

***Pinguicula* ‘Elizabeth’, A New Cultivar**

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In the September 2023 (Volume 14, Number 2) edition of *Carniflora Australis*, I informally described a form of *Pinguicula gigantea* with mostly white flowers as *Pinguicula gigantea* “Pale Flower”. This form is commonly sold in Australia and labelled as a white flowered form of *P. gigantea*. This plant features semi-erect obovate-elliptical,



Figure 1. Rosette of *Pinguicula* ‘Elizabeth’



Figure 2. Close-up of a leaf of *Pinguicula* ‘Elizabeth’ to show its form and how it likes fungus gnats.

slightly revolute yellow-green leaves to 12 cm long and 4 cm wide with a rounded apex. (**Figures 1 & 2**) The pale violet flowers feature two small purple blotches at the base of each corolla lobe near the opening to the throat (**Figure 3**). I didn't detail the spur on this plant which is 7 mm long and 1.5 mm wide (**Figure 4**). The origin of this



Figure 3. Closeup of *Pinguicula* 'Elizabeth' flower to show the purple blotches.

plant in Australia is unknown.

This form is in contrast to *Pinguicula gigantea* var. *alba* which produces rosettes of yellow-green leaves up to 25 cm in diameter. The flowers have pure white corollas with a green throat (**Figure 5**). The spur on this form is typical for the species which is short and rounded, to 8 mm long, and held mostly perpendicular to the tube.

Pinguicula gigantea was formally described in 1996 by Hans Luhrs. *Pinguicula gigantea* is a

Mexican species found in the state of Oaxaca. Plants are perennial and homophyllous that grow on high limestone hills of Cerro Rabo'n, above the valley of the Rio Santo Domingo at elevations of 600-1000 m. This species' climate may be described as tropical rain forest with a drier winter season and high rainfall in summer.

Pinguicula gigantea is closely related to *Pinguicula agnata*, which was formally described in 1963 by Siegfried Jost Casper. *Pinguicula agnata* is a Mexican species found in the States of Hidalgo, Guanajuato and Quere'taro. Plants are



Figure 4. Side shot of *Pinguicula* 'Elizabeth' to show the short spur of this cultivar.



Figure 5. Flower of *Pinguicula gigantea* var. *alba* to show the difference in character, colour and morphology.

perennial and heterophyllus that grow on limestone in steep valleys at elevations of 350-2000 m in tropical deciduous forest or submontane matorral shrub-land. This species climate may be described as semi-arid steppe or hot-summer Mediterranean. Plants survive a cold winter dry periods by living on the shaded side of limestone cliffs in drainage channels of limestone fragments and leaf litter. The survival of these plants is aided by the production of large fleshy winter leaves, which are similar in size to the summer leaves but lack the ability to catch insects.

After further consideration and

comparison of *Pinguicula gigantea* “Pale Flower” / “White Flower”, I believe it is a hybrid of *Pinguicula agnata* and *P. gigantea* var. *alba*, with many morphological characteristics of both parents evident, detailed in a table. (**Table 1**) Obvious differences in characteristics are the leaf shape, leaf apex and cross-sectional shape, petal colour and spur size. The fact that *P. gigantea* “Pale Flower” is heterophyllus and features purple blotches at the base of the corolla lobes strongly suggests *P. agnata* (**Figure 6**) is a parent and likely the seed parent. The exact genetic makeup of this plant is impossible to determine without expensive DNA analysis and therefore I cannot be certain on its



Figure 6. Flower of *Pinguicula agnata* to show the differences and similarities to *Pinguicula* ‘Elizabeth’.

	<i>Pinguicula agnata</i>	<i>Pinguicula gigantea</i> var. <i>alba</i>	<i>Pinguicula</i> 'Elizabeth'
Leaf	Heterophyllus	Homophyllus	Heterophyllus
Leaf length (Summer)	35 - 80 mm	60-145 mm	70-100 mm
Leaf width (Summer)	15-30 mm	40-70 mm	30-50 mm
Leaf colour	pale green	pale yellow-ish green	pale yellow-ish green
Leaf shape (Summer)	spathulate, obovate-oblong	sub-erect, obovate or oblong-obovate	semi-erect, spathulate, obovate-elliptical
Leaf apex shape	obtuse / rounded	rounded/obtuse	obtuse / rounded
Leaf cross-section	shallowly revolute	shallowly keeled	shallowly revolute
Rosette diameter (Summer)	15-20 cm	20-30 cm	15-20 cm
Flower diameter	20-34 mm	28-33 mm	26-33 mm
Corolla lobe length	6-15 mm	10-16 mm	10-16 mm
Corolla lobe width	8-13 mm	5-9 mm	7-10 mm
Petal colour	white or purplish-white with edges pencilled purple-violet, suffusing to a paler shade over about one third the length of the lobes. At the base of each lobe, the corolla is, in most flowers, marked with narrow, dark purple marks.	the corolla lobes are pure white with a yellow-green corolla tube.	the corolla is very pale purple with purple/violet marks at the base of each lobe.
Throat shape	dorsoventrally compressed.	subcylindrical	dorsoventrally compressed.
Throat colour	greenish-yellow.	greenish-yellow.	greenish-yellow.
Throat hairs	sparsely clothed with stipitate glandular hairs	sparsely clothed with stipitate glandular hairs	sparsely clothed with stipitate glandular hairs
Spur shape	subcylindrical or ellipsoid	subcylindrical	subcylindrical or ellipsoid
Spur length	3-6 mm	5-8 mm	6-7 mm

Table 1. A table that details the differences between *Pinguicula angata*, *Pinguicula gigantea* 'alba' and the cultivar, *Pinguicula* 'Elizabeth'

parentage. To identify this plant, and differentiate it from the true white flowered form of *Pinguicula gigantea* (*P. gigantea* var. *alba*), it must be informally or formally described as a cultivar. I have decided to formally name this plant as *Pinguicula* 'Elizabeth', after my mother, who was a large influence and encouragement to me to pursue both horticulture as an interest and my career. To

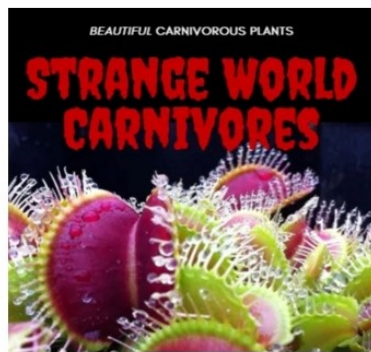
preserve the unique characteristics of this plant, it must be propagated vegetatively.

References:

Pinguicula gigantea (2023), *Carniflora Australis*, pages 46-52.

Lampard, S. Gluch, O. Robinson, A. Fleischmann, A. Temple, P. McPherson, S. Rocca, A. Partrat, E. Legendre, L. (2016), *Pinguicula* of Latin America, Redfern Natural History Productions, England.

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