Weingartia surprise

Although the majority of described species within the genus *Weingartia* produce the 'usual' yellow flowers there are plants, both within the genus and with close affinities to it, that produce distinctly different flowers. John Brickwood introduces some of the most eye-catching and less widely-grown.

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Weingartia is a deservedly popular, floriferous genus of South American globular cacti, several species of which are still much sought after by growers and collectors. Most species grow to about the size of a large grapefruit and, since they generally remain simple in habit with age, rarely outgrow their welcome in even the smallest greenhouse collection,. Flowers are usually borne in profusion each year in late spring to early summer on mature plants, while even younger plants of many forms will flower well once the head have reached about 5cm diameter. The blooms are often produced in more or less complete rings around the shoulder of the plants, with occasional flowers sometimes appearing from areoles either lower or higher on the body. Couple this with their ease of cultivation - given a gritty, porous, peat-based or soil-based compost and several good soakings and feedings during the growing season, the plants thrive - and one could hardly want for more. Well, for something other than yellow (or occasionally orange-yellow) flowers, which are the norm, perhaps? We used to moan about that with *Notocactus*, remember, and look what happened there! Similarly there are still some surprises in store for enthusiasts of *Weingartia*, four of which I will mention here.

***Weingartia trollii* - a darker-coloured flowered form**

I may be stretching the point with the last two species dealt with below, since they straddle the *Weingartia-Sulcorebutia* border according to the experts, but there is no doubt that they also show strong affinities with *Weingartia* and hence are worthy of mention in the present context.

Weingartia trollii

This desirable plant was first described by Oeser in 1978 (based on the holotype OE 815). The habitat area lies south-west of Sucre, near Tulma, at around 2800m altitude in Oropeza Province, Chuquisaca Department, southern Bolivia. Karel Knize collected it from this region under his field number KK 1594. John Donald subsequently relegated this species to a variety of *W. neocumingii* (Ashingtonia 1979) - a name which I would be quite happy to write on my plant label were it not for the 'subspecies *sucrensis'* bit that he inserted in between. Subspecies is a rank we can well do without in cactus taxonomy (keep it simple please, taxonomists) - but that is purely a personal point.

W. trollii (I'll use this name here because it is the shortest, and plants are still usually listed under that name) is a solitary-growing plant, flattened-globular in form, growing to around 10cm diameter and sometimes becoming more globular to elongated with age. The spination is somewhat variable, with denser or more open spined forms occurring in which the radial and central spines are barely distinguishable from one another, in shades of golden-brown to brown, often with darker tips. The epidermis varies in colour from a relatively dull olive-green to glossy, dark green.

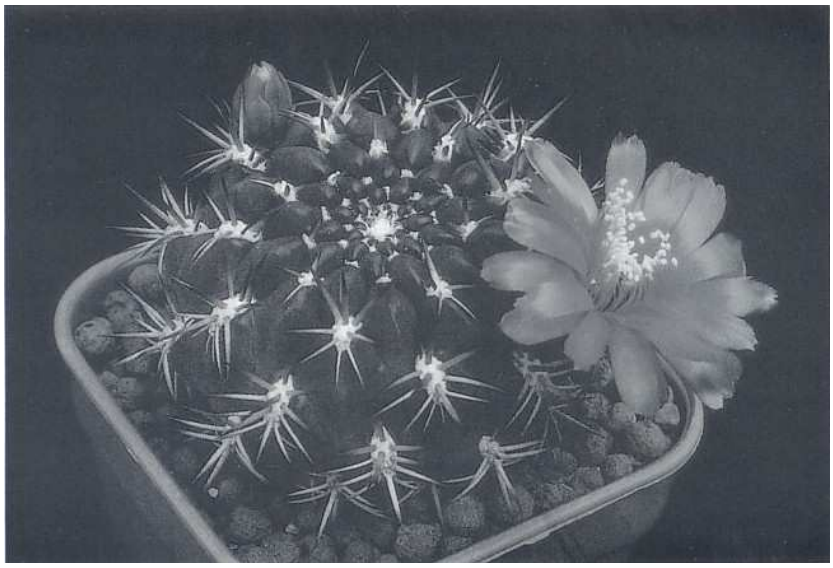
The flowers are up to 3.5cm diameter, while the petals may be narrow or considerably broader; their colour may be yellow, but typically this plant reputedly has flowers ranging from yellowish orange, to clear orange, reddish-orange or brick red. I say reputedly, because when I first set about obtaining one of these darker flower Weingartias a few years ago, four plants from different sources all produced only the ‘usual’ yellow blooms. In due course another plant list arrived, with *W. trollii* listed on it; there was no mention of the flower colour, but the price tag was a bit steeper than usual. Throwing caution to the wind I decided to order a plant, and to hope that fifth time around I would be 1ucky. That fifth plant is illustrated here. Exit three yellow flowered *W. trollii* (I kept one as a keepsake). Another plant obtained since has lighter orange blooms, equally as attractive, with much larger, broader petals, and

there is no doubt that these darker flowered forms of *W. trollii* are among the pick of the genus and well worth seeking out - although preferably while on a visit to a nursery when the plants are in, flower!

