

International Rock Gardener

ISSN 2053-7557



Number 107 The Scottish Rock Garden Club November 2018

---International Rock Gardener---



November 2018

Latvian plantsman, Jānis Rukšāns describes a new species of *Anemone* this month. "Windflowers" - as the little anemones are known in English - are a favourite for those who have the good fortune to see them in their native habitats and also because many species are readily available in commerce and make excellent garden plants. John and Anita Watson, who live in Chile, relate some of their plant-hunting escapades in South America. Most of us will never have the chance to visit there, so these insights from the Watsons into the flora and fauna give us an armchair trip to savour. We are also delighted to introduce the new SRGC President, Julia Corden.

Cover photo: *Anemone basketovii*, photo Jānis Rukšāns.

---Species Description---

Anemone basketovii Rukšāns (Ranunculaceae) – a new windflower species from the Russian Caucasus

Jānis Rukšāns, Dr. biol. h.c. janis.bulb@hawk.lv

Published in International Rock Gardener (IRG 107) November 2018, pages 2 – 24.

Summary: species of *Anemone* with tuberous rootstocks from the Caucasus are discussed; a new species *Anemone basketovii* is described.

Key words: the Caucasus, Turkey, Greece, *Anemone apennina*, *Anemone blanda*, *Anemone caucasica*, *Anemone basketovii*.

The Genus *Anemone* L. (*Ranunculaceae*) is one of the largest genera within the family *Ranunculaceae*. Anemones (windflowers) have a worldwide distribution, but they occur predominantly in the woodlands and meadows of the North Temperate Zone. The genus is very important in ornamental horticulture for it contains some highly decorative species that are widely used in gardening – in landscaping, as cut flowers and for winter forcing. Many varieties are cultivated in the gardens for their colourful flowers. At the same time the genus is morphologically extremely variable. According to Ziman et al. (2008), the genus *Anemone* L. s. str. contains a total of 118 species, which are split into 15 subgenera, 23 sections, 4 subsections and 23 series. A further reclassification by Hoot and colleagues (2012) estimated even 200 species, incorporating into the genus the species of *Pulsatilla* Mill., *Hepatica* Mill., etc. According to Flora USSR (1937), 46 species of *Anemone* grew in the former Soviet Union. The taxa discussed in this publication belong to Section *Tuberosa* Ulbr. It is divided into two series – Series *Tuberosae*, which contains two species - *A. apennina* L. and *A. blanda* Schott & Kotschy, and Series *Caucasicae* with 1 species – *A. caucasica* Willd. ex Rupr. (Ziman et al., 2008).

Anemone apennina and *A. blanda* are superficially very similar and many botanists regard *A. blanda* as a subspecies of *A. apennina* (A. Strid, 2016). The easiest way to distinguish the two is by observing their leaves – according to Phillips & Rix (1989), in *A. apennina* leaves are hairy beneath, whilst in *A. blanda* the underside of the leaves is hairless. B. Mathew (1987) notes that in *A. apennina* fruiting heads remain erect, whereas in *A. blanda* they bend over. Ziman et al. (2008) characterise *A. apennina* as having carpels that are scarcely pubescent, the tepals of the outer whorl have 1–3 anastomosing veins, basal leaf blades ternate, with petiolules 3–5 mm long; in *A. blanda* the carpels are pubescent only at the base, the tepals of the outer circle have 5–9 anastomosing veins, the basal leaf blades are 3-sected, with petiolules only 1–2 mm long, frequently even absent. According to A. Strid (2016), both taxa (as subspecies by A. Strid) overlap in Greece with the allegedly distinct

---International Rock Gardener---

characters appearing in various combinations. Mathew (1987) and Phillips & Rix (1989) state that the underground tubers (rhizomes) of *A. apennina* are more elongated than those of *A. blanda*. My observations on several samples of both species did not confirm this and in reality the shape of the knobbly tuberous rootstocks is so similar that this feature is of no use when separating the two species. Only one sample of *A. blanda* (JJVV-032) from S Turkey (22 km before Gülnar along the road from Silifke) stands out from the typical shape of the tubers of both species and, as indicated by B. Mathew, could be regarded as being closer to *A. apennina* distributed in southern Europe (from Corsica as far as the Balkans) and absent in Turkey. Probably it belongs to another, not yet recognised species.



Blue form of *Anemone apennina* and its tubers (tubers all shown on 5mm grid paper).



White *Anemone apennina*, also showing blue reverse to flowers and its tubers.



Anemone blanda replaces *A. apennina* in the eastern direction and its distribution area stretches from the Balkans and Greece (where it overlaps with *A. apennina*) through Turkey down as far as Lebanon. Until recently the Caucasus Mountains were included in its distribution range although already in 1937 S. Yuzepchuk in the Flora of the USSR opined that the Ciscaucasian plants must be thoroughly compared with the authentic *A. blanda*, as its region of distribution was disjunct from the main range of *A. blanda*. *A. blanda* was described from the Taurus Mountains in Turkey [Type: Turkey. "In monte Tauro. Aestate 1836, Th. Kotschy (isotype designated by Demiriz in 1967 – K)] so only plants from

---International Rock Gardener---

Turkey can be regarded as typical *A. blanda*. Before getting hold of an authentic material from Turkey, I, too, believed that the Caucasian plants were *A. blanda*. The fall of the Iron Curtain and the collapse of the Soviet Union opened the borders and allowed me to come into possession of the material from the region from where *A. blanda* had been described. Thus it was possible to compare the plants from the both main regions of the distribution – the Caucasus and Turkey.



Anemone blanda on Athos peninsula, Greece.

---International Rock Gardener---



Anemone blanda in Turkey, 36 km from Čan to Čannakale (R2CV-009) and its tubers



Anemone blanda from Turkey, 40 km before Ermenek along road from Anamur (RUDA-021) and its tubers.

---International Rock Gardener---



Anemone blanda from Turkey, collected near Akseki (R2CV-039). Clone 'Günite' named after the author's wife, Guna Rukšāne.

Below: *Anemone blanda* from Turkey, 22 km before Gulnar along road from Silifke (JJVV-032) and its unusually shaped tubers, shown on 5mm grid.



---International Rock Gardener---



Anemone caucasica in Georgia, near vil. Shaori (BARAKA-069) and its tubers (5mm grid).



---International Rock Gardener---



Anemone caucasica
(BARAKA-045) herbarium
sheet

In the Caucasus Mountains of the former Soviet Union two *Anemone* species with tuberous rootstocks occur. One was misidentified as *A. blanda*, the other species – *A. caucasica* – grows in Abkhazia (a region of Georgia) in the Western Caucasus and through Georgia and Armenia, enters NW Iran (along mountain ridges bordering S side of Caspian Sea its area reaches Province of Golestan - 16IRS-139, 150 etc.) and NE Turkey. Yuzepchuk (1937) erroneously thought that *A. caucasica* was the “USSR variant of the Western European *A. apennina*” and this mistake was adhered to in some local floras and botanical literature of the former USSR, which regarded *A. caucasica* as a synonym of *A. blanda/apennina*.

Actually, all these species are very distinct and easily separable. *A. caucasica* is a small plant with tiny,

round, pea-sized tubers. In cultivation they sometimes branch, but even then they retain their roundish shape and lesser dimensions. Flowers are less than half the size of its relatives *A. apennina* and *A. blanda* s.l. Differences between *A. apennina* and *A. blanda* had been characterised earlier.

My first plants of the so-called *Anemone blanda* came from Krasnodar Krai, Russia and I received them in the seventies of the last century from V. Korolev, great plant collector and enthusiast, who worked as a teacher in Enem – an urban-type settlement in Takhtamukaysky District of the Republic of Adygea, Russia. He sent me several long tubers that resembled black thin pieces of a tree branch, which he had labelled as *A. blanda*. They grew in my garden outstandingly, were very uniformly deep blue and I named the stock ‘Enem’, even though they had been collected quite far from the place. Just the disjunct area of this plant sparked a deeper interest in the Caucasian anemones and in the spring of 1983, at Mr. Korolev’s invitation, I visited him and took part in a trip he had organized for me into the mountains up to Gelendzhik on the Black Sea coast and along the coast further east and

---International Rock Gardener---

then back to Krasnodar. During this trip I spotted several places where this anemone was growing. Everywhere it was quite uniform, had solely deep blue flowers, maybe a little variable in shade. Although I had a notebook with me, it was used merely as a primitive herbarium press and no additional detailed notes were taken. At that time I did not think much about more thorough botanical researches and possible publication of new species; although in my collection already at least 3 new species of bulbous plants grew from the Central Asian mountains. Using these rather primitively pressed plants I was now able to prepare a holotype herbarium for the new species. That same spring, at the end of May, I visited North Ossetia where a botanist of a nature reserve K. Popov guided me to the localities where *A. caucasica* was growing. Now I kept a diary and you can read in my book "Buried Treasures" (2007) about this trip and the observed plants. At that time *A. caucasica* was out of flower, so I saw only its tubers, which confirmed that both were very different plants.



Galanthus platyphyllus
(BARAKA-068) near vil. Shaori
growing and blooming together
with *Anemone caucasica*.

