

# International Rock Gardener

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We find ourselves halfway through the year – this hardly seems possible but the calendar does not lie even if some plants are ahead or behind of what we consider “normal”. This IRG contains a mix of plants, places and contributors for your mid-year consideration, from Wales via China and the Czech Republic to Denmark and South America – where, coincidentally, many Welsh people have settled over the years – it is truly a small world.

Cover photo: *Oxalis enneaphylla* 'Kila 19' photo Kirsten Andersen and Lars Hansen.

## ---Plant Portraits---

### New Taxa in the Genus *Gentiana* from West Sichuan

by Josef J. Halda and Josef Jurášek, drawings Jarmila Haldová

One member of the section Ornatae, which we describe in this article, is *G. altorum* H. Smith ex Marq. Typical *G. altorum* subsp. *altorum* (which is a meadow plant) creates smaller clumps of leafed stems with obovate leaves, with a tiny basal hibernating rosette, with revolute 5-10mm long leaves. The bright blue flowers have yellow and violet stripes on the outside. Calyx lobes are tiny and leaf like. This taxon is closely related to *G. veitchiorum*, but is much smaller in all characteristics, with a slightly inflated corolla. We have encountered these plants in many mountains in Sichuan.



### *Gentiana altorum* H. Smith ex Marq. subsp. *purpurea* Halda et Jurášek var. nova.

This is similar to var. *altorum*, but much smaller, creating very dense cushions of purplish leaves. Basal leaves are narrowly lanceolate, cauline leaves are narrowed ovate lanceolate in shape. Corolla is azure blue, circa 30mm long, with dark violet stripes.

The habitat is on vertical clayish slopes above Litang, at 4600m.

Quite frequently on the steep or vertical clayish slopes above Litang, a quite different *G. altorum* can be seen, which creates dense carpet-like clumps of short tiny leafed stems mostly only 20-50mm long with tiny leaves which are purple suffused. The corolla is bright azure blue. We are describing this taxon as ***G. altorum* subsp. *purpurea***.

The most common taxon from this group is *G. lawrencei* Burkill. The holotype of this species is kept in Edinburgh Herbarium with W. W. Smith note: “This is the plant which came from Max Leichtlin 18. 3. 1905, designated as *Gentiana* sp. (turquoise). It is the true species described by Burkill in Gard. Chron. 3 ser. XXXVIII (1905) 30..... Seeds were collected by M. Jules Brocherel on a

journey into Mongolia from Lake Baikal.”

The next authors only copied the original description: “First described from plants raised from Siberian seed, collected in the neighborhood of Lake Baikal; this species has subsequently been found to have a wider distribution in a southern direction, probably between Lake Baikal and Tibetan border.”(Marquand)

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*Gentiana alorum* subsp. *alorum*

Why Brocherel came to the conclusion that its site of discovery was the environs of Baikal surprises me, but by comparison of our collections from the vicinity of Kukuror Lake with Brocherel's sheet in Edinburgh, it was evident that this is the same plant. Farrer's holotype collected at Minshan (Gansu) is a very robust plant (Brocherel's plant is tiny) and both belong to the same species, where Burkill's name has a priority.

The next relative species which occurs on the high ridges above village of Litang, is ***G. helophila* Balf. f. et Forrest subsp. *dolichocalyx* (T. N. Ho) Halda**, with huge turquoise flowers up 90mm long, growing in low carpets of pygmy rhododendrons. It is the most robust species of the section *Ornatae*.



Right: *G. helophila* subsp. *dolichocalyx*

Below: *Gentiana oreocharis*



Left:  
*Gentiana lawrencei*



***Gentiana oreocharis* Halda et Jurášek spec. nova**

This new species is similar to *G. lawrencei*, but smaller, without a wintering rosette, with 1-5 flowers on stem. Stem  $\pm$  branched, usually up 40mm long.

Basal and lower leaves obovate, upper leaves narrowly lanceolate, 4-20mm long, 0.7-3mm wide,  $\pm$  cuneate at base, entire. Corolla small, 30-40mm long, 20mm across, tube circa 20mm long, campanulate, azure blue. Capsule circa 15-20mm long.

HOLOTYPUS HIC DESIGNATUS: PR no. 774467

PATRIA ET DISTRIBUTIO: China austrooccidentalis, provincia Sichuan: Litang; in summo collis, solo argillaceo, in stratumuscorum, ad 4900m supra mare, leg. J. J. Halda et J. Jurášek, 15. 10. 2011.

It is found on clayish mossy hilltops at 4900m.

