

# International Rock Gardener

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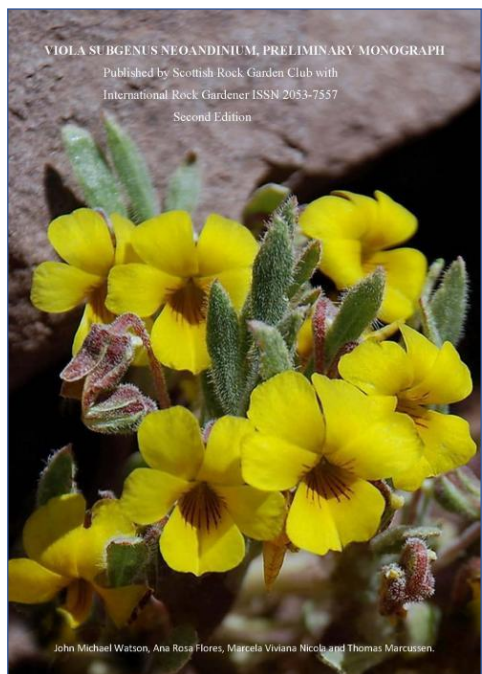


In this IRG: Robert Rolfe highlights the charming *Viola dubyana* and Başak Güner Gardner and her husband Christopher Gardner write about some "Variable violas".

Başak and Chris run [Viranatura Tours](#). Başak Gardner, who qualified with an MSc in Botanical Taxonomy at İstanbul University, began leading botanical tours in 2004. Basak is also an accomplished book designer and in 2014 designed '*Flora of the Silk Road*' a major photographic book with her husband Chris, followed by '*Flora of the Mediterranean*' (2019). She is also very much involved with the design of the revised '*Illustrated Flora of Turkey*' an exciting new ten-year project to update one of the world's great floras. Chris Gardner is a lifelong plant enthusiast and naturalist. He gained a BSc in Horticulture from Reading University in England and spent fifteen years as a professional horticulturist and garden designer. A veteran of over 150 tours, he is also a very popular speaker and an acclaimed photographer. He and Başak live in Beycik, near Antalya with their two sons.

Over the years the IRG has proved how popular the genus *Viola* is, with various articles by John and Anita Watson on their favourite "rosulate violas" on South America.

The Scottish Rock Garden Club was proud to announce the publication the Watson's monograph in an online version and also a new edition of "Viola subgenus Neoandinium, Preliminary Monograph - Second Edition" by Watson, Flores, Nicola & Marcussen in 2022.



The monograph may be [downloaded here](#), free of charge.

Sadly, John and Anita have recently been plagued by ill health but we all wish them better health in 2024 – something that we wish for all our wonderful contributors and readers.

May the coming year bring success in all your projects – and health to all – including our plants!



Cover image: *Linum perenne* subsp. *alpinum*, photo Robert Rolfe.

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## --- In the Mountains ---

### ***Viola dubyana*: a northern Italian endemic with a Swiss connection**

**Robert Rolfe**



*Viola dubyana*

Although reputedly at present available, I've not witnessed authentic *Viola dubyana* in cultivation for almost 20 years. What is probably a vigorous form of *V. altaica* is its habitual stand-in. And until this June, I hadn't seen it on home territory for longer still, dating back to the same month but in 1991.

That first encounter took place on Monte Tremalzo, where I stayed overnight at the Rifugio Garibaldi (1,522m), 'temporarily closed' throughout the summer of 2023, according to the website. This time round, I searched five miles to the south-west, near to Cima Tombea, a mountain long renowned among alpine plant enthusiasts. The highest village thereabouts is picturesque Magasa (985m), from where it is a steady, sometimes fairly steep uphill slog to the top. I was even further away, staying in the hamlet of Persone (890m). Bus services are few and far between, so too taxi drivers, but I managed to secure one of the latter through the local tourist office ([info@valvestino.it](mailto:info@valvestino.it)). While he spoke no English, when it came to driving skills, reliability and good humour he was exemplary, his help invaluable.



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Cima Tombea and M. Caplone, viewed from the south.