I observed *Anemone caucasica* in bloom in the wild only much later, in 2007, when I was invited to join an expedition organized by the Gothenburg Botanical Garden to Georgia. It was in full bloom on 9th of May near vil. Shaori, at the altitudes of 1400-1500 m together with *Galanthus platyphyllus* and *Corydalis caucasica*. We saw only two colour forms – bright blue and purest white. Plants for herbarium were collected to be used later for comparing with the so-called *A. blanda* from Krasnodar Krai. In reality they were identical with the plants from North Ossetia and with those observed later in Armenia and recently in Iran. During several trips to Turkey in the new millennium many authentic *A. blanda* populations were observed, differing only in flower colour and less significantly in size. A few samples of *A. blanda* were spotted on the Athos peninsula in Greece, and also on the E Aegean Islands of Rhodes and Samos and the

---International Rock Gardener---

Peloponnese. All this confirmed that the plants from the so-called Russian Caucasus were different and needed a new name. Further studies of the literature and of the herbariums of the Botanical Institute of Saint Petersburg (then Leningrad) and now the examination of the scans of the Herbarium of Moscow State University on the Internet - [here](#) - proved that the main feature separating the new species from the typical *A. blanda* – the shape of the underground parts - was very uniform throughout its range and was very different from all its closest relatives - *A. caucasica*, *A. blanda* and *A. apennina*.



Corydalis caucasica (BARAKA-074) near vil. Shaori growing and blooming together with *Anemone caucasica*.

---International Rock Gardener---



Anemone caucasica from Armenia, near Vanadzor and its tubers, shown on 5mm grid.





Anemone basketovii – holotype herbarium sheet.

---International Rock Gardener---

Anemone basketovii Rukšāns species nova

Type: Russia, Krasnodar Krai. Near Gelendzhik, S slopes of Marhotski Ridge, at alt. ~ 500 m, 31-03-1983, leg. J. Rukšāns. Holotype: GB (Gothenburg). Ic.: Buried Treasures, pl. 38 (as *Anemone blanda*).

Habitat and distribution: Grows in scrub, oak and other deciduous forests and at forest margins and on dry hills (? - Flora USSR) in the mountains along the Black Sea coast from Novorossiysk down to Adler, Krasnodar Krai, the Republic of Adygea, Russia. It is included in the Red Data Book of Stavropol Krai, Russia but no material has been seen by me, and it is possible that *Anemone caucasica* was misidentified as "*A. blanda*", although the rootstock in the attached illustration looked identical with that of *A. basketovii*. Listing in the Red Data Book of South Ossetia (a territory of Georgia now in fact occupied by Russia) as *A. blanda* certainly is a case of an incorrect identification as only *A. caucasica* is distributed in Georgia.

Flowering time: (February) March till April (May).

Description: Perennial with an oblong to cylindrical, sometimes branched, rootstock (tuber-like rhizomes); basal leaves at the start of vegetation tinged purplish, later fading to dark green with long, sparsely pilose or glabrous purplish or brownish petioles, the leaf blade trisected, segments subsessile, trifid up to the middle and with shallowly incised lobules, leaf surface adpressed-pilose, beneath glabrous. Involucral leaves petiolate, trisect into subsessile segments similar to those of basal leaves with coarsely 2-3 toothed lobules and subobtuse teeth, peduncles hairy. Flowers mostly blue (as seen by J.R. the author) but occasionally can be white or pinkish tinted (seen on the Internet on the pages of [Plantarium](#) under the name of *Anemone blanda*: [see this link](#); although the majority of pictures on this website come from wild plants and show *A. basketovii*, some entries there are from Greece and cultivated plants in Europe, which are *A. blanda*, therefore it is essential to check the information accompanying the pictures), 28-45 mm in diameter with 9-18 narrowly oblong up to 20 mm long glabrous on the outside tepals; fruitlets very short-pilose with a displaced black verrucose or almost obsolete style.

2n = unknown

Right: *Anemone basketovii* tubers, shown on 5mm grid.

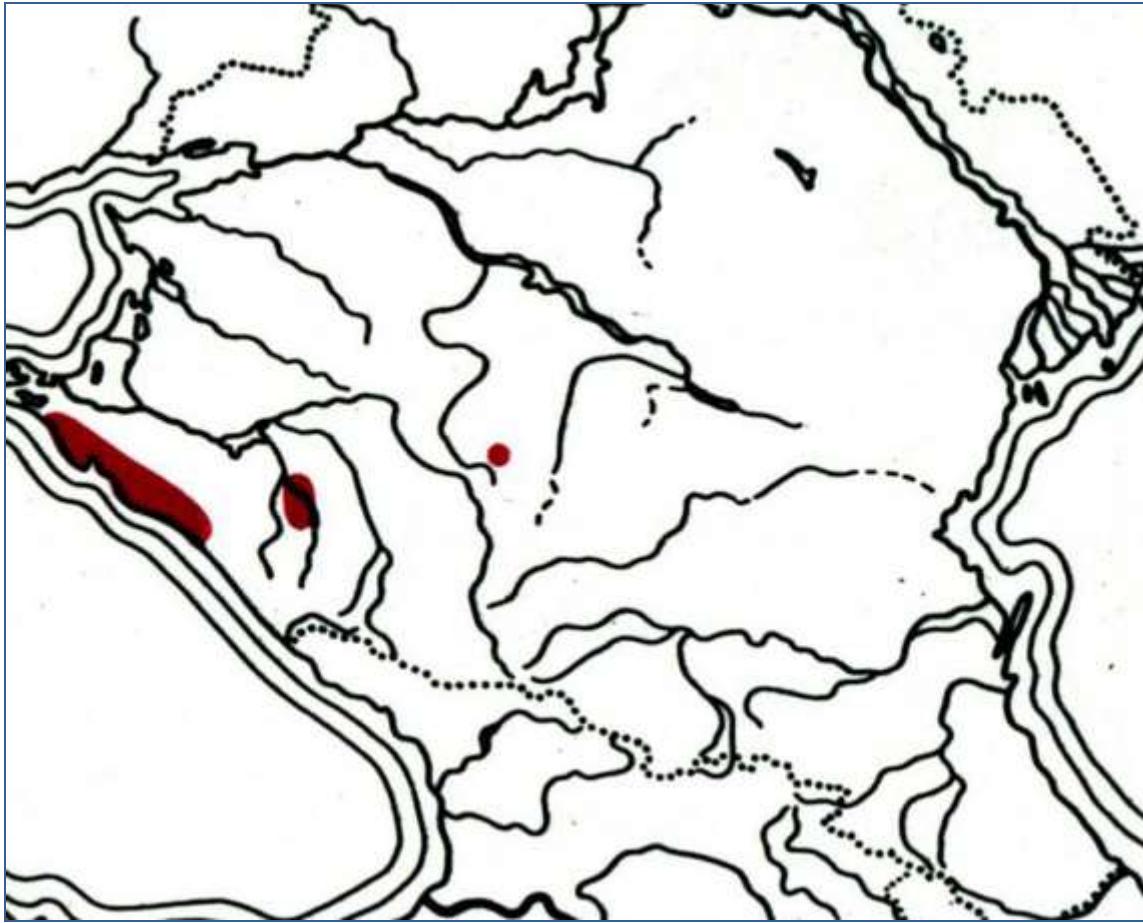


Above left: *Anemone basketovii* - design in the Red Data Book of Russia, showing typical rootstock.

---International Rock Gardener---



Anemone basketovii - type gathering in author's collection.



Anemone basketovii - distribution area according to the Red Data Book of Russia.



Anemone basketovii seeds – Krasnodar Krai, near Gelendzhik. 18.04.2016. Photo S. Basketov as *A. blanda*.

Etymology:

Named for Sergey A. Basketov.

Sergey Basketov is a botanist who lives in Pyatigorsk (Northern Caucasus, Stavropol kraj, Russia). For a long time he has worked as a researcher at the Ecology and Botany Station in Pyatigorsk of V.L. Komarov's Botany Institute of Russian Academy of Sciences (St. Petersburg). He is not merely adept, but unsurpassed at identification of local Caucasian and Transcaucasian flora with a great knowledge about Caucasian plants, their habitat and cultivation tips, as he is also a front-rank nurseryman.



---International Rock Gardener---



Anemone basketovii - type gathering in author's collection.

Key for *Anemone* sp. from Sect. *Tuberosa*

- 1 Underground tubers small, around pea-size, roundish.....*A. caucasica*
1. Underground tubers elongated, branch-like, up to 9 mm in diameter....*A. basketovii*
1. Underground tubers knobbly, large and irregularly shaped roundish
 2. Leaves hairy beneath, fruiting heads erect*A. apennina*
 2. Leaves glabrous beneath, fruiting heads nodding*A. blanda*

---International Rock Gardener---

Some *Anemone basketovii* herbarium sheets (as *A. blanda*) from the [National Depository Bank of Live Systems, Moscow Digital Herbarium](#).



Anemone basketovii herbarium sheet (as *A. blanda*) - [Anapa](#).

---International Rock Gardener---



Anemone basketovii herbarium sheet (as *A. blanda*) - [Novorosisk](#)

---International Rock Gardener---



Anemone basketovii herbarium sheet (as *A. blanda*) - [Rajevsk](#)

---International Rock Gardener---

Cultivation notes

Anemone basketovii along with its relatives from the Caucasus and Turkey, is very easy in cultivation and can be grown both in the open garden and under cover in pots. It prefers a slightly shaded position under large trees where the soil dries out during summer. When grown in pots it can stay in the greenhouse all summer long; occasional watering of the plunge material (if grown in clay pots) around the pots once in 2-3 weeks is recommended. If it grows side by side with the related *A. blanda* it is essential to remove the seedpods before the dispersion of seeds because both species can hybridise. The same was observed on greenhouse-grown *A. caucasica*, which crossbreeds easily with *A. blanda*. Hybrids show a very well expressed hybrid vigour (heterosis), producing huge flowers (around 1.5 times larger than in *A. blanda*) and huge knoblike tubers that resemble those of *A. blanda*. In flower size and tubers these hybrids are similar to the well-known cultivar of *A. blanda* 'White Splendour', which I regard as a triploid or a hybrid between different tuberous anemones. Self-sown hybrid seedlings in pots of *A. basketovii* and *A. caucasica* are so vigorous that they can over-grow the originally potted plants and replace them within a few years. I would have almost lost all my samples of both species if they had not also been grown at isolated localities in the open garden.



