What are mangaves?
The genus *Agave* presently consists of three subgenera. One of these, subgenus *Manfreda*, was originally described as a distinct genus in 1866. Currently, however, available molecular evidence supports the view that this group of about 40 species is most appropriately classified as a subgenus.

*Manfredas*, though, are relatively distinct, consisting of small rosettes arising from underground rootstocks (rhizomes), several of which become deciduous during the winter when the leaves die down completely. The leaves are distinctive and differ from those of the more familiar typical agaves in being very fleshy but relatively soft, brittle and deeply channelled; they are not fibrous as are typical agaves. Leaves range in colour from pale green to blue-green and are often either prominently spotted or mottled in shades of red. The leaf margins are either smooth or armed with very small, weak teeth and there are never any terminal spines.

*Manfreda* ‘Chocolate Chips’ (Fig. 1) is a typical example of this group of plants that is especially attractive with prominently wavy, toothless leaf edges and numerous dark spots. *Manfreda* flowers are borne on unbranched flower spikes which are relatively tall for the size of the rosettes. Flowers are usually single or paired and are variously coloured from white through to brown. *Manfredas* are relatively uncommon in UK collections.

Over the last 15 years or so hybridisers, especially in the USA, have been busy crossing *manfredas* with more typical agaves to create a wide range of hybrids.

Foremost among these plant breeders has been Hans Hansen. Such crosses were formally named by Klein (2010) as the intergeneric *×Mangave* (= *Manfreda* × *Agave*), who headlined these plants as ‘extraordinary hybrids’. Mangaves have been raised in large quantities using tissue culture techniques and subsequently strongly marketed in the USA from a range of outlets and growers, notably by Tony Avent at Plant Delights Nursery in Raleigh, North Carolina.

**Fig. 1**

*Manfreda* ‘Chocolate Chips’
Here in the UK mangaves have started to appear in garden centres (Fig. 2) where a modest range of crosses with cultivar names have become available at relatively steep prices. The ones I have encountered have been marketed by the US company Walters Gardens under the trademark Mad About Mangave®.

It should be noted that mangaves are likely to be frost sensitive here in the UK, as are the majority of agaves, and hence will require winter protection. They make ideal summer patio plants and of course are fine in greenhouses and conservatories and, unlike the generally larger-growing agaves, they are also more amenable for growing as houseplants.

In contrast to typical agaves the mangaves are relatively fast growers and notably reach flowering size much more quickly. Many agaves can take up to 20 to 30 years or even longer to flower and generally die after the event unless they have produced offsets. Based on available evidence many mangaves, given optimal growth conditions, can apparently flower in three or four years. They generally offset after flowering so they are effectively perennial, unlike most agaves that are monocarpic and die after flowering.
Many, but not all, mangaves have spotted or mottled leaves, markings not found in typical agaves. This range of hybrids has, therefore, significantly added to the diversity of this group of plants in cultivation. In contrast, to my knowledge, no plants of mangaves have yet been reported as occurring naturally in the wild with the exception of that described next. Here just a few mangaves are discussed and illustrated as examples of the range currently available.

×Mangave ‘Macho Mocha’

Among the mangaves, ‘Macho Mocha’ (Fig. 3) is apparently unique in that it originated in the wild in Mexico and was not artificially produced by a plant hybridiser. It has been in cultivation since 2004. Seed collected from a plant of Manfreda variegata that was growing in close proximity to Agave mitis, resulted in a mixed batch of seedlings with some exhibiting hybrid vigour. It was therefore proposed that this seed resulted from the cross Manfreda × Agave. In contrast all other mangaves to my knowledge have been artificially created in cultivation by human intervention.

‘Macho Mocha’ looks very similar to Manfreda variegata but has larger rosettes growing up to about 1.2m across. It has thick, fleshy, soft and pliable finely toothed leaves that are grey-green in colour, which are also densely covered with large burgundy spots. These become so numerous towards the tip of the leaf that most of the leaf appears burgundy red. It is a relatively fast-growing plant that pups readily to form large clumps and hence is easily propagated. The thick, reddish inflorescence rises from the centre of the rosette and resembles that of an agave. This was one of two early mangave introductions to be propagated, marketed and named (Klein, 2010), along with ×Mangave ‘Bloodspot’.