I was taken as far as Denai (1,216m), a halt with a few scattered buildings and farmsteads. From there, it is 15 minutes' walk to Pilaster, beyond where I'd been told that vehicular progress was out of the question. Not so. The track, paved in part, would not trouble a 4WD (I saw a Land Rover parked a couple of miles further on) right up to the cowsheds below Cima Tombea, and would allow longer at that destination. I've since read that cars are banned and as such assume that this was a ranger's vehicle. Two-wheel transport is permissible – the only two people I encountered were riding mountain bikes and a few days afterwards a cycling tournament was scheduled to take place.

Anyway, I walked, at first through glades where *Geranium phaeum* abounded in semi-shade, with *Euphorbia nicaeensis* preferring sunnier sites. This showy spurge has parented Blackthorn Nursery's *E. 'Blue Haze'*, with *E. seguieriana* subsp *niciciana* as the mother plant. *Arnica montana* and the occasional white *Pulsatilla alpina* were also in evidence. The geranium is of course a widely grown, reliable garden plant, unlike the helleborine found just a little further along, *Cephalanthera longifolia*, often with single spikes but optimally forming clumps and colonies stretching back and up steep, wooded slopes, which they occupied in good numbers. Other than a solitary, handsome spike of *Orchis mascula*, it was the only orchid seen all day.



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*Geranium phaeum*



*Euphorbia nicaeensis*





*Cephalanthera longifolia*



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Several massive bluffs, blackish mineral-striped and – this year at least – dripping wet, were passed under (and aside) to the right before, at around 1,550m, a sharp turn led to a rock face with a small scattering of that reliable indicator plant *Paederota* (*Veronica*) *bonarota*, accompanied by *Primula spectabilis* (long past flowering) and *Gentiana clusii*, far more profuse hundreds of metres higher but here with the white, spotted throat markings outlined as if by heavily applied mascara. These overlooked a smattering of *Linum perenne* subsp. *alpinum*, the rather fragile flowers having just opened in response to the mid-morning sunlight. The clone ‘Alice Blue’ does duty for this in gardens and is best grown in a trough, where its fleeting display can be admired at close quarters.



*Paederota bonarota*



*Gentiana clusii*





*Linum perenne* subsp. *alpinum*

To my delight, the first scatterings of *Viola dubyana* were also evident, in the main either side of the track, in the stony ditches, occasionally in crevices or positions free of any other substantial competition, and again in stabilised scree. Some of the best plants beautified a slippage where the vegetation was only just beginning to re-establish, this including slightly sinister *Scrophularia canina* subsp. *hoppii*, the Alpine Figwort, the species distributed in several versions from the Pyrenees to central Italy, with blackish flowers, their lobes white, arranged in branched spikes, here around 40cm tall, in places at least half that height again.



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*Viola dubyana*



Upper path east to Cima Tombea



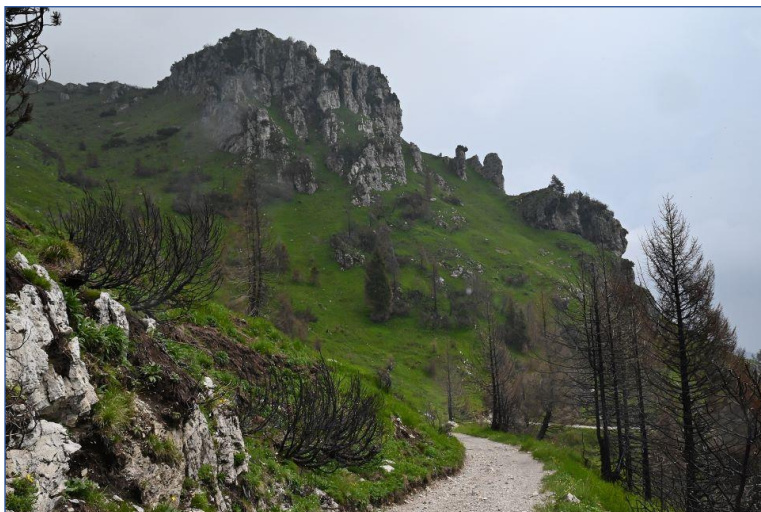
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Another favoured habitat was beside, below, and sometimes directly beneath very loosely gathered, sawn pine branches blackened by fire. I doubt this presence can be attributed to the potash created: more likely, an absence of competitors in the newly cleared, disturbed ground gave encouragement. In 2022 the summer was bone dry, the level of Lake Garda successively dropping 2cm each day: in June 2023, there were nightly/mid to late afternoon mighty downpours, thankfully, the subsequent, rapid recovery of temperatures to around 30C engendering vast clouds of steam over many miles across the wooded valley systems.