The tubers of the *Anemone blanda* cultivar 'White Splendour' and, below, in flower.



---International Rock Gardener---



Hybrid between *Anemone basketovii* and *Anemone blanda*.

---International Rock Gardener---



Hybrid between *Anemone caucasica* and *Anemone blanda*.

Unfortunately in the open garden all anemones can suffer from a fungal disease known as the anemone cup or *Dumontinia tuberosa* (*Sclerotinia tuberosa*). This disease is very widespread in Europe and northern Asia and can infect plants of several *Anemone* species. It is very common in forests and bushes in spring as a parasite on the rhizomes of *A. nemorosa* and *A. ranunculoides*, but it can infect plants from other genera (*Hepatica*), too. It is also distributed in Latvia, but in the garden it mostly infects plants grown on nursery beds, much less if they are planted “wild-style” among other plants under trees and shrubs. It seems that there is the so-called “natural protection” from the roots of other plants and microorganisms at work, which obstructs the wider spread of *Dumontinia*. On nursery beds where anemones are grown exclusively it spreads very quickly. At first you can observe a premature dying of leaves in some spots. After uncovering of soil soft thickened rhizomes or tubers can be seen that are covered in white cotton-like matter. Later in the season large black, glossy irregularly round sclerotia can be found and then following spring on the surface of the ground light

---International Rock Gardener---

brown cup-like mushrooms have formed. Seeing on a nursery bed spots where leaves have suddenly started to dry off, I always remove the soil and get rid of the infected rhizomes or tubers and also of the still healthy-looking plants in around 10 cm distance from the place of infection. The exposed place is not covered by soil anymore. Such treatment allows the protection of plants from the spread of this disease, which I call “the plague of windflowers” – it is so fast and deadly. Of course all anemones later are replanted into new beds in some distance from the infected site. Growing in pots allows us to minimize the chances of infection because the developmental cycles of the potted plants are more advanced which makes it possible to escape the period when this disease spreads in nature, but occasionally the infection can affect the greenhouse plants, too, so I recommend annual repotting of all anemones in a fresh sterile substrate and careful checking of repotted rhizomes or tubers. As an additional bonus, such a modus operandi prevents the germination of occasional hybrid seeds, thus the stocks remain clean.



Above, left: *Anemone nemorosa* rhizomes infected with *Dumontinia tuberosa*. Above, right: Sclerotia of *Dumontinia* (*Sclerotinia*) *tuberosa*.

Cup-like mushrooms of *Dumontinia tuberosa*.



---International Rock Gardener---

Acknowledgments

I want to express my greatest thanks to my longtime travel partners Dimitri Zubov (Ukraine), Henrik Zetterlund (Sweden), Václav Jošt and Jiří Bydžovský from the Czech Republic, to Zhirair Basmajyan (Armenia), Eugenius Dambrauskas (Lithuania) and others who have accompanied me in search of many new plants; to Prof. Arne Strid who shared with me all the information amassed by him; to Arnis Seisums and Reinhard Fritsch for the advice and many recommendations which have all helped to improve the quality of my publications. Of course, my thanks go also to my regular language corrector Mārtiņš Erminass. And I am especially thankful to my family and my wife Guna in particular, for the hard work at the nursery during my absence while in the mountains.

Bibliography

Anemone blanda Schott & Kotschy – see [this link](#).

Davis P.H., Coode M. J. E., Cullen J. 1979. *Anemone* L. in Flora of Turkey and the East Aegean Islands. Vol. 1: 134-138. Edinburgh University Press.

Galushko A. I. 1978. Flora of Northern Caucasus. Key-book. vol. 1: 319. Rostov State University (in Russian).

Grossheim A. A. 1950. Flora of Caucasus. Vol 4: 314. Moscow, Leningrad: Acad. Sc. USSR (in Russian).

Hoot S. B., Meyer K. M., Manning J. C. 2012. *Phylogeny and Reclassification of Anemone (Ranunculaceae), with an Emphasis on Austral Species*. Systematic Botany. 37 (1): 139–152.

Herbariums – see [this link](#).

Ivanov A., Malihina A. (ed.). 2013. Red Data Book of Stavropol Krai, Russia, Vol. 1 Stavropol. (In Russian, as *Anemonoides blanda*).

Malihina A. (ed.). 2017. Red Data Book of Krasnodar Krai. Plants and Mushrooms. Krasnodar (in Russian).

Mathew, B. 1987. The Smaller Bulbs. London: Batsford.

Nikolaev I. (ed.). 2017. Red Data Book of the Republic of South Ossetia. Nalchik. Stavropol. (In Russian, as *Anemonoides blanda*). Cited in [this link](#).

Phillips, R., Rix M. 1989. Bulbs. Revised ed. London: Pan Books.

Strid A. 2016. Atlas of the Aegean flora. Part 1: Text & plates (700 p.). Part 2: Maps (878 p.) – Berlin: Botanic Garden and Botanical Museum Berlin, Freie Universität Berlin.

Tahtadjan A. L. (ed.). 1988. The Red Data Book of Russian Federation. p. 389-390. Gosagropromizdat, Moscow (in Russian).

Tutin T. G. 1964. Flora Europaea. Anemone L. in Vol. 1: 217-219. Cambridge University Press.

Yuzepchuk S. V. 1937. Anemone L. Flora URSS, vol. VII: 236-282. Nauka, Moscow (in Russian).

Ziman S. N., Bulakh E. V., Kadota Y., Keener C. S. 2008. Modern view on the taxonomy of the genus *Anemone* L. sensu stricto (Ranunculaceae). J. Jpn. Bot. 83(3): 127-155.

Ziman S., Bulakh E., Tsarenko O. 2011. *Anemone* L. (Ranunculaceae): comparative morphology and taxonomy of the species from the Balkan flora. Botanica Serbica. 35 (2): 87–97.

---International Rock Gardener---

---From South America---

Seek and Ye Shall Find ... something else

John M. Watson & Ana R. Flores, Casilla 161, Los Andes, Valparaiso Region, Chile.
john.anita.watson@gmail.com

Published in International Rock Gardener (IRG 107) November 2018, pages 25 - 63

Introduction

It must by now be glaringly obvious to regular readers that we pair of Watsons are utterly obsessed by the Andean violas, mainly rosulate, known formally as *Viola* section *Andinium*.

For John, it all began in 1965 when Sydney Albury showed him Sampson Clay's 'The Present-day Rock Garden'. He was spellbound by Comber's black and white photos of them taken during his 1925 and 1926 Patagonian explorations, above all by the amazing sempervivoid *Viola coronifera* [fig. 1]. It lit an ambition to encounter them in the wild that has never been extinguished, and was first realised in 1971 and 1972 during the initial exploration of Chile, in that instance with Martyn Cheese and Ken Beckett (B.C.& W.). Fourteen species were registered over the half-year period [fig. 2], three of them not identified until years afterwards. Rather than satisfying, this merely stimulated the appetite, not least due to a frustrating, aborted attempt to meet up with charismatic *V. coronifera*. It took exactly two more decades to rectify that.

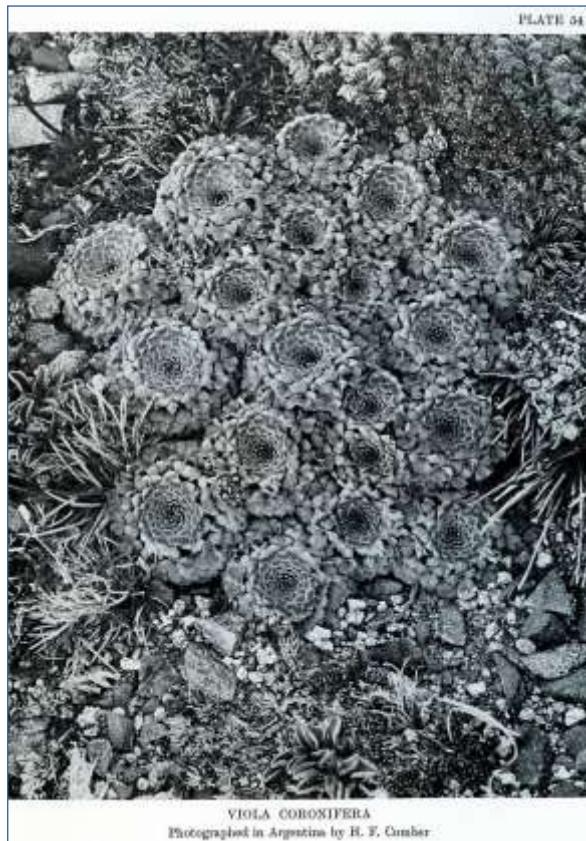


fig.1: Harold Comber's inter-war photo of *Viola coronifera* in Patagonia, the 1965 starting pistol for our ongoing rosulate viola marathon.



fig.2: B.C.& W.4634 *Viola escarapela*, one of the first rosulate violas ever that we found in the wild. Baños del Toro, Coquimbo Region, Chile. (Dec 1971. JMW)

---International Rock Gardener---

By inviting John in 1991 to contribute to the AGS Encyclopaedia of Alpines, the same Ken opened the door to their botanical history and possibilities. These became apparent at the Kew Library as all the literature associated with them was studied. The considerable overall total was revealed, even then something around 85 species. Above all, it became apparent no one had resumed study of them since the death of their outstanding historical expert Wilhelm Becker in 1928. Even he had only begun to scratch below the surface of their taxonomy and relationships. So they were up for grabs. By then we two had begun our life partnership together: so before anyone else did ... we grabbed! Living as we do in Chile, we also have the great advantage of being in the midst of them - in fact some can be seen literally 'just up the road' (see [The Rock Garden 133: 97-101, 2014](#)).

