



Beschorneria yuccoides, as with most species in the genus, makes an excellent specimen plant

An overview of *Beschorneria*

Marianne Majerus / AMCI

Dramatic and exotic-looking in foliage and flower, there are a few more species than the usual two seen in gardens, as PAUL SPRACKLIN discovers.

DURING IDLE MOMENTS I sometimes wonder what it would be like travel back in time to accompany the early plant hunters, just to see the look of wonder on their faces when encountering new and interesting plants. I can not imagine a better candidate than *Beschorneria yuccoides*. It is a plant with which I am wholly familiar yet those bizarre inflorescences, seemingly lifted from

the pages of a science fiction novel, drop my jaw every time. This, almost literally, fantastic plant is both hardy and easily cultivated and deserves, along with many of its kin, to be more widely grown and appreciated.

Relationships

Beschorneria is a genus of succulent plants belonging to subfamily *Agavoideae* of the family *Asparagaceae*, making them cousins of such plants



The slightly menacing, emerging inflorescence of *Beschorneria yuccoides*

All photographs by Paul Spradlin unless stated otherwise

as *Agave* and *Yucca*. The name was given in 1850 to honour a German botanist, Friedrich Wilhelm Christian Beschorner. The genus is generally agreed to contain eight species, all of which are native to Mexico although one, *B. albiflora*, extends south as far as Honduras.

With one exception they are all trunkless plants, forming a rosette of succulent, sword-shaped leaves. From the centre of the rosette, after just a few years, a huge, unfeasibly flamboyant, branched flower spike emerges, from which dangle scores of tubular, bicoloured flowers. The rosette that has flowered dies but the underground part of the plant throws up offsets, resulting in a clump of multiple rosettes.

The exception is *B. albiflora*, which

grows a trunk and continues on this single trunk after flowering, often additionally branching from the base of the plant.

In cultivation the genus is best known by the species *B. yuccoides* which has been in European gardens for 150 years under an array of synonyms. Together with *B. septentrionalis* it forms what I perceive as one of the two main groups, based on leaf width and habit of flower spike, into which the different species naturally fall. In this article I will discuss those two groups first, followed by the species that do not seem to fit into either group.

Broad-leaved species

This group has long, relatively broad leaves and a flower spike that is more leaning than erect.

Beschorneria yuccoides

This species typically has a sparse, open rosette of greyish green, sword-shaped leaves that are 85–90cm long. These are widest, 8–10cm, around the upper third and tapering to a soft tip. The lower surface, and sometimes the upper surface, is rough to the touch, with both surfaces generally covered to a varying degree with a glaucous patina. The edges are finely serrated, evident when running a finger along the margin, but not sharp enough to draw blood or even hurt.

This species has recently been split into two subspecies, *B. yuccoides* subsp. *yuccoides* (syns. *B. bracteata*, *B. hidalgorupicola*, *B. viridiflora*) and *B. yuccoides* subsp. *dekosteriana* (syns. *B. argyrophylla*, *B. dekosteriana*). This is based on geographical separation and morphological differences related mainly to the colour of the flowers and bracts. However, in practice the situation is less than clear, with some authorities not being able to apply the distinctions



The tubular flowers of *Beschorneria yuccoides* often exceed 6cm in length

in the wild consistently. To complicate matters, material I have seen in cultivation is also inconsistent. For the purposes of this article (and my sanity!) I will refer to all plants simply as *B. yuccoides*, and I remain to be convinced otherwise.

After a few years a plant will be ready to flower and this is where the fireworks begin. Usually early in spring, the centre of the plant produces stunted leaves clasped around a fattening, slightly reddish bud. This bud extends into a flower stalk, the tip bending into a hockey-stick shape, looking you straight in the eye in a vaguely menacing fashion. The bud then deepens in colour to a strong rhubarb-red with large fleshy bracts of the



Beschorneria yuccoides growing wild in Mexico



The fine serrations on the leaf margin of *Beschorneria yuccoides*

same hue clasping the sides. As the days progress these bracts dry off and, from around a quarter of the way down the stalk to nearly the bottom, side branches start to open up. Attached to these branches, and also directly on the stalk, are short red peduncles each bearing two to four flower buds. At the same time as extending, the main flower stem also starts to droop until, ultimately, it can be almost horizontal. At this point the side branches are fully extended and flowers start opening in succession. Each slightly hairy tubular flower is a paler shade of rhubarb-red, grading to pale pear-green about half way, and flared slightly at the apex to show the anthers. I measured my flowers at 6.4cm long, 1.1cm wide at the shoulder and 1.4cm wide at the apex. At its zenith this whole display is nothing short of spectacular, with literally scores and scores of these bicoloured bells dangling from the red, branched panicle that in my garden reaches up to 3m long and with side branches to 50cm.