Weingartia rubriflora nomen nudum
'W. rubriflora' is the latest novelty to appear in the genus, but has not yet, to my knowledge, been published as a valid species, and thus remains only a name at present. It is already becoming available in cultivation from a few nurseries, and seeds are freely available. Like all Weingartias, this species is easily raised from seed using standard germination techniques. Plants bearing this name are generally not too dissimilar in form from those of the *W. neocumingii* group. The body is fresh to dark green in colour and flattened-globular in form. The spination is somewhat variable, in colours ranging from gold-yellow to brown, often with darker tips. Denser, thinner-spined, and more open, stouter-spined forms occur, and in typical *Weingartia* fashion, the central and radial spines are not easily distinguished. Some plats bearing this name resemble *W. trollii.*

My largest example of this plant flowered for the first time a couple of years ago, and at the time I eagerly awaited the opening of the mass of reddish buds that had rapidly developed around the shoulder of the plant during the previous couple of weeks or so. With some anticipation I traipsed down to the greenhouse on opening day, my mind full of imaginary red *Weingartia* blooms, and I was met by a sight not too dissimilar from that illustrated here. Another pleasant surprise - not red, but bi-coloured red and yellow flowers, and on a genuine *Weingartia* at that! Make no mistake, if you only have room for one Weingartia in your collection, you could probably do no better than to opt for this one. The blooms are similar in size to those of W. trollii, although the more open spined forms may have larger flowers. Two other plants of this species in my collection have also since produced bi-coloured flowers. Whether or not there are any forms of this plant with pure red flowers, as I thought the name implied, I cannot say. My plants of KK 1593 and HS 164, which have been provisionally named *W. rubriflora*, have not yet flowered, but judging from the seedlings they appear to represent more open and denser-spined forms respectively. However, the plant KK 1771, which has appeared in some listings as '*W. rubriflora* var. *violaciflora'* or '*W. violaciflora'* seems to be a form of *Sulcorebutia torotorensis* with bright magenta flowers, and thus not referable to this *Weingartia* (see below).

Sulcorebutia purpurea Lau 332 - the typical form of the species



There is little doubt that my own plants of *Weingartia rubriflora* are indeed true Weingartias. However, whether or not this plant is a new species or merely a form of an existing species remains to be clarified. To my mind the plants look as though they belong within the *W. neocumingii* complex. There are even some suggestions that it may only be another form of *W. trollii* itself (bearing in mind that KK 1593 presumably lies close to KK 1594, the latter now knew, to be *W. trollii*). John Pilbeam, because of the variability of plants appearing in cultivation under this name, regards *W. rubriflora "*at best as a dubious catalogue name, and possibly something far worse"!

The following two Sulcorebutias (often referred to in the past as the 'purple-flowered Weingartias', though none are truly purple-flowered) now seem to be regarded as genuine Sulcorebutias by many authors.

Sulcorebutia purpurea
This species was discovered by Alfred Lau in 1970 (Lau 332 is the holotype) and has been rather slow to come into cultivation since then. The type originates from Cochabamba Department in southern Bolivia, near Cruce, on the pass between Cruce and Mina Asientos, at 2900m altitude growing in a rather exposed position, suggesting that cultivation in full sun might be recommended.

Originally described as a *Weingartia* by Donald and Lau in 1974, Brederoo and Donald transferred this plant to *Sulcorebutia* in 1981. Ritter preferred to include it in his new genus Cinnabarinea in 1980, along with *Sulcorebutia torotorensis* (see below). Described as a species transitional between *Sulcorebutia* and *Weingartia*, the modern consensus of opinion is that it is a *Sulcorebutia*, although it seems to vary quite wildly in habit, with some forms exhibiting Weingartia-like characteristics with regard to spination and the shape and positioning of the flowers.

The type is a largely solitary growing plant which may occasionally offset later to form small clumps, with heads ranging from around 8 to 10cm diameter. The body is flattened-globular in form, with 11 to 18 spiral ribs, each divided into prominent tubercles. The spination is exceedingly variable, typical plants having notably stronger central spines than radial. The spines vary in colour on plants at the type locality from white to horn-coloured, pale-brown or reddish-brown to brown, with blackish

***Weingartia rubriflora* n.n. - a startling bi-coloured flowered form**

tips. Plant, with the type number Lau 332 have a very dark green epidermis, flushed an attractive deep purplish colour between the tubercles. The flowers of typical plants are notably short-tubed (Weingartia-like), measuring up to 4.5cm diameter on mature plants. They vary in colour from dark violet-magenta to reddish-purple or violet-red - in truth their precise colour is difficult to define, the blooms often possess a bi-coloured mixture of these hues. The buds (noticeably different to most Sulcorebutias, and also rather Weingartia-like) are produced from lateral areoles towards the upper part of the body; they are prone to dry up rapidly and abort unless the plants are watered well as soon as they appear.