Logically, we began by seeking out those nearest to where we lived at the time, and added any encountered along the Pacific coast, as well as during tours we led in the central temperate Andes and Patagonia. But we became ever more intrigued by fourteen species (again that magic number) described and published by Becker between 1922 and 1928. These had all been found in a relatively limited sector of Andean outliers extending for about 750 km in north-western Argentina on the Atlantic exposure of the main range. Almost unbelievably, no living person at the time had seen a single one of them, and very few had been re-encountered at all since they were discovered during the very first years of the 20th Century.

A year before he died in 1995, our colleague the Argentinian botanist Ricardo Rossow told us he had spent his whole lengthy university teaching vacation searching for them ... in vain: he hadn't found a single one. It has to be admitted we took the snooty cavalier attitude that he must have left his glasses at home! How could anyone possibly not find at least one of fourteen needles in a relatively small haystack they were sitting on? We were soon to find out to chastening effect, because by then they had become a top priority for ourselves.

This far corner of our next-door neighbouring country, which lies over the other side of the main Andes, is not an easily accessible destination for us and requires planning, considerable resources and sufficient time to explore effectively. Before we'd even begun to think that far ahead in practical terms, an unmissable opportunity presented itself off the cuff.



fig.3: Our lovely friend Kim Blaxland. We were still showing her violas here in southern Chile with 2 days to meet Robert in NW Argentina! (5 Dec 2003. ARF)

At the very end of November and during the first week of December of 2003 we realised a long-standing arrangement with our dear fellow 'violaholic', Kim Blaxland [fig. 3], an Australian resident in the U.S., sadly no longer with us. Although her focus was strongly on North American violets*, she'd joined one of our tours and became fascinated by the particular and peculiar brand of these Southern Hemisphere species. So she booked to fly down and pay us a personal visit. As planned, we took her in our jeep down to north Patagonia and the adjacent volcano and monkey puzzle-clad sectors of Chile to show her as many of the different violas we knew there as was possible. In fact the short trip exceeded our wildest dreams as we discovered a new natural hybrid together, which we two published and named for her posthumously [fig. 4].

*Her husband Chris has created a wonderful website, [Botanikim](#), with all her work on the genus laid out as groups

---International Rock Gardener---

and species, copiously illustrated by her photos and drawings. It is a treasure store for any one, whether gardener, botanist (or both!) who loves these plants. We should mention that the layout is one page at a time, with ten species per page, and moving from one to another is achieved by clicking the instruction boxes 'older posts' and 'newer posts' at the bottom of each page.



fig.4: The new wild hybrid we found with Kim and named for her. *Viola x blaxlandiae*. Between Copahue and Laguna las Mellizas, Neuquén Province, Argentina (13 Jan 2010. Kees Jan van Zwienen)

Just before we started out with Kim though, we received surprise news from good friend Robert Rolfe. In early December he would be arriving at La Rioja Province, NW Argentina, the very place we were so desperate to visit ourselves, to see what Andean flowers he could during a flying visit. Offering to drive Robert around up there in our jeep was as much an outrageous excuse as a generous gesture, we have to admit!

The hastily revised itinerary left us with a distance of some 1200 km to cover in just three days [fig. 5], starting on the 5th December. It included seeing Kim off at the airport from our home halfway along the journey, and still arriving in good time to meet Robert in Chilecito on the 7th [fig. 6]. But we somehow managed it. Not only that, but after crossing over from Chile into Argentina, we traversed a stretch of desert in San Juan Province underway, and even at the speed we were travelling some eye-catching white cactus flowers caught our attention. They were too pretty to miss, even in our obligatory state of post-haste, so we stopped to make them the opening floral shots of this northern sortie. With all windows wound fully down the incoming air had been like an oven as we moved. Outside on the baked ground it felt like a furnace. We later discovered it had been over 40°C, the

---International Rock Gardener---

hottest we've ever experienced in our lives! The only equivalent was when, as a young untravelled National Serviceman in the RAF, John had stepped from the plane carrying troops from a dull English July onto the airstrip at Nicosia in Cyprus, where the air all around was shimmering with heat like a mirage, and thought he might die.



fig.5: Map 1. Southern South America. Our itinerary.
[1] With Kim, 5 Dec. [2] Home, Los Andes, 6 Dec. [3]
With Robert, 7 Dec. [4] Post Robert exploration, 13-19
Dec.



Left, above: fig.6: Map 2. Our brief 2003 NW Argentina viola hunt from where we met up with and left Robert to subsequent explorations. Positions shown of one general and two immediate maps as follow.

fig.7: F. & W. 13784A *Tephrocactus articulatus* var. *articulatus*, seen in the desert between home and meeting up with Robert. Beside National Route 40, San Juan Province, Argentina. (7 Dec 2003. ARF)

Cacti abound in Argentina, and can be found wherever conditions are dry enough, from the coast to the high Andes, and from the border with Bolivia down to the tip of Patagonia. Their taxonomy is notably difficult and subject to constant dispute between those who study them. But the recently published count by our good friend Roberto Kiesing, the undisputed expert of those in his native land, gives 225 species in 36 genera, with 130 of those species national endemics (Catálogo de las Plantas Vasculares de la República Argentina II). The species of refined elegance with *Cistus*-like white-flowers we now added to our photographic collection is one of those 130. It comes in two varieties, both mixed together in the large population we found ourselves among, and both having thoughtfully evolved without spiteful



---International Rock Gardener---

spines. *Tephrocactus articulatus* var. *articulatus* [fig. 7] has a completely bald structure apart from the small, pale, tufty areoles on their regularly spaced 'bumps'. Var. *papyracanthus* [fig. 8] is something else though. It decided it couldn't manage without spines, so Mother Nature partially repented and gave it a disorganised shock of harmless ones like long paper streamers!



fig.8:F.& W.13784B *Tephrocactus articulatus* var *papyracanthus*. An interesting variant with papery streamers in lieu of spines. Beside National Route 40, San Juan Province, Argentina. (7 Dec 2003. ARF)

We met up with Robert in time to arrange a room at his hotel in Chilcito and enjoy a meal at the best restaurant in town (what else with Robert?). Over the few available days together we drew one blank after another, and failed to add another plant worth having to our list. The first let-down came with the discovery the road into the high Sierra de Famatina alongside [fig. 9], our Great White Hope, was impassable. We next took the long, arid upwards road to the high Altiplano at the very border with Chile, which offered little more than endless vistas of straw-coloured bunch-grass for most of the way. At the very crossing into Chile we did at least notice a *Nototriche* ... but out of flower. Robert remarked wistfully a short time ago how he wished we had decided to carry on to Tucumán instead, which was to prove so rewarding for us after he left. Well, if the flora evaded us, at least we had a memorable time socially

together, with a great deal of fun and jollity thrown in.



fig.9: The Sierra Famatina, La Rioja Province, NW Argentina, which we tried in vain to reach with Robert, the massive snow-clad Cerro General Belgrano at over 6000 m in the background. (13 Dec 2003. JMW)

---International Rock Gardener---

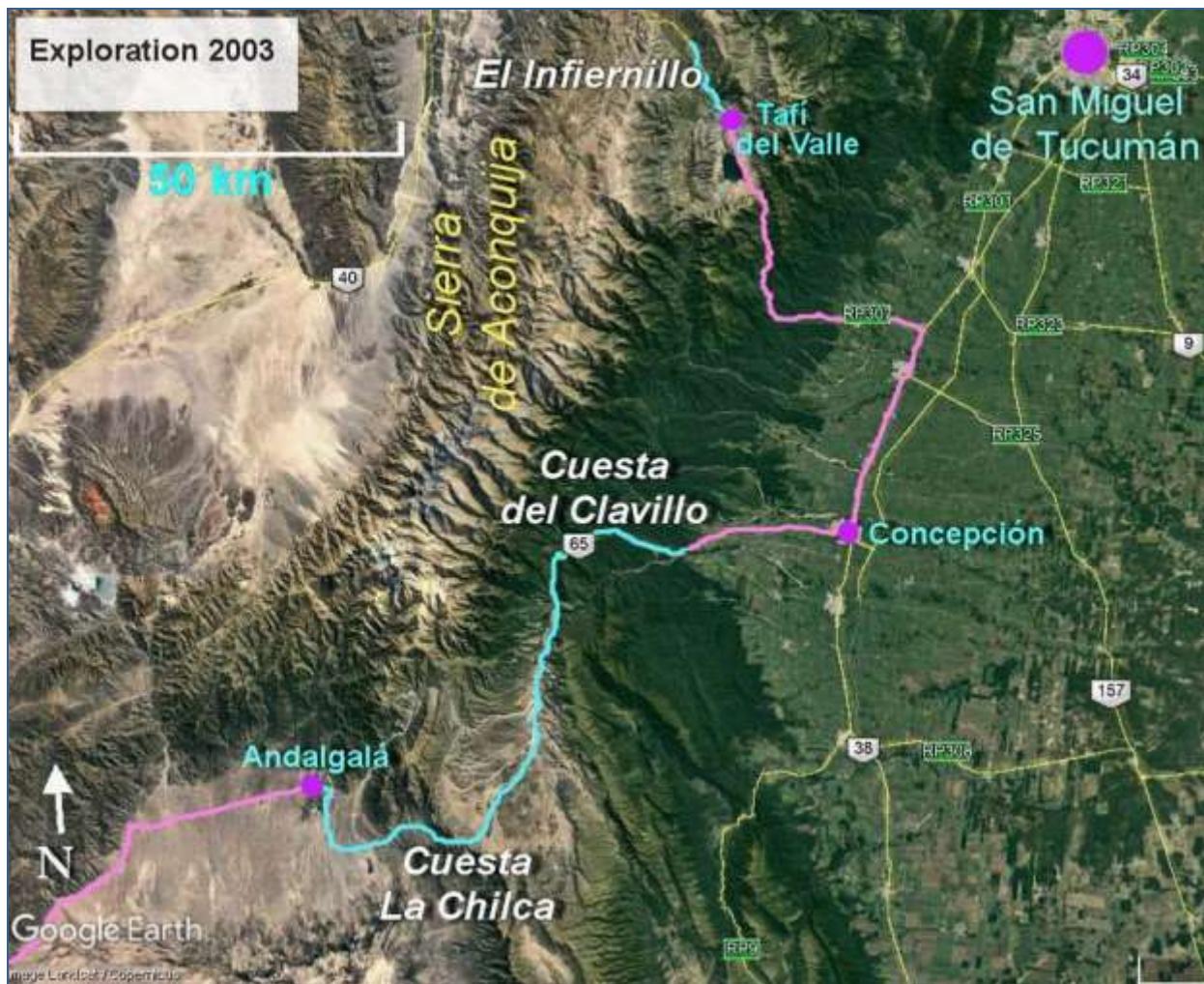


fig.10: Map 3. Route of area covered here in adjacent Catamarca and Tucumán provinces with two stretches of road marked blue where the following flora was found.

fig.11: Map 4. Starting in Catamarca Province and crossing into Tucumán. The first stretch of scenic road where we found much unfamiliar flora of interest on and between two passes.