*Viola dubyana* colonising a cleared slope.

Dead, fire-damaged trees below  
Cima Tombea





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Ubiquitous *V. biflora* was also present – I didn't manage to find the two growing sufficiently close to incorporate in a single image, yet such a conjunction is highly likely. Another member of the genus, *V. calcarata*, is absent but occurs not so very far away, the other side of Lago d'Idro on Monte Columbine (2,215m) and, a little to the north, along the Passo di Croce Domini (1,892m). One hundred years ago the annexation *V. calcarata* var. *dubyana* was published. At the conclusion of this article I'll mention a legitimate subdivision of wide-ranging *V. calcarata* but the one just cited can be consigned to history.



*Viola dubyana*

Most agree on the upper altitude limit for *V. dubyana* at around 2,100m. After that, you often run out of mountain in these regions. The lower marker is variously given as 700m, 1,000m and 1,500m, the last of these too rarefied, both from personal knowledge and on the evidence of a photograph taken in the Bergamasque/Orobic Alps on M. Zucco at 1,191m, blooming atypically early, in March. May to early July is the main flowering season, with further modest salvos throughout August (and September in gardens, if it has been cut back and liquid fed after the main late April/early May performance. Greenfly and red spider mite – its principal foes in cultivation – must be kept ruthlessly in check).



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Its west-east distribution is book-ended by two of Italy's three largest lakes – a span of some 80 often scenic miles from Como east-south-east to Garda, involving two provinces, Lombardia and Trentino-Alto Adige. Lake Garda, 34 miles long and from 2-11 miles wide, acts as a block to its further eastward expansion, in common with *Daphne petraea* and *Silene elisabethae*. Isolated reports of *V. dubyana* on M Baldo are highly dubious.

Many of Europe's finest violas are restricted by rock type and habitat delimitations, in extreme cases such as the *V. cenisia* affiliate *V. comollia* to just a handful of mountains (in that species centred on Pizzo del Diavola, above 2,000m, well to the north of Bergamo). *V. dubyana* is invariably, in all likelihood *only* found on limestone, whether that substrate takes the form of trackside rubble, open scree, cliff fissures or bedrock. It eschews vigorous competition yet I once saw it popping up amidst with *Paederota bonarota*, then, within a stone's throw, in a similar entanglement involving *Physoplexis comosa*, and this time round in the proximity of *Carex baldensis* and *Bellidiastrum michelii*. It was frequent up to around 1,750m, almost to the Bocca di Cablone, whereat the track turns sharply eastwards, first to Cima Tombea, then M Caplone. Several wartime tunnels, burrowed into the cliff faces, the open doors complete with lintels, provide handy shelter if bad weather strikes.



*Carex baldensis* and *Viola dubyana*



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*Bellidiastrum michelii* and *Viola dubyana*

I've selected a few variations on a theme, the flower profile by degrees ample to almost rounded, or else angular, the petals overlapping or separated in the main; some more faintly blotched and black-whiskered but always with a yellow eye that can be white-bordered below. They are typically, pleasingly, a little top-heavy. Anything above c. 20-25mm or so (corolla length) and you have nurtured an imposter. I recall brief ownership of a pale lilac exemplar, seed sent my way second-hand from *Viola* aficionado Gerd Knoche. After that, Peter & Penny Watt's 1990 introduction (Cima Tuflungo, 1,500m, limestone scree) yielded a few now-you-see-them, now-you-don't offspring, as did their 2001 re-introduction (M Tremalzo, 1,600m, 'crevices and debris at the base of limestone cliffs).

