

The smaller opuntias

Michael Partridge

The co-author of the recently published book entitled *Small Opuntias* gives a short summary on the desirability of growing some of these fascinating plants. All photographs by the author.

Introduction

Looking back through a few recent editions of *CactusWorld* reveals that the largest subfamily of plants within the Cactaceae is also the most under-represented. For a large number of plants within the Opuntioideae there are very good reasons why this is the case, as it contains numerous quick-growing, unruly plants often fiercely armoured with barbed spines and showing a great reluctance to flower at any reasonable size, or indeed at all in the UK's relatively sun-poor climate. Then there are the glochids which make handling the plants a tricky and potentially very irritating experience. However, in a subfamily as extensive as the Opuntioideae which ranges from Canada in the north to the extremes of Argentina and Chile in the south, there is a very wide variety of genera and species, some of which are true gems, and are deserving of space even in the smallest collections. This article introduces some of these smaller, well-behaved members of this subfamily which the author believes should be far better known and grown.

Background

I was very fortunate as a child to find myself with two uncles who grew and loved cacti and succulents. During those seemingly endless Sunday afternoon visits to relatives which characterised my childhood I could, at two locations at least, sneak off to the greenhouses and gaze in wonder at the serried rows of plants contained there. There seem to be no family photos of these collections (this being the 1960s and early 1970s, when cameras were scarcer and photography was a far more expensive hobby than it is now) so they live on only in the memory of those who saw them. When I began to express more than a passing interest and began to ask the kind of questions which indicated that a small part of the object in question would be much appreciated, I was eventually rewarded with a selection of cuttings and offsets. Amongst the *Mammillaria*, *Rebutia*, *Pachyphytum*, etc. were a few pieces of *Opuntia*. I am not sure what the modern 'Health and Safety' culture would make of giving a 10-year-old pieces of *O. tunicata*, *O. fragilis*, *O. microdasys* and a large pad of *O. engelmannii*, but

things were different then and after all I did become very attached to them (in more ways than one).

They all grew and thrived alongside the tomatoes in the family greenhouse, but of course the opuntias never flowered in the small pots they inhabited and were gradually discarded apart from the *O. tunicata* and *O. engelmannii* which I have to this day. Fast forward 25 years and, having finally moved to a house where a greenhouse was possible, I reclaimed the surviving cacti from my parents and began collecting anew.



Fig. 1 *Tephrocactus nigrispinus*



Fig. 2 (top) *Tunilla* sp.

Fig. 3 (middle) *Tunilla soehrensii* 'Fuchs'

Fig. 4 (bottom) *Cumulopuntia iturbicola*

Overview of genera and species

It would be fair to say that far more of the 'greenhouse friendly' smaller opuntias originate in South America than in North America and it is from the former that the majority of the plants illustrated in this article come. They are largely drawn from the following genera: *Cumulopuntia*, *Maihueiopsis*, *Pterocactus*, *Tephrocactus* and *Tunilla*.

They represent a few of my personal favourites, selected mostly because they are relatively easy to obtain, flower at a small size and, with a couple of exceptions, form relatively neat, compact plants.



Tephrocactus nigrispinus (Fig. 1)

Although this species is somewhat fragile and prone to converting itself into a large number of cuttings at the slightest touch, during its winter rest it produces a stunning display of vivid red flowers most years.

Tunilla sp. (Fig. 2)

This is a plant which arrived without a label. *Tunilla* is the most confusing genus within the plants covered and I have collected around 30 clones of these plants and would be hard-pressed to assign definitive names to over half of them. That said they are for the most part charming plants with neat little pads looking like miniature versions of their North American cousins and generally flower exceptionally freely – some twice a year.



Tunilla soehrensii 'Fuchs' (Fig. 3)

Plants of *T. soehrensii* are the most extremely spined within the genus, and the so-called 'Fuchs' cultivar is probably the best example. It is less generous with its flowers than others but given the struggle it often has to open them amongst the 3–4in (7.5–10cm) long spines it can be forgiven that.

Cumulopuntia iturbicola (Fig. 4)

A fairly recently introduced species which has proved to be a neat grower and generous with its attractive orange flowers.

Fig. 5 (top) *Cumulopuntia rossiana*

Fig. 6 (middle) *Maihueniopsis minuta*

Fig. 7 (bottom) *Maihueniopsis clavarioides*

Cumulopuntia rossiana

(Fig. 5)

This is a very well-behaved plant in cultivation producing tight mounds of small heads, slightly random spines and very attractive flowers in a range of red and orange.

Maihueniopsis minuta

(Fig. 6)

This is another plant which makes small mounds, and rewards the grower with a large number of its mostly yellow flowers. There are a few different variations, with differing segment size and spine length which can be obtained, all of which are worth growing.

Maihueniopsis clavarioides (Fig. 7)

Having spent a while in the short-lived genus *Puna*, this intriguing plant has now been placed in *Maihueniopsis*. Often encountered in cultivation as a grafted plant where it can make a show-stopping specimen. In habitat it is a tuberous plant forming single heads or very small clumps. On its own roots it often remains relatively small and is slow growing.

Tephrocactus verschaffeltii (Fig. 8)

Until recently an *Austrocylindropuntia*, this plant has now become a *Tephrocactus*, where to my eye it sits a little uneasily with its companions. It is easy to cultivate aside from its tendency to fall apart in winter, a trait which it does share with most tephrocacti. There are several different flower colours available ranging from deep red through orange to almost yellow. It is probably not grown for its overall appearance as it tends to be a slightly untidy plant both in habitat and in cultivation.