Robert's flowery legacy

Even before Robert took a taxi from Chilecito on the 12th December to begin his journey home we two had decided to stay a week longer and try our luck at the more northerly of these Andean outliers - in Catamarca and Tucumán provinces [fig. 10]. All we found from now on would be down to his decision to come over here at that particular moment, and ours to join him.



---International Rock Gardener---

We chose to drive north along the flat western outskirts of the Sierra de Famatina, then follow the road bearing east around the lower edge of intervening heights to arrive at first base, Andalgalá. This town is situated below the southern extremity of the lofty Sierra de Aconquija range on the border of Catamarca with Tucumán. From there our proposed route would take us northeast across ruggedly undulating, heavily vegetated country, where we hoped the fun would begin [fig. 11], and out to join the main road to San Miguel de Tucumán, capital of the homonymous province. But before getting there, a branch road leads off to the northwest and our final crowning destination, the high pass of El Infiernillo [fig. 44], which we fervently believed just had to hold the only upper Andean flora in bloom of our entire journey. Surely we would find at least one rosulate viola there?



fig.12: Only in close-up did we realise why we photographed a grotty tree. Sing harder Cicada!
(13 Dec 2003. ARF)

---International Rock Gardener---

A short few kilometres to the east, after leaving Andalgalá and driving across the fringe of the arid, dusty surrounding plain, we reached the lines of hills and low mountain chains running north to south. Our road crossed over the first main stretch of these via the giddily serpentine Chilca Pass. Its western exposures are in the rainshadow of the moist Atlantic airflow and so have a relatively xeric flora, including trees with minimal foliage [fig. 12]. It was no surprise therefore to spot our second cactus, *Parodia microsperma* [fig. 13], a brilliant scarlet little fellow such as any one might find in botanical garden glasshouses or the collection of any fanatical devotee of the family.



fig.13: F. & W.10785 *Parodia microsperma*. W exposure of Cuesta La Chilca, Catamarca Province, NW Argentina. (13 Dec 2003. ARF)

The next discovery though brought us up with a jolt by its total unfamiliarity and wonderfully exotic appearance. In the case of this novelty, *Asclepias mellodora* [figs. 14, 15], its two photos here do indeed speak louder than a thousand words, as it would be difficult for the most accomplished and imaginative wordsmith to describe it. We'll have a go. The tight inflorescence contains around three dozen pale, waxy flowers, each with a light creamy yellow, gracefully swept-back star of a calyx and a pale flush column of five close-set, erect petal-pillars, each with a fierce white claw extending inwards and meeting the other four at the centre. The whole effect suggested some weird creature from the ocean's depths. The actual small bush which produced them was quite ordinary-looking and might have been taken for an oleander. This leathery-leaved, evergreen shrub cover offers some relief from the surrounding mainly sere, dry soil and dehydrated vegetation, and also provided our

---International Rock Gardener---

next surprise. Here we were at least perfectly au fait with its genus, *Mutisia*, a commonplace Asteraceae throughout the sectors of Andes we know. But apart from being a completely different and much larger plant vegetatively, *M. kurtzii* [fig. 16] does not sport the usual open fuzz or chalice of straw-yellow to orangey stamens. Instead these protrude as a narrow brush, constrained by a long, tubular, red-based involucre. Quite clearly this is a hummingbird evolved species. And why not? Thirty-six of these jewel-like little aerobats are recorded from Argentina (ref. Wikipedia), mostly here in the north, as opposed to our meagre ten in Chile, most of those right up in the tropical zone by the borders of Peru and Bolivia (ref. Martínez & González, Las Aves de Chile).



figs.14 and 15: F.& W.10790 *Asclepias mellodora*. W exposure of Cuesta La Chilca, Catamarca Province, NW Argentina. (13 Dec 2003. ARF)



fig.16: F.& W.11368 *Mutisia kurtzii*. Road to Mina La Mexicana, Sierra de Famatina, La Rioja Province, NW Argentina. (8 Feb 2007. ARF)

---International Rock Gardener---



fig.17: F. & W.10786 *Pelexia bonariensis*. W exposure of Cuesta La Chilca, Catamarca Province, NW Argentina. (13 Dec 2003. ARF)

The incredulity of the rather ordinary *Pelexia bonairensis* [fig. 17] on the other hand, was the simple fact of finding what might have been any old usual greeny ground orchid from Europe or the Mediterranean growing in these subtropical surroundings.

---International Rock Gardener---



fig.18: Life is short - so are my legs. A giant millipede in dry NW Argentina. Millipedes were one of the garden treasures of John's childhood days. (17 Dec 2003. ARF)



fig.19: Looking back west towards Andalaglá from the 1730 m crown of the Cuesta La Chilca at the rather spectacular serpentine road we've just driven up. (9 Jan 2006. ARF)

The time taken to reach the top of the pass had more to do with the excessive length of the incredibly tortuous road than the actual height involved, this being barely 750 m from base to top. But once perched on the crest we had an airy, distant perspective back along the valley we had just negotiated, with its intertwining skeins of road and river [fig. 19].

The other, eastern, side offered a complete contrast, a dense, lush patchwork of woodland, intersected by a narrow, green-carpeted valley - our route ahead. We might call it Andean montane subtropical vegetation influenced by frequent incoming moist Atlantic weather systems. To prove the point the yellow, brown-flecked epiphytic orchid *Oncidium bifolium* grew on branches high in the trees at one point.

---International Rock Gardener---



Left, above fig.20: F. & W.10794 *Clematis montividensis*. En route from Andalgalá to Concepción. Valley between the two passes, Catamarca Province, NW Argentina. (14 Dec 2003. ARF)
Right, above fig.21: *Clematis flammula*. (24 Dec 2011. JMW)

At this stage it almost amounted to a relief to find anything as familiar as an old man's beard to latch on to, in this case *Clematis montividensis* [fig. 20], much of a dead ringer for *C. flammula* [fig. 21]. The latter makes a pretty nuisance of itself by seeding all over our Chilean garden. With it, though, grew another we also had no difficulty in identifying to genus level, *Commelina erecta* forma *hamipila* [figs. 22, 23]. Its two clear blue, fancifully big-eared Disneyesque petals lend it the appearance of a cross between Dumbo and Mickey Mouse, but it would undoubtedly be a prize to treasure in anybody's collection. *Commelina diffusa*, which we also grow, is similar in colour and form but much smaller-flowered.



fig.22: F. & W.10793 *Commelina erecta* forma *hamipila*. En route from Andalgalá to Concepción. Valley between the two passes, Catamarca Province, NW Argentina. (14 Dec 2003. ARF)

---International Rock Gardener---



fig.23: F. & W.10793 *Commelina erecta* forma *hamipila*. En route from Andalgalá to Concepción. Valley between the two passes, Catamarca Province, NW Argentina. (14 Dec 2003. ARF)



fig.24: The lush valley connecting the La Chilca Pass with the Clavillo Pass. Catamarca Province NW Argentina. (8 Jan 2006. ARF)

Despite having covered little more than 50-60 km due to a delayed start and with so many interesting stops, it was late afternoon and we didn't want to find a worthy plant in the undergrowth we

---International Rock Gardener---

wouldn't be able to photograph to our satisfaction due to insufficient daylight. About halfway along the valley [fig 24] our mind was made up for us when we arrived at a sort of rambling, pub-like building in a larger clearing. Ah, refreshments and maybe a meal in prospect, so Anita would be saved preparing one. Inside was a sizeable group of fellows clustered around a wall TV showing a soccer match in progress. Maybe it was some international or other, as nothing was going on in the Argentinian league at the time, nor was the national team in action. But whatever it was, it was exciting, drawing appropriate roars and groans from the assembled company. One of us, John of course, got drawn into watching and trying to exchange comments in his inadequate Spanish. The food and drink was satisfying too, and left us with nothing more than the tent to erect for an early night.

fig.25: F. & W.10795
Siphocampylus argentinus.
En route from Andalgalá to Concepción. Cuesta del Clavillo, Tucumán Province, NW Argentina. (15 Dec 2003. ARF)

Next morning we awoke early, refreshed, to continue our intake of the rich biodiversity of the valley and next pass. We didn't have to wait long to add our first. It possessed red, yellow-tinged flowers, which, together with its conspicuously bulbous calyx brought to mind our shrubby Chilean lobelias. *Lobelia tupa* is the relatively familiar species from cultivation, and according to the most recent Plant Finder (2003-2004) on our shelves, was then available from more than 30 suppliers. No woody plant that one though: instead we were confronted by a tall herb fit to grace the most exclusive of herbaceous borders with its elegant spire of two to three dozen individual curved blooms on slender, extended

peduncles. Once back home we had the clue of *Lobelia* (now Campanulaceae) to work from, so quickly ran it down to the genus *Siphocampylus* and finally to *S. argentinus* [figs. 25, 26].