Lau collected another form of this species (the co-type Lau 336) at the type locality. This is a generally less stoutly-spined form with more numerous tubercles and closer set areoles, the dull, dark green epidermis lacking the reddish tone of Lau 332. Other collections from the type area include WK (or KR) 229, 667 and WR 670. In the Dutch journal *Succulenta*, in 1985, Walter Rausch described *Sulcorebutia unguispina* (WR 731, from Rumimokho, Department Cochabamba, Bolivia), which appears to be only a stouter-spined variety of *S. purpurea*, but which does not seem to have come into cultivation as yet.

If the experts are to be believed, a whole range of recently introduced forms of Sulcorebutia are referrable to *Sulcorebutia purpurea*. These vary so greatly in habit and differ to such an extent from the type that they are worthy of an article in their own right. These are said to include HS 25, 25a, 25b, 26, 67, 68, 68a, 109, 115a, 118, among others, several of which are now freely available in cultivation.

***Sulcorebutia torotorensis* - perhaps the most controversial of the transitional *Sulcorebutia/ Weingartia* species**

Sulcorebutia torotorensis

This species is regarded by some as the most dubious *Sulcorebutia* within the *Sulcorebutia/ Weingartia* transitional group, as can perhaps be surmised from the illustration. The form illustrated here looks for all the world like a magenta flowered form from the *Weingartia neocumingii* complex and, out of flower, could remain quite indistinct among a group of plants from this complex, which perhaps is why Cardenas, who discovered this species, originally described it as a *Weingartia* in 1971. Donald (1974) appeared to endorse this opinion in *Ashingtonia*. However, Brederoo and Donald (1981) later transferred it, together with *W. purpurea* to *Sulcorebutia*. Ritter, forever out on a limb it would seem, shunted this pair into his new genus *Cinnabarinea* in 1980, but the latter genus does not appear to have won many converts in the cactus world.

This south Bolivian species (not to be confused with the quite different *S. totorensis*) grows in Potosi Department in Bilbao Province, near Toro-Toro (hence the name) at around 2,000 metres attitude. Lau collected it from here as Lau 327, the most widely distributed form presently available in cultivation, as did Rausch WR 464b). Karel Knize's collection number KK 1771, provisionally named *'Weingartia rubriflora* var. *violaciflora'* or *'Weingatia violaciflora'* in some catalogues, also belongs here.

This species is an attractive fresh-green, flattened-globular plant with a depressed crown, forming heads to 7cm tall and 15cm diameter (reputed to be the largest growing *Sulcorebutia*), sometimes offsetting around the base to form small clumps. The tubercles are rather prominent, but, unlike the typical *S. purpurea*, the radial and central spines are not easily distinguishable. The spines are variable in length and density (both shorter and longer-spined forms occur), but generally number around 15, and are greyish to whitish, or pale yellowish to light brown in colour, the tips sometimes curving slightly. As in many *Weingartia* species, the spines are arranged in a more or less pectinate fashion. The bright magenta, short-tubed flowers are around 3cm diameter and are produced around the shoulder of the body in general, with occasional blooms sometimes appearing from higher or lower areoles along the flanks of the body. Mature plants are very free-flowering, often producing complete rings of blooms in late spring and early summer. Plants of this this species are easily raised from seed and develop at the same rate as most *Weingartia* species.

I don't pretend to be knowledgable about this group of plants, have never visited the habitat areas, and have not studied their geographical distribution; this article is based solely on my own plants and the little information about them that has appeared in the literature. It must be stated here that there is apparently a lot of wrongly labelled material doing the rounds in cultivation under the four names mentioned here, and particularly under the name *W. rubriflora*. But whatever your views on the true status of the species discussed here (and as with any transitional plant forms this is largely a matter of personal opinion), there is no denying that they are truly choice cacti, and I know that I certainly would not be without them in my own collection.

References:

Cardenas, M. (1971). C&SJ (US). 43: 243
Donald, J. (1974). *Ashingtonia*. 1: 53
Donald, J. (1979). *Ashingtonia*. 3: 137
Ritter, F. (1980), *Kakteen in Sudamerika. Vol*. 2: 637
Donald & Brederoo. *KuaS*. (1981). 32: 270-273
Rausch, W. *Succulenta*. (1985). 64 (6): 132
Pilbeam, J. (1985). *Sulcorebutia and Weingartia - A Collector's Guide.* Batsford

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