On the top ridges above the Litang monastery at the windy mossy drier tundra is common tiny plant, like a miniature *G. lawrencei* with short leafed stems with 1-5 pale turquoise blue flowers. In culture this plant is more sensitive to over-watering, but it is still growable. This taxon we named *G. oreocharis*. We introduced all these newly described taxa into culture several years ago. All of them have turned out to be good ornamental plants.

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On the rich habitats above the Litang monastery we have found rarely intermediary plants (presumably hybrids between *G. oreocharis* and *G. helophila* subsp. *dolichocalyx*). We also collected several plants, the classification of which we have not yet finished. Additional research in the locality will be needed. Curiously SW China is rich in autumn-blooming species of gentians, while there are only a few spring-flowering ones.

After a few field trips into China we described two further Gentians from the section Monopodiae.



*G. stipitata* subsp. *stipitata*

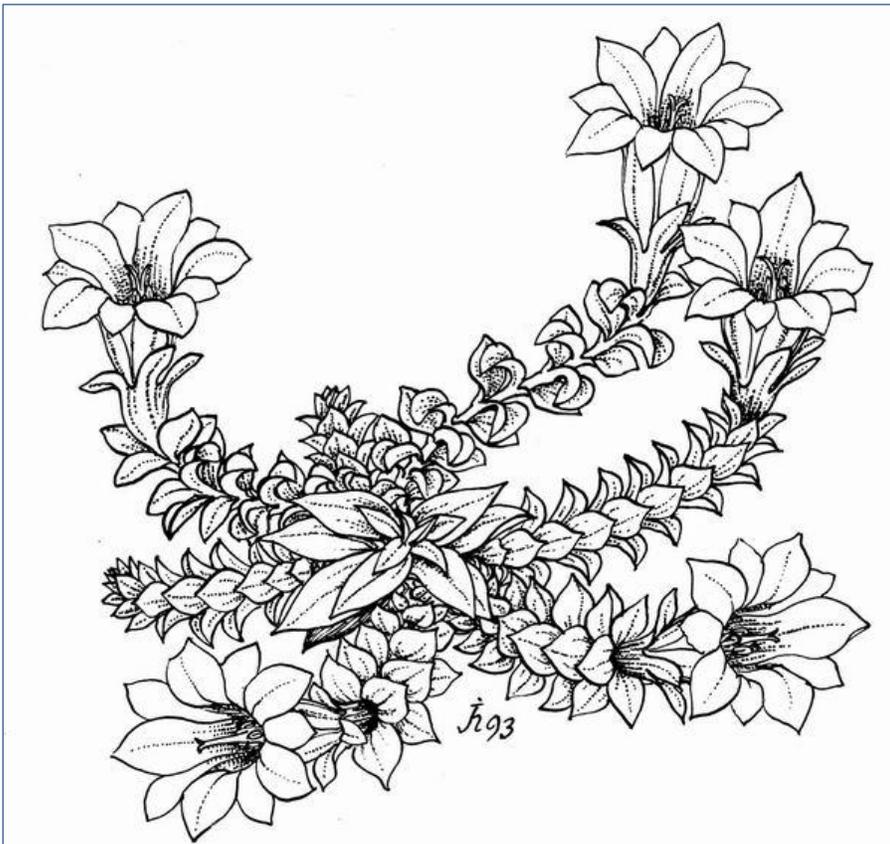
***Gentiana stipitata* Edgew.** is a frequent species in the West Chinese mountains and in Sichuan two subspecies can be found – in the west, subsp. *stipitata* and in NE Sichuan, subsp. *tizuenzis*. *G. stipitata* Edgew. subsp. *stipitata* is the most robust plant of the whole complex with a prominent evergreen basal leaf rosette composed of ovate lanceolate leaves, 15-35mm x 5-15mm. Flowering shoots are single, densely covered with almost sessile ovate or obovate leaves, 6-9mm x 3-6mm. The almost campanulate calyx with leaf-like ovate tips, 6-8mm x 2-3mm, is very prominent. Campanulate corolla is 20-35 x 15-25mm large in many colours from grey, blue to creamy white.

This taxon covers a huge area - most of N India (Himachal Pradesh, Uttar Pradesh), N Nepal, and S Tibet to W Sichuan. It inhabits predominantly the drier areas in subalpine and alpine tundra, rocky slopes and moraines. This taxon is relatively uniform.

*G. stipitata* subsp. *tizuenzis*

***G. stipitata* Edgew. subsp. *tizuenzis* (Franch.) T. N. Ho** is much more subtle in all its characteristics; its attractive flowers are slender and much bigger. It inhabits much drier mountains.