---International Rock Gardener---



fig.26: F. & W.10795 *Siphocampylus argentinus*. En route from Andalgalá to Concepción. Cuesta del Clavillo, Tucumán Province, NW Argentina. (15 Dec 2003. ARF)

Flowers weren't the only diversion along the way. We'd already encountered and photographed a cryptic cicada [fig. 12] and a giant millipede [fig. 18], the latter also seen later, and now another and famous arthropod caught our eye as we examined the dense, verdant foliage which included the *Siphocampylus*. Being such a human attribute, care of young by creatures further back down the evolutionary scale, most or all of whose equivalents leave theirs to fate, is something we find

remarkable and tend to publicise. The devotion of the male sea horse and mother wolf spider are two well-known examples, as also the attention of the earwig to her brood of helpless white nymphs.



fig.27: Offspring of the parent bug (Acanthosomatidae), so-called, as it looks after them until they're old enough to care for themselves. (15 Dec 2003. ARF)

Another of this ilk is the plant-sucking so-called parent bug (Acanthosomatidae), and here we had an example of a clutch of red, aphid-like recent hatchlings

---International Rock Gardener---

and their attendant nearby mum [figs. 27, 28]. Like butterflies, moths and beetles, a few of these acanthosomatid shield bugs produce some of the more memorable colours and patterns of the insect world, but many, such as ours here, can be inconspicuously dull, and accordingly she took us much longer to locate.



fig.28: And here is the Old Woman Who Lived in a Shoe with so many children she doesn't know what to do. (15 Dec 2003. ARF)

It is always a particularly satisfying pleasure to come across any plant in the wild which grows in one's garden.

Mandevilla laxa [figs. 29, 30], a deliciously scented denizen of two of our pergolas, met that

yardstick. Although known as Chilean jasmine (but belonging in the Apocynaceae, not the Oleaceae - never trust popular names), ironically it doesn't occur wild in the said country, only cultivated there in gardens such as ours! In its native habitat, where there are no handy pergolas, it drapes itself over low trees and large shrubs.

---International Rock Gardener---



fig.29: F. & W.10796 *Mandevilla laxa* (17 Dec 2017. JMW)

---International Rock Gardener---



fig.30: At home with us. F.& W.10796 *Mandevilla laxa* as raised from 2003 wild-collected seed.
(17 Dec 2017. JMW)

---International Rock Gardener---

fig.31: The road down the east side of the Cuesta del Clavillo pass, Tucumán Province, into the final stretch of our first session of intensive exploration in NW Argentina. (15 Dec 2003. ARF)

Shortly after that we reached and crossed the second and final pass, the Cuesta del Clavillo [fig. 31], before continuing on our way to join up with the main road to San Miguel de Tucumán. Due to regular precipitation, unlike the Chilca there was little variation in the wooded scenery or the type of flora on the pass itself, or from one side to the other. A slight exception proved to be showy *Agalinis genistifolia* [fig. 32], a herbaceous plant bringing somewhat to mind a grassy-leaved foxglove. It used indeed to be assigned to the Scrophulariaceae, but thanks to permitting its DNA to be checked, has recently been removed to the broomrape family, Orobanchaceae. (If it comes to that, and readers are not already aware of the fact, *Digitalis* was also rehoused in that upheaval - to the plantains, Plantaginaceae, along with many other genera. Anyone seriously writing up anything traditionally regarded as being a scroph: e.g. *Calceolaria*, *Ourisia*, *Mimulus* - aka *Erythranthe* as most now are, should check the current situation. Wikipedia is an easy e-route for that.) To return to the *Agalinis*, although this species may be found at very low elevations, its upper limit is 3000 m, and we are much more accustomed to seeing it on climbs to Andean zones.



fig.32: F. & W.10797 *Agalinis genistifolia* near the top of the Cuesta del Clavillo Pass, Tucumán Province, NW Argentina. (15 Dec 2003. ARF)

fig.33: There was so much different stuff to photograph all the time, one after another, that this is mostly the only view Anita had of John! In this case as he photographs *Colignonia glomerata*. (15 Dec 2003. ARF)



---International Rock Gardener---



fig.34: F. & W.10798A *Colignonia glomerata*. On the descent down the E exposure of Cuesta del Clavillo, Tucumán Province, NW Argentina. (15 Dec 2003. ARF)



fig.35: A tortoise beetle like a ladybird with negative colours, black for red and red for black. (15 Dec 2003. ARF)

In dense greenery by the roadside a shrub looked as though a fright or severe shock had turned some of its upper foliage white, in lieu of the hair it didn't possess. At first sight it resembled a poinsettia with albino bracts, but on closer examination it could be seen that these did not regularly surround the inflorescence, but were randomly distributed leaves, often some way below the very insignificant head of stingy white flowers. It cost us to identify back home, but we eventually pinned it down to *Colignonia glomerata* [figs. 33, 34] of the

Nyctaginaceae. Significantly, that is also the family of *Bougainvillea*, one of the best known plants with spectacular coloured bracts. Why white leaves? Well, white or pale flowers are often so-coloured to show up at dusk and after dark and thereby attract moths or other nocturnal insect pollinators. As the flowers themselves are so insignificant, and perhaps only contain the nectar reward and a faint scent, it may be that the leaves perform the flagging 'come hither' function. And while on the subject of insects, we immediately added our next, a tortoise beetle [fig. 35] as endearing as any ladybird.

---International Rock Gardener---



fig.36: F. & W.10799 *Ludwigia peruviana*. On the descent down the E exposure of Cuesta del Clavillo, Tucumán Province, NW Argentina. (15 Dec 2003. ARF)

Ludwigia peruviana [fig. 36] also threw us for a long time, as it might have any plant lover from the Northern Hemisphere. If it looks exactly like a dwarf dogwood, only yellow instead of white, surely it must belong in the Cornaceae too? Hang on though; all dogwoods are woody, yes? But this is not, so try some other four-petalled family. Obviously not a cress. But what about the willowherbs? Some of those are certainly stuck with four petals. Got it! The Onagraceae it is, where evening primroses can also be yellow with four petals.

---International Rock Gardener---

We owe identification of our next species along the route to vital clues kindly provided by Martin Gardner of the Edinburgh Botanic Garden. Our own attempts led to nothing closer than the Bignoniaceae. But this rather lax shrub with cascades of showy white blooms possesses a matching pair of lowermost corolla lobes, each marked with a pale violet central line, while Bignoniaceae and every other family we could think of has a single, lip-like bottom lobe. So we went a-begging to Martin for help, and he informed us that some of the Verbenaceae have inverted flowers of a similar pattern and suggested *Duranta serratifolia*, which it is [figs. 37, 38].



fig.37: F. & W.10801 *Duranta serratifolia*. On the descent down the E exposure of Cuesta del Clavillo, Tucumán Province, NW Argentina. (15 Dec 2003. ARF)

---International Rock Gardener---



fig.38: F. & W.10801 *Duranta serratifolia*. On the descent down the E exposure of Cuesta del Clavillo, Tucumán Province, NW Argentina. (15 Dec 2003. ARF)



fig.39: If it's a girl, we'll call her Twiggy. (17 Dec 2003. ARF)

Although we found no more plants worth bothering with in the developed countryside before we got to the mountains again, on one of the occasions we stopped for refreshment

Anita's sharp eyes did spot a stick insect [fig. 39] along the way for our 'beastie image collection'.