Starved in fine, dry scree, plants barely reach 5cm tall but in more suitable conditions 10-20cm is typical, extending to 30cm at a later, straggly stage in their growth cycle. It's in any event more a biennial than a perennial species. I estimate a lifespan of at most three years on average, in part because (unlike other European scree dwellers such as *Viola cenisia* and



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*V. albanica*) it doesn't increase by subterranean runners. All the growth emanates from a single stock. The foliage differs very noticeably from these, for while the basal leaves are orbicular, the upper ones are narrowly lanceolate or linear.

Harvest seed and sow at least twice every year. You can tell straight away if the original issue is genuine, for the dimensions are telling – under 1mm (and pale brown or light fawn). It rivals eastern Austrian/Carpathian *V. alpina* and southern Greek *V. poetica* (also from limestone mountains and miniature) in my affections among the European members of the genus. Both I've grown with a measure of success; both have succumbed to hot summers.



*Viola dubyana*

*Viola dubyana* Burnat ex Gremli was published in *Excursions fl. Schweiz* (1878). Émile Burnat was a nineteenth century Swiss botanist (1828-1920), commemorated by *Fritillaria burnatii* from the area west of Lake Garda. August Gremli (1833-1899), also Swiss, published works on the flora of Switzerland, the Maritime Alps, and northern Italy. A third countryman, Jean Étienne Duby (1798-1885), studied theology in Geneva and became a parish priest with an abiding interest in botany. He could hardly have a better memorabilium.

Several other favourite European violas once grown with repeated success by alpine enthusiasts are also named for eminent botanists.



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First in my list comes *V. calcarata* subsp. *zoysii*, a yellow form of which (it can also be purplish) was offered by a number of British nurseries from c. 1970 onwards to the end of the twentieth century. Karl von Zois (1756-1799), came upon it in the Slovenian Karavanke Mts c. 1786, a disjunct outlier of the species also recorded from Serbia, Bosnia, Montenegro and Albania but surely not Austria, whatever you might read. Where nursery catalogues are concerned, I can trace it back as John Kelly's Stanton list for 1971: 'A rare and beautiful geographical variant of *V. calcarata* and a much better garden plant... can be grown in the open but better in the alpine house'. (It came to occupy almost half of a semi-shaded alpine house, filling 30 cm pans). After this Inshriach (Jack Drake's) 1974 autumn list, where it was advertised as forming 'beautiful tufts of bright green leaves... covered with delightful bright yellow violas. Very choice'. It was still offered by this firm up to at least 1992, and after that by Edrom Nurseries, when Jim Jermyn was at the helm, including in the 1995-1996 catalogue. But now?

*Viola doerfleri* had a latterday, briefer flourish from a couple of introductions made in the 1990s, but was first mastered by Paul Giuseppi, whose exhibit received an RHS Preliminary Commendation in 1937. Another boom-and-bust species, which I witnessed in spectacular abundance on Greek Macedonian Kajmakčalan, along with Jim Archibald and Norman Stevens, in June 1996. This is also where Austrian Ignaz Dörfler (1866-1950) first came upon it in July 1893, spread in its thousands across schistose scree at up to 2,500m, the plants optimally 40cm across and massed with deep violet flowers. He was a determined collector not just of plants but also of correspondence, autographs, coins, stamps and butterflies. A pattern that one can trace to more recent alpine plant enthusiasts, one (long since gone) a notorious collector of the eggs of every single British bird. Another, more innocently, a renowned philatelist. Dörfler travelled further afield but early on blotted his copybook by draping a ring of sausages around the neck of a saint's statue in Kremsmünster, which caused his immediate expulsion from the Stiftsgymnasium

I end with *Viola bertolonii*, named for Antonio Bertoloni (1775-1869), who spent much of his adult life in Bologna, having graduated in Medicine at the age of 21, practising thereafter as a physician but making collections of plants in the Ligurian Alps and adjacent mountains. His researches led to the first authoritative Italian flora, based on his work as Professor of Botany at the University of Bologna, and as Director of the Botanical Garden from 1817, the following year. The eponymous *V. bertolonii* is distributed from the south-western Alps south to Sicily and is occasional offered by nurserymen, confusion with *V. corsica* Nyman ongoing. I write in



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mid-July, when temperatures in southern Italy have soared to an alarming c. 50C. One hopes that a munificent seed crop took place before then, for how else could this endure at lower levels in its more southerly stations?



