

Yucca news

Fritz Hochstätter

A new series is circumscribed for two yuccas in section *Yucca*, following the discovery that *Yucca queretaroensis* has fleshy fruits.

It can now be revealed exclusively that the rare *Yucca queretaroensis* has fleshy fruits, not unlike those of *Yucca baccata*. The plant photographed in Fig. 1 was found in the wild with fruits in June this year. Considered by many to be the most beautiful yucca of all, *Yucca queretaroensis* was discovered only in recent times and was described in the Mexican journal in 1989. Its type locality in the Moctezuma basin along the Rio Extorax was then its only known locality, but it has also very recently been found to the north-east of Zimapan in Hidalgo, where it grows at a similar altitude of 1000–1300m.

The species is notable in having very narrow leaves, only about 2mm thick, and, with its sister species *Yucca linearifolia*, is unique in *Yucca* in being not flat but quadrangular in cross-section (Fig. 2), and therefore the leaves do not bend readily without cracking. These leaves are fairly uniform in length, up to around 60cm long, thus forming an almost perfect ball of leaves that often sways and ripples in the wind. It is also unusual in *Yucca* in being able to sucker slowly below ground to form groups. Large groups of up to 50 such stems can be found in nature.

Although appearing superficially similar to the narrow-leaved yuccas of the series *Rupicola*, eg *Y. rostrata* and *Y. thompsoniana*, *Yucca queretaroensis* actually belongs to the section *Yucca*, distinguished from other sections by its fleshy fruits. However, this species and the closely-related *Yucca linearifolia* (Fig. 3) are so distinct from other plants in section *Yucca* as to merit a separate series of their own.

Yucca section *Yucca* series *Gracilifoliae* Hochstätter ser. nov.

Type: *Yucca queretaroensis* Piña Lujan

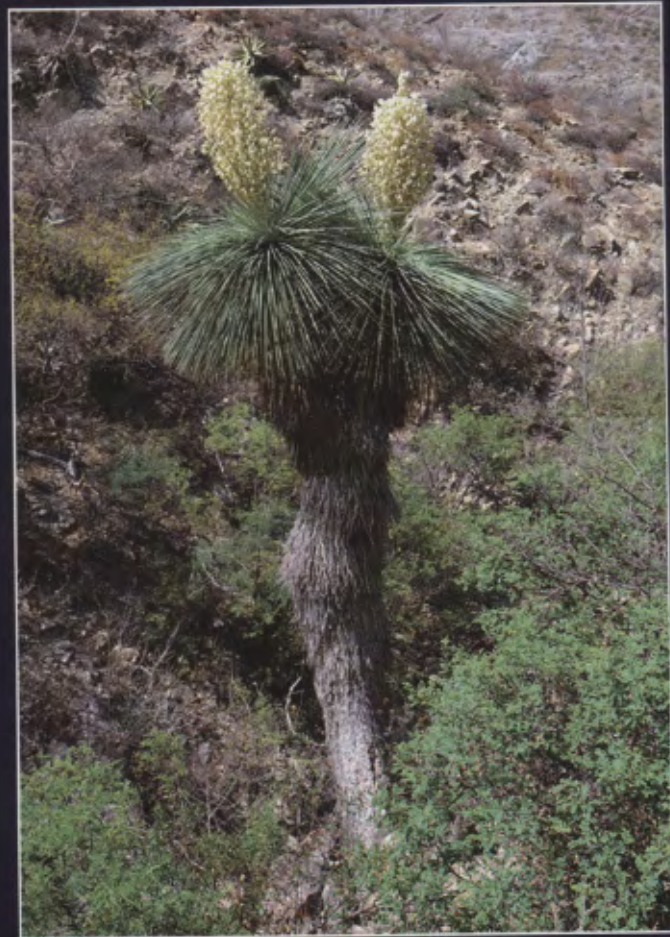
Radix rhizomatosa. Folium tenue flexibileque, in sectione transversali quadrilaterum, gracilissimum. Fructus carnosus, in maturiti pericarpio aspero viridibrunneo et non viscoso. Semen variabile, rotundatum, 6mm longum et latum, 1–2mm crassum, cum testa striatissima et cellulae convexis.



Fig. 1 *Yucca queretaroensis* (Querétaro, 1300m) (Photo: Ignacio Piña Lujan)



Fig. 2 *Yucca queretaroensis*.
Upper right: fh335 (Photo: Fritz Hochstätter);
left: fh670 (Photos: Fritz Hochstätter);
lower right: fh670 (Photo: Michael Bechtold)



(Fruit = 10 cm long)

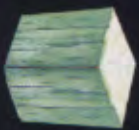


(Leaf = 40 cm long)

Yucca queretaroensis Piña Lujan



Fig. 3 *Yucca linearifolia*. Upper left and leaves fh672 (Photo: Fritz Hochstätter). All other images by Michael Bechtold and his daughter Luisa



(Leaf = 30 cm long)

Yucca linearifolia Clary

Root system rhizomatous. **Leaf** thin and flexible, 4-sided in transverse section, very thin. **Fruit** fleshy, in age with a rough, green-brown surface, not sticky. **Seed** variable, rotund, 6mm long and wide, 1–2mm thick, with a strongly striated surface and convex testa cells.

Included species:

Yucca linearifolia Clary

Yucca queretaroensis Piña Lujan

A potentially informative study by Pellmyr et al (2007), based on nuclear DNA, is frustratingly incomplete through the exclusion of several taxa, including the all-important type species of the genus, *Yucca aloifolia*. Had all of the recognised taxa been included in their study, its results could have contributed greatly to the understanding of taxonomic relationships within the genus.

Cultivation

Yucca linearifolia is hardy enough for outdoor cultivation, as long as it receives some protection. However, *Yucca queretaroensis* is more tender, and is best grown in pots under glass, being only hardy to around -5°C. They are available in Europe as plants or seeds, although not easy to find and larger plants are

invariably sold at very high prices, in common with other yuccas that share the same very slow growth rate.

There is some evidence that *Yucca queretaroensis* has been in cultivation from the early 1970s, long before it was described, but misidentified as *Yucca elata*.

LITERATURE CITED:

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- Pellmyr, O, Segraves, K A, Althoff, D M, Balcázar-Lara, M, Leebens-Mack, J (2007) The phylogeny of yuccas. *Molecular Phylogenetics and Evolution* **43**: 493-501.
- Piña-Lujan, I (1989) Una nueva especie del genero *Yucca* (Agavaceae). *Cact. Suc. Mex.* **35**: 51-56.
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