The flowers are readily fertilized and soon bloated seed capsules form. Towards the middle of autumn these

dry out, turn brown, and split to reveal six chambers filled with hundreds of flat, shiny, black seeds, often with good viability. If two species are in flower at the same time there is a good chance of cross-fertilization – worth bearing in mind if trying to keep the species pure. Meanwhile, the rosette that has flowered will start to wither and die and dormant buds on the rootstock then start to produce a number of offsets, sometimes alarmingly late in the season! Thus, in time the plant becomes a slowly spreading colony of many rosettes, repeating the flowering and offsetting cycle as it ages. A large clump that produces many inflorescences in the same year really is a sight to see. Occasionally, old rosettes of plants can show a small, above-ground stem, especially where plants have been trimmed of tatty older leaves, but this is not common.

In its native habitat, around central and east Mexico, *B. yuccoides* is found at fairly high altitudes of 2,600–3,400m in the cloud-forest zone of temperate woodland. It generally grows in pockets of organic soil on steep, rocky outcrops in the

light shade of tall tree canopies but also in open, sunnier positions. Rainfall in this environment is surprisingly high; the species is not particularly xeric in its requirements, but drainage seems to be very important.

We can take hints from this to aid its cultivation in the UK. A position in full sun or even light shade is fine, planted in good soil that is well-drained. In the open garden plants are generally hardy to around -10°C. If grown under an evergreen canopy or given overhead winter protection, they can survive temperatures down to -15°C or so.

The attempt to designate subspecies gives a hint that cultivated plants too are variable, perhaps emphasized by different growing conditions. There is an immense clone enjoying the balmy climate at Tremenheere Sculpture Gardens near Penzance, Cornwall, boasting rosettes more than 2m across and flower stalks reaching nearly 4m.

A cultivar ‘Quicksilver’ exists, said to have a heavier glaucous patina on the leaves but to my eyes it does not seem any different to the unnamed

clones I grow. Variegated selections occasionally are named, one being *B. yuccoides* 'Flamingo' which bears inconsistent creamy margins and bands in the leaf. The flower colour of variegated selections of all species is brighter, according to nurseryman and connoisseur of variegation, Bob Brown of Cotswold Garden Flowers, Worcestershire.

Young plants of *B. yuccoides* can be easily confused with young plants of *Furcraea parmentieri*. Typically, the leaf is more linear in *Furcraea* but this is variable. Roughness on both upper and lower sides of the leaves is also said to distinguish *Furcraea* but, again, this is not consistent. According to nurseryman Steve Mules of Lower Keneggy Nurseries, Cornwall, the only sure way is to watch slugs and snails which will quickly rasp unsightly patches from the leaves of

B. yuccoides yet leave *Furcraea* alone. Of course, within a few years the difference is apparent – the *Beschorneria* will flower colourfully and not, in the usual course of events, form a trunk, whereas the *Furcraea* will continue to build a trunk for some years before flowering. Ultimately, *F. parmentieri* is a good deal more tender; a hard frost below -6°C is usually enough to kill it off in the open garden.

