of the European butterworts, even doubts the existence of P. bohemica as a species and considers it just a form of P. vulgaris (Casper, 1962). Hadač (1977) criticizes this view as unfounded. The latest opinions are that P. bohemica is an independent taxon, quite different from the typical P. vulgaris and other European species. The differences between P. bohemica and all other European butterworts are given in detail by Krajina in the quoted original description of the specimen.

Pinguicula bohemica was found in at least 10 localities 50 years ago. Farming, unfortunately, in the fertile country here is a grave threat to this endemic, most of all through changes in the water system and through the use of nitrates and phosphates to enrich the soil. Plant life is changed by this and the butterwort is subjected to interspecific competition. Today we know of only one locality where a few dozen Czech butterwort plants grow, and this unfortunately a protected nature reservation.

The butterwort grows here on a small marshy field measuring 300 by 200 me-

POLYPOMPHOLYX

(Continued from p. 38)

in the field that are taller and have larger blooms than normal, but this is probably due to soil conditions. *P. tenella* grows to only 5 cm at best.

On rare occasions I have found pure white forms of *P. multifida*. As yet I have not managed to collect seed of this form.

Polypompholyx are truly worth growing — not only for their CP appeal but also for their fantastic long lasting flowers.

ters. At the end of the glacial period there was a large shallow lake here which gradually filled up with marshy soil. There were many such swamps in this part of the country. The Czech butterwort grows here together with many other rare plants such as the orchids Dactylorhiza maculata, D. majalis, Epipactis palustris, Liparis loeselii, Platanthera bifolia, the creeping willow Salix repens, interesting and often endemic sedges Carex spp., Tofieldia calyculata, Parnassia palustris and Menyanthes trifoliata. At places with the most acid soil rain reaction there are islands of Sphagnum palustre and rare occurrences of Drosera rotundifolia and Utricularia minor f. terestris.

Pinguicula bohemica will probably soon become extinct in its natural surroundings, and all that will remain is a few documents in the herbariums of Charles University and the National Museum in Prague. A few thriving plants grow in the Botanical Gardens at the town of Liberec in Czechoslovakia. This "genetic bank" is a final attempt to preserve this beautiful and also scientifically interesting carnivorous plant.

References

Casper, S. J. (1962). Revision der Gattung *Pinguicula* in Eurasien. Feddes Report. Beih. 66:1-148.

Ernst, F. (1961). Revision der Gattung *Pinguicula*. Bot. Jahrb. 80:154-194.

Hadač, E. (1977). Notes on endemic plants of the Czech Socialist Republic. Reports of Czechoslovakia Botanical Society 12/1:1-15.

Holub, J., Procházka, F. and Čeřovský, J. (1979). List of extinct, endemic and threatened plants of the flora of the Czech Socialist Republic (first draft). Preslia 51: 213-237.

Krajina, V. (1927). *Pinguicula bohemica*, species nova a sectione Pionphyllum DC. Memoires de la Sociétié Royale des Sciences de Bohême 1926/15:1-13.