*Viola dubyana*



Picturesque Lombardian hamlet of Moerna, 966m



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## --- Genus Overview ---

### **Variable Violas - text and photos by Chris and Başak Gardner**

The humble violet is all too often distorted into a gaudy floppy mess and renamed a pansy; colourful perhaps but far from the truth and belying a rich and varied genus. True, there are some 'typical' violets that sprinkle in woods and margins in spring with equally typical flowers; open faced with neat lines around the mouth often delicately fringed with white hairs. It is the flower design that remains the constant, they are always instantly recognizable as being violets. But where they grow and the architectural and design of their other parts can be breathtakingly different. They are very widespread plants, but their main distribution takes in the Eurasia and North America, down to the farthest southern tip of windswept Patagonia. What is interesting is how they have morphed in these different centres.

Below: *Viola doerfleri*



Above: *Viola graeca*

In Europe they are at their most familiar and few countries excel at *Viola* more than Greece with 63 species (30%

endemic), such as large-flowered *Viola graeca*, a beauty that decorates stony slopes and



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woodland edges around Mount Parnassos in May. It is fairly widespread, but many Greek violets are confined to more limited areas or even individual peaks as in the case of lovely *Viola doerfleri*, found only on Mount Voras and adjacent peaks, where it smothers stony ground and slopes in June and July, coating the gravels in a veneer of soft lilac. At this season the turf around is peppered with *Gentiana verna*, *Dianthus myrtinervius* and countless magenta *Geranium subcaulescens* in a glorious alpine show.

### *Viola macedonica*

Other mountains in northern Greece at this time have other species, such as *Viola macedonica*, which varies from violet to yellow, creating some dazzling mixtures. Across the Aegean Sea in Turkey,



we find floriferous masses of *V. gracilis* below the limestone peaks of the Taurus, which play host to the diminutive scree specialist *V. crassifolia* later on in mid-summer.



*Viola gracilis*



*Viola crassifolia*



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### *Viola odontocalycina*

Another Turkish scree-runner is *Viola odontocalycina*, found only in a few inland Black Sea mountains, whilst high up in the Sierra Nevada of Spain is the similar *V. crassiuscula* again thriving in the mobile substrate of scree. It is a fact that many species of violet choose to grow in such unstable ground (especially Andean violets), but even if it is not their regular home, they look wonderful growing in it, such as *V. somchetica* from Armenia.



*Viola crassiuscula*

*Viola somchetica*





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Likewise, *Viola altaica* a species with a huge range from eastern Turkey to Central Asia, these photographed in Kyrgyzstan on a loose bank, but they are more typically found in alpine tuft, scattered across the ground in a random assortment of violet, mauve or yellow. Also found in Kyrgyzstan is the much smaller *V. tienshanica*, a plant with rather oval leaves and a flower shape closer to the remarkable Andean violets. Close to these grew *V. palmata*, a species with dissect leaves and what we see as we move east and ultimately across the Bering Strait is a far greater variation in foliage shape. In Japan we see with its neatly crimped margins.



*V. altaica*



*V. tienshanica*

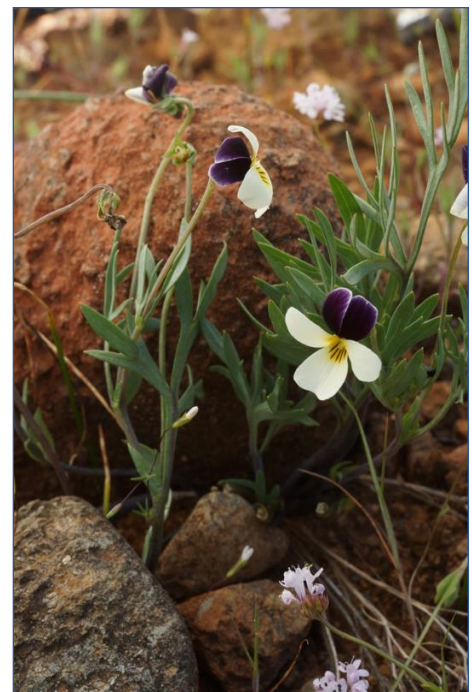


*V. alliarifolia*

Cross over the Pacific to California and among its 26 species we see some real shifts in



leaves, the most exaggerated examples those in *V. lobata* (left) and the somewhat tidier and prettier *V. hallii*, (right) these growing on serpentine flats with *Calochortus tolmei*, *Delphinium andersonii* and the azure trumpets of *Penstemon heterophylla* in May.