Maihueniopsis darwinii (Fig. 9)

It is easy to forgive *M. darwinii* its untidy habit when it produces a flower like this on a plant comprising just four segments. Ultimately this is a large sprawling plant but it takes a while to outgrow a small greenhouse and in the meantime earns its keep by being relatively easy to flower. Add to this the fact that it is amongst the most southerly-growing of all





Fig. 8 (top) *Tephrocactus verschaaffeltii*

Fig. 9 (middle) *Maihueniopsis darwinii*

Fig. 10 (bottom) *Pterocactus araucanus*

cacti, and is thus as tough as old boots, and you have a real winner for the cold greenhouse.

Pterocactus araucanus

(Fig. 10)

An old specimen from Bill Weightman's collection. Pterocacti are some of the most attractive plants of the group being generally brown-bodied with short dark spines and brown, cream, orange, yellow or dark red flowers. They form large tap roots and like most pterocacti they can be slow to establish from cuttings, taking time to form the necessary growth underground before they really get going. Once they reach flowering size they are most rewarding.

Cumulopuntia leucophaea

(Fig. 11)

Available in numerous forms, these plants originate from Chile and are well worth including even in a small collection as they flower when only a few segments high.

***Opuntia polyacantha* var.**

arenaria (Fig. 12)

Sometimes seen as *O. arenaria*, the more correctly named *O. polyacantha* var. *arenaria* is a North American species which is a small-padded, true *Opuntia*. It grows fairly quickly and flowers at a reasonable size. There are other variations of *O. polyacantha* which are worth seeking out as they are hardy and often very well-spined (var. *erinacea* being a good example).

Tunilla soehrensii (Fig. 13)

The photo shows a plant in habitat, and proves that such plants are not always to be emulated. Seen in the Quebrada del Toro in Salta, Argentina this plant had died out in patches and exhibited



Fig. 11 (top) *Cumulopuntia leucophaea*

Fig. 12 (middle) *Opuntia polyacantha* var. *arenaria*

Fig. 13 (bottom) *Tunilla soehrensii*

life only at the extreme edges. This also happens with plants in cultivation after a few years (but not generally until they have filled 9in (23cm) pans or more), and then it is time to select the best parts and start again.

Tunilla corrugata (Fig. 14)

Probably everyone's favourite *Tunilla*. It is often found labelled as *T. hintonii* but is now generally considered to be a form of *T. corrugata*. Covered in beautiful long glochids it is best not approached too closely. It is shy to flower compared to some species, though it produces two or three brownish-yellow flowers each year once it has reached around 5in (12.5cm) across. I find it has a tendency to die out in the centre when it gets much beyond 8in (20cm) across and then requires restarting.

Pterocactus fischeri (Fig. 15)

This is a very free-flowering plant obtained from Michael Kiessling in Germany. The creamy-brown flowers are set off well by the brown stems and white spines. This clone flowers well each year and is one of my favourites.

Cultivation

Most of the plants illustrated here are grown in an unheated greenhouse, and are subject to a fairly harsh regime, which I believe helps to promote flowering. In a few instances this does lead to plants which bear a closer resemblance to plants in habitat than those seen on the show bench, which in the case of *Tunilla* at least, is not always a good thing (Fig. 13).

The greenhouse I grow them in is located on an open allotment site receiving the maximum sun the UK can offer. Being mainly plants of mid to high altitude they benefit greatly from all the sun they can obtain. I have also begun to house the larger plants in a polytunnel on the same site, covering this with high UV transmitting polythene which I hope will promote even better growth.

For containers I use a mixture of plastic and clay pots (and for some larger *Tunilla* I have resorted to seed





Fig. 14 (top) *Tunilla corrugata*

Fig. 15 (bottom) *Pterocactus fischeri*

the risk of hard frost has passed. I stop watering completely in early September so that the plants are very dry before the first proper frosts appear. They tend to be fed two or three times a year with a low nitrogen feed, always after flowering has finished

Conclusion

I hope this article persuades more people that this group of plants is well worth some valuable bench space. They are in the main undemanding plants and whilst they have undoubtedly become more popular in recent years, thanks in part to the work of the Tephrocactus Study Group who have championed them both via their journal and more recently via their Facebook page, there is plenty of scope for them to become more widespread in collections. It took me close to ten years to persuade John Pilbeam that a book on the smaller opuntias would be a good idea and with regular nagging and emails of the plants in flower he eventually came round to the idea. I believe he was quite surprised at how many people grew them.

trays) with the latter being used mainly for *Pterocactus* and others with tuberous roots. Coupled with a very free-draining potting mix (tending towards 75–80% mineral content in the form of grit, gravel, pumice and the moler clay type of cat litter) and sparse use of water with limited feeding, the plants respond well and produce good flowers each year. I find the mat-forming plants look best in shallow round pans although this is not the most economical use of bench space.

In an unheated greenhouse in the southern part of the UK watering commences in mid April by which time

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In future articles I will cover each genus in a little more detail and hopefully win over a few more people along the way.

Editor's note: A full review of the book Small Opuntias can be found in the December 2016 issue of CactusWorld, 34(4): 281, which also includes details on how to order a copy.

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