Beschorneria septentrionalis

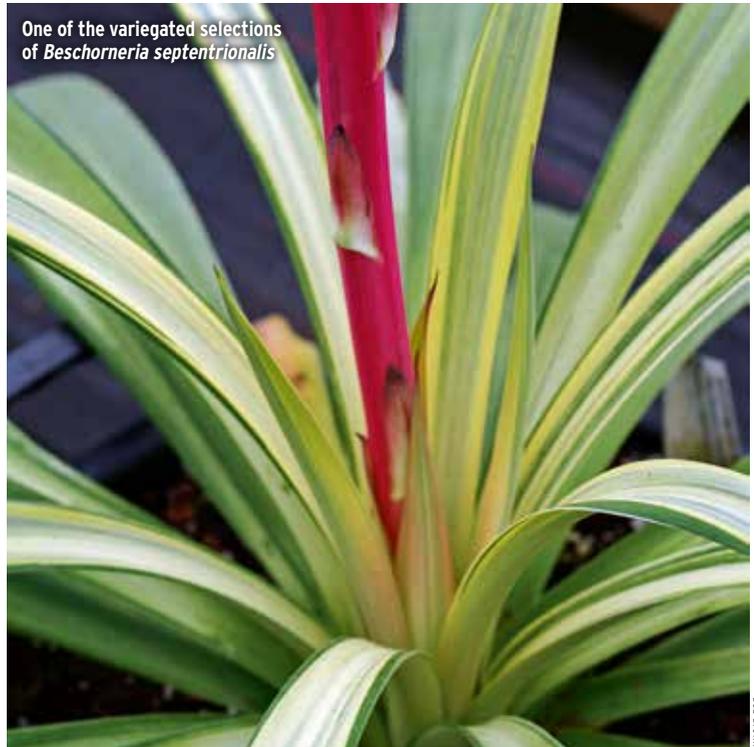
Not as familiar, perhaps, as the previous species, *B. septentrionalis* is a smaller plant than *B. yuccoides*. It has open rosettes of smooth, leathery,



The vivid red flowers of *Beschorneria septentrionalis*



The flower stems of *Beschorneria septentrionalis* are the same colour as the flowers



One of the variegated selections of *Beschorneria septentrionalis*

Bob Brown

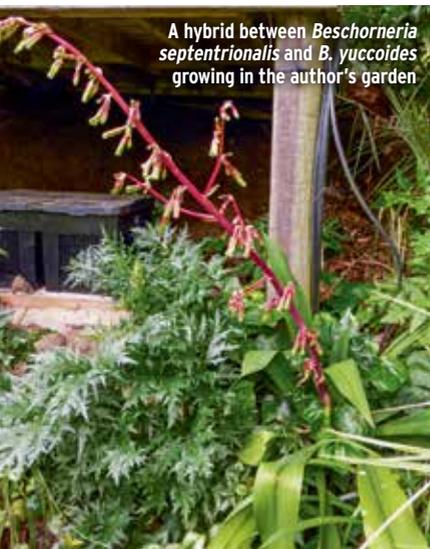


The fine serrations on the leaf margin of *Beschorneria septentrionalis*

shiny, apple-green leaves to 70cm long, finely serrated at the margins, and broad for their length at 9–11cm, and often rippled. Startling, radish-red flower stems emerge straight and continue to grow more or less erect (as opposed to the 'hockey stick' ➤

of *B. yuccoides*) to around 2m or so, branching only towards the lower third with branches reaching 30cm in length. Eventually, the weight of flowers causes it to tilt but never to the same extent as in *B. yuccoides*. The bracts are the same radish-red but much smaller and less persistent than in *B. yuccoides*, withering as the stalk starts to unfurl. The flowers are again tubular but with a closed-in apex, and smooth and bright red with the apices seemingly dipped in kiwi-fruit green. I measured mine at 6.6cm long, 1.3cm at the shoulder and 0.9cm across the apex.

Its native habitat is in northeast Mexico where I have seen it growing on well-drained rock banks in moist woodland, often in quite dense shade. Given this provenance, in theory it should be hardier to cold and more tolerant of wet than *B. yuccoides*, but this does not bear out in practice. Where happy it grows extremely well, and in some gardens has survived down to -12°C, perhaps tolerating even lower temperatures if covered for winter. I have seen two variegated clones with very different types of variegation.



A hybrid between *Beschorneria septentrionalis* and *B. yuccoides* growing in the author's garden

Hybrids

I grow a hybrid between *B. septentrionalis* and *B. yuccoides* that was raised by a friend. It seems to combine many of the best features of each parent and is both compact and colourful. The leaves are greener than those of *B. yuccoides* and bear some light, silvery patina.

It flowered for me for the first time in 2017 and produced a strong, blood-red flower stalk, slightly mottled with green near the middle. The stem reached 1.7m tall, was sparsely branched near the middle of its length and bore tubular flowers that were half blood-red and half apple-green. It also attempted, but did not quite manage, the intimidating 'hockey-stick' thing, as in *B. yuccoides*. The same cross from a different source flowered at RHS Garden Wisley a few years ago and was similar in appearance to mine.