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The violets continue south, even in Costa Rica there is the delicate *Viola guatemalensis* on the misty heights of Cerro de la Muerte.

However, carry on south and there is the most dramatic shift in design. It is in the Andes that the genus has adapted to the plethora of high mountain habitats to form the most remarkable collection of violets anywhere on Earth. Whilst there are typical species in the woods below such as *V. reichii*, most have gone down a different path. Even in the dry lands of the Atacama Desert there are indications that things have changed. When the rain comes (and it did in spectacular fashion in 2022, and may do so again in 2023), in places the stony ground is carpeted in tiny rosettes *Viola polypoda*, the golden foil for the abundant *Alstroemeria*, *Mirabilis*, *Zephranthes* and *Zephyra*. Similar *V. pusilla* is woollier and this species probably hints even more strongly at what is to come.



*Viola pusilla*



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It is up in the sun-drenched mountains where intense insolation and steep cinder slopes have created a niche for the world's ultimate violets. Their forms have become very compact to conserve moisture (and their roots are very long to remain on their shifting homes), with densely overlapping often texture leaves between which the flowers emerge. And if the immediate impression from leaves alone is of something quite un-violetlike, the flowers reveal all, so typical in shape (for the most part at least).



*Viola congesta*



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Our first experience of these beauties was *Viola congesta* on the ash slopes of Altos de Lircay, where the best specimens of the softly hairy rosettes where ringed with golden-mouthed flowers.



*V. congesta*



On the black ash of Volcan Antuco grows the similar *V. volcanica*, often in great numbers. Indeed, some species are locally abundant, but what can be frustrating when searching for Andean violets (as with many plants) is they are localised and large tracts of seemingly suitable habitat bear nothing.

*V. volcanica*



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One of the finest of all species - *Viola atropurpurea*, eluded me for years until I was directed to the correct slope where sure enough there were many superb little turrets and discs of exquisite tightly-packed leaves and darkest violet flowers (flecked with waxy appendages). The flowers may be small, but they are attended by some hefty bumblebees even at the rarified 3000 metres I was photographing these.



*V. atropurpurea*



*V. skottsbergiana* in an *Azorella* cushion.

Likewise, I found *V. skottsbergiana* quite by accident, having stopped to look at the impressive mats of *Azorella monantha* at Paso Vergara, suddenly finding the gorgeous little buttons studded with ivory flowers, some actually growing among the *Azorella*.

Other pretty species include *V. microphylla* (common at Farellones) with leaves like miniature savoy cabbages, and the seldom seen *V. montagnei* (syn. *V. canobarbata*) from the drier Andes inland from the Elqui Valley (again only



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encountered in one isolated patch of scree). It also grows alongside *V. atropurpurea* near Santiago. More species grow over the border in Argentina such as showy *V. sacculus*, but my own botanical wanderings have always kept me in the more varied lands of Chile.



*V. montagnei* (syn. *V. canobarbata*)

It is the borderlands between the two countries though where these stunning plants perhaps reach their peak. One of the showiest species is also one of the commonest and it is undoubtedly a plant that demands a view. The magnificent sweeping volcanic landscapes of Laguna de Maule host a huge population of *Viola cotyledon*. Rather than form tight little domes these create mounds that are buried beneath much larger showier flowers in a variety of colour forms. Başak and I have also seen them with the classic snow-capped cone of Volcan Llaima and the backdrop of Laguna de Laja is not bad either. Beats rainy Britain in December and violets are one of the few genera that give us dual pleasure, with northern abundance followed by the option of flying south for winter.



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*V. cotyledon* at Laguna de Laja, Chile



Colour forms of *Viola cotyledon*, Chile



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*Viola cotyledon*, Laguna de Maule



*Viola truncata* (syn, *V. glacialis*)



*Viola philippii*



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*Viola cotyledon* and Volcan Llaima.