---International Rock Gardener---

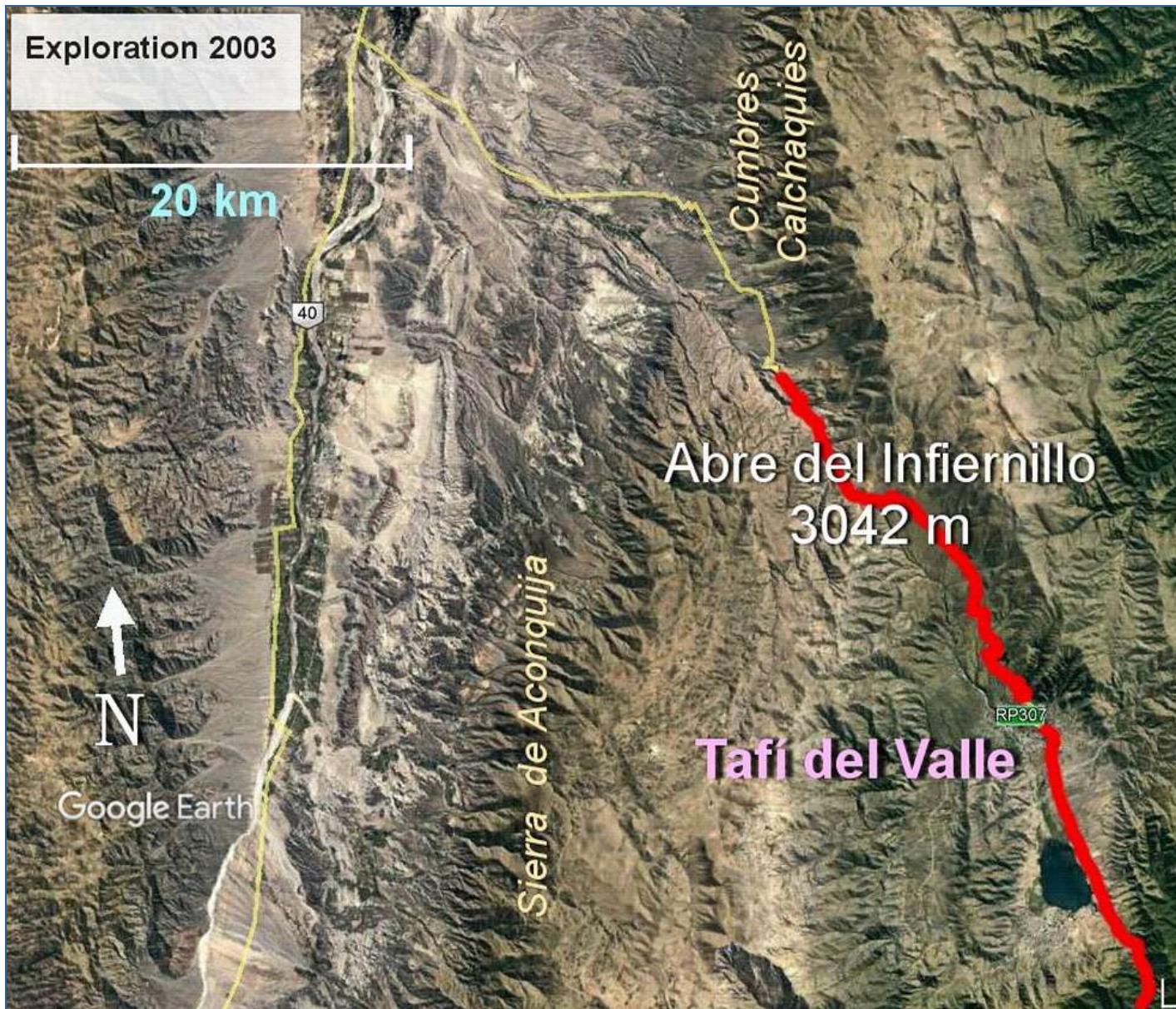


fig.40: Map 5. The outlying heights of Tucumán Province showing our route through Tafí del Valle to the high pass of El Infiernillo - where we found our very first high Andean plants of NW Argentina.

After another night's camping we now embarked on the 100-odd km road journey to the final, most far-flung, and what we hoped would be the most promising stage of our journey, the El Infiernillo pass over these notably biodiverse, outlying Andes [fig. 40]. We reached Tafí del Valle below the pass in good time to make some inquiries about the possibility of guides and horses for an intended ambitious future exploration. Our hopes were aroused when a group of students and their guide returned from a day's trek. But then they were dashed on our being informed that there were only fixed circuits, and the guide would not deviate from them. To save the hassle of moving on and camping again, we decided to overnight in a small guest house. This only brought more misery, as swarms of mosquitoes attacked us before we had time to set up our tent inside the room and seek refuge under its protective netting. There's a lake just to the east, the Dique de Angostura, an obvious breeding ground, so we should have been forewarned. Never mind, the next day made up for it by paying off in spades such that we forgot to scratch the itchy bites even!

Tafí of the Valley sounds so essentially Welsh with its 'Taffy' sounding name and hint of Richard Llewellyn's 'How Green Was My Valley'. We'd hardly left its environs before being hit in the eye by a plant in the slanting morning sunlight that might have been transplanted from the very first alpine

---International Rock Gardener---

nursery John knew as a 15-year-old, Robinsons' Hardy Plants of Sidcup, Kent [fig.65]. Ostentatious red *Glandularia peruviana* [fig. 41] is looked at way down the nose from a superior height by alpine plant connoisseurs. Apart from its blatant vulgarity, it is condemned for being anything but a mountain plant. (What did the Robinsons care, they made a pile out of it!) In fact here it was at around 2300 m, and we have even seen it higher still in Catamarca. It can indeed be lowland, but so too can *Morisia monanthos* and other favoured alpines if it comes to that. Let us end the argument in glandularia's and our favour by saying Mother Nature always knows best. A white butterfly settled on it and fed avidly, reminding us how we have seen another such pierid, perhaps even the same species, on red *Tropaeolum tricolor* in a hedgerow near our home. Some butterflies are among the few insects with good red vision.



fig.41: F. & W.10803 *Glandularia peruviana*. Encountered quite low down, near Tafí del Valle, Tucumán Province, NW Argentina. (17 Feb 2003. ARF)

Our attempts to capture the restless white butterfly on camera came to little. Well never mind, it looked boringly common ... or was it? Never write off any insect in South America because it looks like a familiar one back in the Northern Hemisphere. A lady scarab or dung beetle beginning to work up the globular foodstore of horse deposit for her larvae to be [figs. 42, 43] was more cooperative in the matter of having a portrait taken. She also took John back to his military Cyprus days again when he first saw her kin.

There has been much debate as to when the first sporting ball was invented, and by whom. Received opinion suggests the Ancient Egyptians, as some sort of game is depicted on their earliest monuments of about 3000 BC (Wikipedia). Now here's an interesting connection. The scarab was sacred to that culture. Surely then there can be little doubt they copied theirs from these fascinating beetles, which were constructing something as perfectly spherical and about the same size as a golf ball millions of years before we humans even appeared on the scene?

---International Rock Gardener---

fig.42: And here's one that's sacred to the Egyptians - if not the Argentinians. (17 Dec 2003. ARF)



fig.43: Well, we put her back down to get on with her business - or rather others' business! She's going to have a ball. (17 Dec 2003. ARF)



---International Rock Gardener---



fig.44: Looking down and northward at Abre del Infiernillo, the pass above Tafí del Valle at just over 3042 m, Tucumán Province, NW Argentina. (23 Feb 2007. ARF)

El Infiernillo Pass [fig. 44] continued the strong primary colours begun by *G. peruviana*: reds, yellows and blues were all well represented. Upper mountain plants they may be too, but many were no more familiar than their nearby lowland cousins.



fig.45: F.& W.10805 *Physaria mendocina*. El Infiernillo, Tucumán Province, NW Argentina. (17 Dec 2003. ARF)

Let us begin with yellow, and what is obviously a Brassicaceae. But which? First note any from Argentina found in Tucumán at 3000 m. Following massive elimination on various scores, six species in six genera remain. A more detailed investigation reveals that all are totally different from ours except for one, then a *Lesquerella* now *Physaria mendocina* [fig. 45]. It fits the bill to perfection. Easy to be wise after the ident. We now know from following up the name that there are heaps of the things in North America, also mostly transferred to *Physaria*, and only one down south with us here. Even

---International Rock Gardener---

that, though, was included a decade later in Martin Sheader et al.'s admirably comprehensive 'Flowers of the Patagonian Mountains', as it ranges from the border with Bolivia to northern Patagonia. We're never too old to learn! This little dwarf is a must for adding to any list of mountain plants worthy of introduction.



fig.46: F.& W.10810 *Airampoia corrugata* (syn. *Tunilla*). El Infiernillo, Tucumán Province, NW Argentina.(17 Dec 2003. ARF)

Airampoia corrugata [figs. 46, 47] belongs in the well-known opuntia group of cacti with flat pads rather than columnar bodies. In fact until not too long ago all were actually collected together under the genus *Opuntia*. Roberto came up with the ID for us, just as he did with the earlier *Parodia* cactus [fig.13]. Certainly we're not going to blunder in where angels fear to tread (and who could blame them with those spines!). He provided the following note as translated: "*A. corrugata*, syn. *Tunilla corrugata*. This genus is poorly understood and we do not know the boundaries between its species thoroughly. I have adopted a compromise solution. Those found from Mendoza to Salta provinces are *A. corrugata*, while those more to the north which are not *A. soehrensenii* are *A. airampoae*. I am cultivating specimens from a wide number of locations to see how they develop under similar conditions (sadly, they are not doing particularly well!). At El Infiernillo I myself found specimens with different coloured flowers from yellow to red, but they almost always have a green style, like yours."

For those who adopt the same 'not plants of the alpine persuasion' dismissal of cacti as for *Glandularia peruviana*, we would note that 3000 m is far from their upper limit. Some inhabit these high central Andes up to at least 4500 m.

fig.47: "Good night. Sleep tight." A dozing bee in F.& W.10810 *Airampoia corrugata*. El Infiernillo, Tucumán Province, NW Argentina. (17 Dec 2003. ARF)



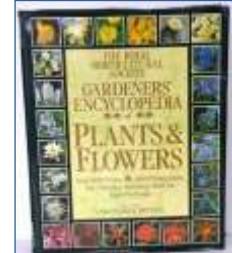
---International Rock Gardener---



fig. 48: F. & W. 11339 *Stenandrium dulce* at El Infiernillo - one any alpine enthusiast might consider worth travelling to South America to lay their hands on! (8 Jan 2007. ARF)

A different sort of shock was provided by the next to come to our attention. It was the last thing we expected to see: we only knew it previously from the Chilean side of the Andes close to the Pacific coast. *Stenandrium dulce* [fig. 48] is a sweet little dwarf; sweet, as its Latin epithet tells us. That it is one of the Acanthaceae family takes some swallowing, so unlike those we are familiar with in cultivation is it. The genus even, let alone the species, was quite unknown to John when he added the Andean flora to the AGS Encyclopaedia in the early 90s: nor is it represented in the RHS Encyclopaedia of Garden Plants or The Plantfinder on our home shelves.

All perhaps rather surprising, since we have subsequently discovered that this *desideratum* ranges between 0-3000 m in eighteen Argentinian provinces from the extreme north to Patagonia, as well as seven regions in central Chile. It is also registered from Paraguay and Brazil. We can point out however, that Michail Belov (a Russian emigré settled in Chile who speaks good English!) lists seeds of it for sale on his website, Chileflora. And, by golly, it would be worth anyone's time and trouble to send for it and try their luck. By contrast the genus *Nothoscordum* hardly sets the world on fire, but *N. andicolum* [figs. 49, 50], which grew close by, looks a little choicer and less invasive than many of its ilk, with more sizeable and slightly violet flushed perianths.