A reverse cross with *B. yuccoides* as the female parent was raised in the US and a selection was given the inglorious name of 'Ding Dong'. I have not yet seen it in cultivation in the UK.

Narrow-leaved species

The next three species seem to form a natural group, all sharing common features such as narrower, shorter, keeled leaves and a more erect flower stem.

Beschorneria tubiflora

This species has narrow, greyish green, almost linear leaves with a pronounced V-shaped cross-section and bearing a silvery patina, growing to around 50cm long by 3cm wide. They are coarse to the touch on both surfaces and with strongly pronounced marginal serration although, again, this is not sharp enough to hurt. The more or less erect flower spike emerges a fairly



Tom Heirt-Dryke

The corolla tube of *Beschorneria tubiflora* is more flared than that of *B. yuccoides* and *B. septentrionalis*



The leaf serrations of *Beschorneria tubiflora* are more pronounced than those of *B. yuccoides* and *B. septentrionalis*



The unbranched flower stem of *Beschorneria rigida*



Close inspection shows the flowers of *Beschorneria rigida* to be hairy



The leaf serrations of *Beschorneria rigida* are fine

dark brownish-red, eventually losing the colour as it extends to 1.2m in height. Side branches are few but retain the colour, as do the bracts and peduncles. The tubular flowers are large for the size of the plant; pale rufous red fading to pear-green, with a strongly flared apex and noticeably hairy.

In the open garden I have found this species to be more tender than the preceding two, sustaining damage at -8°C from which it has taken several years to recover. With overhead protection cold is not such a problem – Tom Hart-Dyke grows it well in his Mexican border at the World Garden in the frost pocket of Lullingstone Castle, Kent, but with a temporary winter shelter.

Beschorneria rigida

I have only grown this species for three years but already it has become a firm favourite. It is small in stature, vigorous, and outstandingly showy in flower. The leaves are deep glossy green, 60cm long by 2.5cm wide, and V-shaped in cross-section at the centre, narrowly tapering to a slender point and with fine marginal serrations.

In its second season after planting it threw up a spectacular, erect, unbranched, flower spike to 2m in a brilliant carmine-red. Strongly coloured carmine and apple-green tubular flowers, 4.8cm long by 0.9cm at the shoulder and 0.9cm at the apex, are large for the size of the plant and, like those of *B. tubiflora*, noticeably hairy. Immediately after flowering several rosette offshoots pushed up and are growing strongly to make a compact clump.

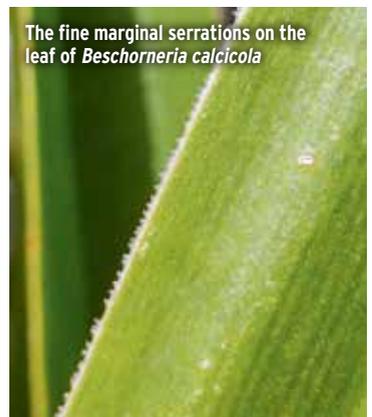
With mild winters for the past three years, hardiness has not been tested with me. However, coming from central Mexico it should prove to be pretty frost-tolerant.



Beschorneria calcicola has an unbranched flower stem, like *B. rigida*



The flowers of *Beschorneria calcicola* are shorter than those of *B. rigida*



The fine marginal serrations on the leaf of *Beschorneria calcicola*



An old specimen of *Beschorneria albiflora* in a public garden in the Azores



The smooth margins of the leaves of *Beschorneria albiflora*



An atypical example of *Beschorneria albiflora* flowering at RHS Garden Wisley



The flowers of *Beschorneria albiflora* are mainly pale green, despite its name

Bob Brown

Beschorneria calcicola

This is another species I have only grown for three years but, like *B. rigida*, it is trying hard to impress. In many ways it resembles an even more compact version of *B. rigida* with mid-green, glossy leaves that are 40cm long by 2.2cm wide, and deeply keeled with a V-shaped cross-section and fine marginal serrations.