The most distinct taxon in this complex is the population on the clayish slopes around Litang in W China which create cushion-like clumps on drier vertical or steep slopes and is prominent by sessile tetramerous flowers.



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*Gentiana stipitata* subsp. *elegantissima*

***Gentiana stipitata* Edgew. subsp. *elegantissima* Halda et Jurášek subsp. nova**

This is similar to subsp. *stipitata*, but much smaller, with 4 lobed flowers. Stem single flowered. Leaves basal rosulate, narrowly obovate, spathulate, 6-10mm long, 5-8mm wide, base  $\pm$  cuneate entire. Calyx narrowly campanulate, circa 10mm long. Corolla tiny, whitish or lilac, 20-30mm long, 20mm across, tube circa 20 mm long. Capsule circa 15mm long.

PATRIA DISTRIBUTIO: China austrooccidentali, provincia Sichuan: Litang; in clivis alpinis ad 4700m supra mare, leg. J.J. Halda et J. Jurášek, 15. 10. 2011.

This new subspecies grows at alpine slopes up to Litang at an altitude of 4700m.



*Gentiana stipitata* subsp. *elegantissima*

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The next taxon of the section Monopodiae is *G. szechenyi* Kanitz. It is very ornamental plant which resembles the European *G. acaulis* L. but with white, narrowly campanulate, up 80mm long flowers. Typical *G. szechenyi* subsp. *szechenyi* creates compact carpets with olive green basal rosettes, with widely lanceolate leaves, with side rosettes which are almost sessile. [**Editor's note:** [J.J. Halda](#) treated, in his book *The Genus Gentiana* (ISBN 80-901846-6-9), the similar species - *Gentiana georgei* Diels as only a synonym of *G. szechenyi*.]

In the mountains around Kangding (Dashueshan, Gonkashan) there are uniform populations of *G. szechenyi* with side rosettes on very long stolons (up 200mm long), which we named *G. szechenyi* Kanitz subsp. *stolonifera* Halda et Jurášek.

### ***Gentiana szechenyi* Kanitz subsp. *stolonifera* Halda et Jurášek subsp. nova**

Differs from subsp. *szechenyi* in having long stolons, 50-200mm long. Leaves elongate 20-50mm long, 3-12mm wide. Scape erect 20-50mm tall, single flowered. Corolla campanulate, white or pale lilac, 5 lobed. Its habitat is the alpine pastures around the [Zheduo Pass](#) at an elevation of 4600m.



Right and below:  
*G. szechenyi* subsp. *stolonifera*



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***Gentiana quercetica***  
**Halda et Jurášek spec. nova**

Affinis *G. veitchiorum* sed arosulata, erecta. Planta 60-100mm alta, folia omnia caulina lato vel elongato lanceolata, decurrentia, 1,5-2mm lata, et 9-20mm longa. Scapus erectus uniflorus. Calyx ± campanulatus, 5 lobus, 15-20mm longus. Corolla campanulata, atroviolaceocyanea, violaceo zebrina, 5 loba, 35mm longa, ca 25mm in diametro, tubo ca 30mm longo.



Similar to *G. veitchiorum*, but without wintering rosette, stems erect, single flowered, 60-100mm tall, leaves all cauline, widely lanceolate or elongate, narrowed, 1,5-2 mm wide and 9-20 mm long. Calyx ± campanulate, 5 lobed, 15-20 mm long. Corolla campanulate, deep violet blue, darkish striations, 5 lobed, 35mm long, circa 25mm across, tube circa 30mm long.

HOLOTYPUS HIC DESIGNATUS : PR 774466

PATRIA DISTRIBUTIO: China austrooccidentalis, provincia Sichuan: Kangding: Zheduo Pass; in quercetis pygmaeis in vicinitate oppidi ad 4300m supra mare, leg. J.J.Halda & J. Jurášek, 20.10.2011.

Pygmy forest of dwarf evergreen oaks under Zheduo Pass, 4300m.

[First published:

[Acta Mus. Richnov., Sect. natur. 19 \(3-4\): 55-70, \(2012\)](#)

**Literature cited**

Halda J. J. (1995): Návrh nového systému rodu *Gentiana*. – *Acta Mus. Richnov. (Sect. natur.)*, 3(1): 3-50.]



# Scottish Rock Garden Club

For people who love plants

established 1933



The Scottish Rock Garden Club welcomes visitors to its special Summer Event in Dunblane:

**Flowers of the Hills and Mountains 23rd August 10.00am to 4.00pm**

A day to celebrate rock gardening with talks and a display of plants, plants sales and more.