---International Rock Gardener---

figs.49, 50: F. & W.10812 *Nothoscordum andicolum*. El Infiernillo, Tucumán Province, NW Argentina. (17 Dec 2003. ARF)



fig.51: F. & W.10809 *Evolvulus sericeus*. Amaicha del Valle, Tucumán Province, NW Argentina. (17 Dec 2003. JMW)

---International Rock Gardener---



fig.52: F.& W.10814 *Ipomoea hieronymi* var. *calchaquina*. Amaicha del Valle, Tucumán Province, NW Argentina. (17 Dec 2003. ARF)

---International Rock Gardener---

After looking around the crown of the pass where these were found, we crossed over and down the other side to the west for a bit, blissfully unaware that on the way we'd passed one of our sought-after violas by no more than a few tens of metres. It was in the sector of Amaicha del Valle lower down that the next beauties appeared in the form of two highly contrasted Convolvulaceae. There is little to distinguish the genus *Evolvulus* superficially from well-known *Convolvulus*, either in flower shape or growth form. But the royal blue of the otherwise *C. arvensis*-equivalent flowers of *E. sericeus* [fig. 51] brings you up short, even if you know **C. tricolor*. In any case the latter usually has a far more extensive white centre to its larger funnels, and a twining as opposed to prostrate and branched habit. A related, nearby companion beside the road at Amaicha was yet more spectacular and exotic though. The typical variety of *Ipomoea hieronymi* is a vigorous climber, located in seven northern provinces up to 1600 m. Without doubt it's a lovely plant, as images on the Internet show, but the very locally distributed *Ipomoea hieronymi* var *calchaquina* [fig. 52] wins out for us as being much more compact and prostrate, with choicer glaucous, not green foliage, although the actual flowers are identical in every respect. It takes over in the Andes where var. *hieronymi* leaves off; reaching a maximum elevation of 2500 m, so must be hardier. It can be taken as a symbol of just how many wildlings in this region would be welcome introductions for even the most discriminating plantsman. Morning Glory though? Come off it! This one is equally glorious at noon, in the afternoon, the evening, and maybe at night too, for all we know. We've never passed by without being captivated by its display.

*Not to be confused with *Ipomoea tricolor*.



fig.53: F. & W.10813 *Hieronymiella marginata*, El Infiernillo, Tucumán Province, NW Argentina. (17 Dec 2003. ARF)

Even allowing for our '24 hour glory' and other shrubs, taller herbs and cacti, the flora encountered at the Infiernillo sector was much more to the refined taste of alpine plant enthusiasts. Bulbs have a huge following, and any of the small and highly variable amaryllid genus *Hieronymiella*, all exclusive to Argentina except for one shared with Bolivia, would surely receive a warm welcome from the vast majority who do not already know and grow them (Pacific Bulb Society members cultivate one or two). Unlike the four white and yellow species with flaring skirts for perianths, in common with a good number of other South American amaryllids, *H. marginata* [fig. 53] (to 4000 m) has long-tubular red or reddish hummingbird-adapted perianths. We later discovered the most likely customer to be the gleaming little red-tailed comet, *Sappho sparganurus*, which is common around Aimacha, and visits garden kniphofias there for a good draft of nectar. Once seen, never forgotten, with its forked and banded 'empennage' as long as the body, which opens and closes like a pair of scissors as it hovers and feeds.

---International Rock Gardener---

fig.54: The ants' *Senna* petal gold trail. (17 Dec 2003. ARF)

During our Amaicha stops we could hardly have failed to miss one fascinating natural phenomenon: a column of ants marching from a bright yellow-flowered *Senna crassiramea* shrub to their nest, holding on high like flags its cut petals up to ten times their own size [fig. 54].



Above - fig.55: F.& W.10817 *Asclepias curassavica*. Crossing Catamarca Province, NW Argentina on the way home. (19 Dec 2003. ARF)

fig.56: *Asclepias curassavica* in our Chilean garden. (21 Apr 2017. JMW)



---International Rock Gardener---



fig.57: F. & W.10819 *Caesalpinia gilliesii*. Crossing Catamarca Province, NW Argentina on the way home. (19 Dec 2003. JMW)

---International Rock Gardener---



fig.58: *Caesalpinia gilliesii* self-sown in our Los Andes garden. (4 Dec 2011. JMW)

---International Rock Gardener---



fig.59: F. & W. 1018 *Ipomoea cairica*. Crossing Catamarca Province, NW Argentina on the way home. (19 Dec 2003. ARF)



fig.60: Snap! The same *Ipomoea cairica* on our front wall at home in Chile. A view from the street. Note *Clerodendron bungei*, which has escaped out under the wall! (20 Apr 2017. JMW)



Above - fig.61: Our humble abode as it looked a year after our return. Note car entrance on right. (22 Oct 2004. ARF)

fig.62: Another shot of *Ipomoea cairica*, a pride and joy of our street front, 13 years later. The car entrance has been painted black. (20 Apr 2017. JMW)



---International Rock Gardener---

Although we left it until the absolute latest we dared, with reluctance we eventually had to return hastily back via Catamarca and San Juan provinces and the Portillo pass over to Chile.

Appropriately, it was during this last, flat stage that we were given ever more frequent reminders by the flora of our 'home sweet home' (or to be more precise, 'garden, sweet garden') to add to the earlier *Mandevilla laxa* [figs. 29, 30] encounter. The species concerned, all well-known in cultivation, were the subshrub *Asclepias curassavica* [figs. 55, 56], the woody shrub *Caesalpinia gilliesii* [figs. 57, 58] with its starburst of incredibly long stamens like some miniature fireworks display, and *Ipomoea cairica*, trailing over the ground as we saw it in the wild [fig. 59]. We had great difficulty trying to get this last going in our own plot; and now it's thoroughly well established, would find it even harder to stop ... as if we want to! Despite dying right back in winter it festoons its way all the way along the top of our front wall [fig. 60], scales the flagpole, curtains down one side of the entrance [figs. 61, 62], and flowers profusely all summer and autumn long until cut down by the first heavy frost. What more could we ask?

Near the end of our journey across Argentina we drove through a small storm towards dusk which, as it cleared up, was lit up at one point by a full rainbow [fig. 64]. Although the damned elusive violas had given us the slip this time ('They seek them here, they seek them there, those Watsons seek them everywhere ...'), our trip had been full of ample compensations and we hoped the rainbow might augur better luck still for the future. Indeed it did. In 2007 our prolonged and carefully organised exploration eventually yielded four or five different violas after much scouring of these isolated Andes in NW Argentina. Even so, a dozen remain unseen, as we only lit upon two of the known fourteen, one being *Viola joergensenii* [fig. 63]. The other two or three we collected and photographed are undescribed new species though, so we're not exactly complaining!



fig.63: And four years later we finally hit the jackpot. F. & W.11397 *Viola joergensenii*, one of several we found then in those NW Argentinian Andes. (13 Feb 2007. ARF)

---International Rock Gardener---



fig.64: A rainbow such as we saw over the Andes earlier during that NW Argentinian trip - offering us good hope for better luck seeking violas in the future. (18 Jul 2013. JMW)

---International Rock Gardener---



fig.65: How things began for John Watson. Three Generations at unsung Robinsons' Nursery before World War 2, the founder seated, front. He knew them all. (photo courtesy of Alan Robinson)

---International Rock Gardener---

---SRGC NEWS---



At the Annual General Meeting of SRGC on 10th November 2018, the Club welcomed Julia Corden as our new president.

Julia Corden has been involved with SRGC for longer than it is polite to mention! Julia, from Pulborough in Sussex, studied at RHS Wisley and the RBG Edinburgh and also has experience of working in the likes of Inshriach nursery and great public gardens. For many years now she has been the garden manager at the Explorers' Garden in Pitlochry, where she oversees tremendous advances to this popular garden.

Her involvement with SRGC has seen her serve in many capacities at local and national level, including as Show Secretary for Perth, as Administrator of the Diana Aitchison Student Grant Fund and as organiser for several Discussion Weekends and other SRGC events. Julia travels the UK and abroad as a Speaker, always using the opportunity to publicise the Club, wherever she may be. Julia is also a freelance Botanical/Garden tour guide and this work, along with many private trips she has made, as well as with expeditions aided by

SRGC, mean she has first-hand knowledge of the flora of a great many countries of the world and connection to gardeners and the wonderful SRGC members and members of sister organisations around the world.

The Scottish Rock Garden Club is very important to Julia - she is deeply committed to the objectives of the Club to spread knowledge and build an international community of plant lovers - there can be no doubt she will work tirelessly to this end. We are fortunate - and delighted - to welcome Julia as our President.



Julia Corden by a fine plant of *Haastia pulvinaris* var. *minor* in New Zealand.

---International Rock Gardener---



Julia's interest in plants began at an early age – here she is, aged just four, with her winning entry in a local Pulborough flower show.



Her beloved spaniels, Poppy and Bracken, play a big part in Julia's life. (Photo Simon Shire)



George Anderson (MBE VHM and the Hon. President of the Royal Caledonian Horticultural Society) at an SRGC Show, interviewing Julia about George Forrest, for the Beechgrove Garden BBC TV programme.

---International Rock Gardener---



Post graduation photo at RBG Edinburgh in 1987 – Julia Corden centre, with, far right, a younger George Anderson - working even then at RBGE.



Julia's own photo of the Moon Gate in the snow at the Explorers' Garden in Pitlochry, Perthshire and a reminder of a twenty day trek she was part of in Bhutan.

---International Rock Gardener---



Julia among the plants – above, in South Africa and below, in South America