It also flowered for me last year and had a similarly unbranched, erect flower spike of a strong

carmine-pink. Unfortunately, snails ate through the emerging stem but I would estimate it was heading towards 1.5m high. It has carmine-pink bracts and peduncles, and tubular, very slightly hairy flowers that are smaller than the other species at 4cm long, 1cm at the shoulder and 0.7cm at the apex. These are carmine-pink tipped with pear-green and also attractively mottled.

As with *B. rigida*, hardiness has not been tested with me, but as

B. calcicola comes from south Mexico and likely to be more tender than the others, I take the precaution of growing mine in a border that receives a cover for winter.

Atypical or poorly known species

The three remaining species are somewhat enigmatic.

***Beschorneria albiflora* (syn. *B. chiapensis*)**

Very much the odd one out in the genus, this is the only truly arborescent *Beschorneria*. It is said to form trunks reaching an astonishing 8m, with secondary stems arising at the base. It typically has glossy green, leathery, 7cm-wide leaves to 70cm long with – unusually – smooth margins. Sometimes the leaves display a glaucous patina. The inflorescence is usually an erect, much-branched, rhubarb-red panicle to 2m with long horizontal branches from which dangle flowers that are mainly pale green – not white as implied by the name, but much paler than others in the genus.

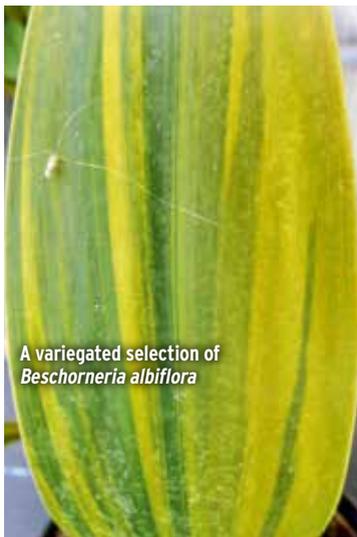
Its range extends from the very south of Mexico down to Honduras, growing in subtropical cloud forest in deep, rich soil and shade. Despite this unpromising provenance, plants are hardy in the UK down to -6°C, which puts it in reach of gardeners in milder locations. I grow a plant – not

yet tested by a hard winter – in a bed at the base of my south house wall that receives overhead cover in winter. I have seen a yellow-variegated selection of this species.

I have recently seen two different arborescent plants that are clearly *Beschorneria* but do not conform to botanical descriptions of *B. albiflora*. Together with the other riddles posed by the genus, it is obvious that more field studies are needed.



A variegated selection of *Beschorneria yuccoides*



A variegated selection of *Beschorneria albiflora*

Beschorneria dubia

This name is accepted in current botanical literature, but it is based on a specimen cultivated in France in 1876 when the genus was poorly understood.

Beschorneria wrightii

This name was published in 1901, based on plants in European collections. It has apparently been recently rediscovered in the wild, but the little material appearing in cultivation does not seem to be correct. What I have seen lacks a supposedly large and colourful inflorescence and small trunk.

Propagation

Propagation is by seed, or division of large clumps for the non-trunk-forming species.

Seed is best kept in a fridge until early spring then sown in trays or modules, covering the seed with 2mm of medium. Germination is usually within a fortnight for good seed, and plants will develop quickly if potted on regularly.



A variegated selection of *Beschorneria septentrionalis*

Dividing plants is again best carried out in spring. Simply slice through the clump and dust the cut surfaces with your preferred fungicide. Either plant the division directly into the new position or pot up, keeping the compost only just moist for the first month or so.

For seed-raising and potting divisions I use a freely draining medium of two parts John Innes No. 3, one part sharp sand and one part Tesco low dust lightweight cat litter.

General observations

Beschorneria make great garden plants. They have handsome rosettes and staggeringly impressive flower power. Given good drainage any of the species are worth trying, especially if given overhead cover for winter. They make perfect companions for other succulent genera such as *Agave*, *Dasyliirion*, *Nolina* and *Yucca*. However, not being too extreme in their requirements they can be considered for a mixed border where the flowers will add exotic impact.

As long as you watch for mollusc damage on *B. yuccoides* and think carefully how to site them, as the long drooping inflorescences can easily obstruct pathways, they are pretty much care-free.

PAUL SPRACKLIN is a garden designer based in Essex specializing in gardening with succulent plants.

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