×Mangave ‘Bloodspot’

When this plant first appeared on the scene just over a decade ago it caused a sensation in the world of agaves since it looks like a typical Agave with chunky blue-green leaves with maroon edges,
prominent teeth and fierce terminal spines (Fig. 4). Startlingly though, the leaves are spotted unlike no true Agave and hence its name.

Parentage of this cross has been recorded as *Manfreda maculosa* × *Agave macroacantha*, apparently produced by a Japanese grower (Klein, 2010). The Agave parent accounts for most of the features of this exceedingly attractive and hence popular cultivar apart from the spots which originate from the *Manfreda*.

My plant of ‘Blood Spot’ flowered (Fig. 5) after just seven years in my collection with an unbranched spike only 1.15m tall; flowers were generally paired. In contrast *A. macroacantha* took 30 years to flower with me, producing a branched inflorescence 2.3m tall. After flowering, my plant of ‘Bloodspot’ died and hence behaved in the same manner as the typical monocarpic agave parent. It has been reported, however, that other plants of ‘Bloodspot’ have behaved more like a *Manfreda* in producing offsets and hence surviving and proliferating after flowering.

×Mangave ‘Blazing Saddles’ and ‘Gonzaloi’

*Mangave* ‘Blazing Saddles’ (Fig. 6) is typical of many of the spotted-leaved or mottled cultivars. It was produced by Hans Hansen at Walters Gardens in the US with the parentage ×Mangave ‘Bloodspot’ × *Agave nizandensis* and was introduced in 2018. The latter parent is unusual in having relatively non-fibrous and unarmed leaves.

‘Blazing Saddles’ forms rosettes up to 35cm across composed of softly-toothed, olive-green leaves adorned with large violet spots that merge so that the centre of the leaf appears red. It was named after the 1974 film *Blazing Saddles* which is full of deliberate anachronisms. I have yet to see if this cross offsets in a similar sporadic manner to its Agave parent or whether it will behave more like ‘Bloodspot’.
×Mangave ‘Gonzaloi’ (Fig. 7) is another similarly spotted-leaved cultivar, the origin of the name of which I have not been able to ascertain. Its leaves are broader and less spotted than those of ‘Blazing Saddles’ but the individual dark red spots appear more distinctly prominent.

×Mangave ‘Silver Fox’

This Mangave (Fig. 8), in contrast to ‘Blazing Saddles’, is seemingly unadorned with spots. It forms rosettes up to around 50cm across. Its leaves are recurved, silver-grey and somewhat reminiscent of stone-washed blue denim, armed on the edges with relatively harmless tiny teeth.

My single specimen came bearing two offsets. Its flower spike is recorded as being up to 2.7m tall. This is another Hans Hansen creation with its parentage recorded as Agave pablocarrilloi × Agave macrocantha × Manfreda sp., making ‘Silver Fox’ a second generation mangave. The leaf surface is slightly roughened, a feature presumably endowed by A. pablocarrilloi. Indeed this cross is much more agave-like than other mangaves with the effects of the Manfreda genes being ‘diluted’. This is a very attractive plant and I eagerly await to see how it performs in the coming years since it has been in my collection for less than a year.

Further information and the future for mangaves

There is a relative dearth of information on mangaves; however, the latest book on agaves by Spath & Moore (2021) has a section devoted to them and illustrates a good range of diversity, so this is a good place to start looking further. Even more images of mangaves and background information on the individual cultivars are provided on the website Madaboutmangave.

In summary, from a botanical perspective, mangaves are intrageneric hybrids (within the same genus rather than being intergeneric) with the status of ×Mangave downgraded to a synonym of Agave.
From a grower’s standpoint, however, these are fascinating and attractive plants with the name mangave clearly here to stay. Many other hybrids in addition to those showcased here have been produced and introduced into cultivation with evocative names such as ‘Blue Mammoth’, ‘Femme Fatale’, ‘Frosted Elegance’, ‘Kaleidoscope’, ‘Painted Desert’ and ‘Whale Tale’. There is also little doubt that further hybridising, propagation and distribution of more varied mangaves will follow. There is an impressive range to choose from for those searching for something different in the world of agaves to add to their collections.

*Photos: Colin C. Walker and Tina Wardhaugh (Fig. 4)*

**References**


Mad About Mangaves
[website accessed 24.02.23]

Spath, J. & Moore, J. (2021) Agaves. Species, cultivars & hybrids. Privately published by the authors, USA.