Our guest speaker, **Olga Bondareva**, from Moscow, will give three or four short talks through the day on the theme of 'Plant Hunting in Russia'.

This event celebrates both that the SRGC is a *garden* club and the *plants* which members grow. It will illustrate the beauty, diversity and garden-worthiness of the widest range of rock and woodland garden plants, bulbs, shrubs and trees, to encourage their cultivation in gardens and to encourage the exchange of plants and knowledge among gardeners.

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## --- Mountains in the Garden ---

### European primulas in a North Wales crevice garden

text and photos: [Professor John E.G.Good](#), Bod Hyfryd, Wales.

I am fortunate to have several crevice gardens built a few years ago in my North Wales garden by my friend Zdeněk Zvolánek and his late lamented partner, Joyce Carruthers. All I did was to help collect the stone from the nearby mountains of Snowdonia and sit at the feet of the master as he worked to create a thing of beauty out of a pile of boulders, although ZZ's frequent cry of 'more compost' did mean that I was kept busy making mix after mix of gritty material to fill the gaps between the stones.

Let me tell you that my garden is located on a steep north-facing slope 1km from the sea and 150m above sea level in a country that is renowned for wind and rain, and you will appreciate that the chief requirement of the rock building was that it was firm, and of the compost that it was well drained, using about half sharp grit by volume, the other half being my garden soil, which is silty, stony loam. This mixture has proved to be a little too sticky for some plants (notably *Kabschia saxifrages* and dwarf dianthus), but just right for others, among which are European primulas. They have been particularly happy in a crevice garden built above a low retaining wall with a sloping grass lawn above that provides a source of moisture seepage.



Raised crevice beds in winter

The stone used was variable, some being slate and shale, of which there is plenty in a range of colours and textures in North Wales, some a hard, crystalline, rough-textured rhyolite which is less easy to use, but worth the effort as it is often beautifully coloured with a mixture of brown, red and greyish hues; all

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are lime free. The plants were either grown by me from seed, were gifts from other gardeners, or in some cases were bought from nurseries, especially the famous local Aberconwy Nursery of the Lever family, famed for many plants, especially perhaps Asiatic gentians and dianthus, many of which they have bred and introduced into cultivation for our delight.

I shall talk here chiefly about a few European primulas among the range that I grow, but there are of course many other plants in the crevice beds, including several unusual celmisias and various other New Zealanders, all of which revel in our wet and windy climate. While as mentioned earlier, *Kabschia saxifrages* have generally not been successful, doing much better in one of my other crevice beds with even better drainage and more light, ***Saxifraga oppositifolia***, which occurs wild in the mountains a few kilometres away, loves the moister, slightly shaded crevice beds and I have it in several forms from as far apart as Iceland, Scandinavia, France and Wales.



*Saxifraga oppositifolia* in [Cwm Idwal](#)

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I have seen *Primula pedemontana* (above) on several occasions in the European Alps, especially in and around Val d'Isère, often growing in quite wet and cool situations, sometimes in rock crevices, often in moist screes. Like all these European primulas it requires reasonable exposure to the sun to flower well, but as its natural habitat suggests, does not appreciate over-dry soil or too intense heat. It will slowly spread along a crevice and look just right.



*Primula daonensis*

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*Primula daonensis* is very closely related to the much more widespread *P. hirsuta*, which it replaces on acidic rocks, chiefly granite, in its area of distribution in the south central Alps and the south west Dolomites. Indeed, in my experience it is difficult to tell them apart in cultivation. And although *P. daonensis* is certainly much rarer in cultivation, and said to be more difficult, I have not found it so, albeit it is slower and perhaps a little less floriferous.

*Primula hirsuta*



*Primula x bilekii*

*Primula x bilekii* (sometimes spelled *P.x bileckii*) is the name used by many nurseries to cover all forms of the hybrid between *P. hirsuta* and *P. minima*, of which there are many in the wild and quite a few in cultivation.

An alternative name, which seems to have taxonomic priority but has not been adopted as widely in the trade, is *P. x forsteri*. This variable cross may be very similar to either parent or intermediate between them, but what matters to the gardener is that all forms appear to possess hybrid vigour, making them easier to grow than either parent, particularly *P. minima*, which in my experience is not too easy either to grow well or flower freely. It is my suspicion (no more) that some nurserymen offer the hybrid in place of the species, either out of ignorance or because the source from which they obtained their stock named it incorrectly. Whatever the story, all forms of *P. x bilekii* (or *P. x forsteri*) are well worth cultivating, being a little bigger and bolder than either parent, with larger flowers born on slightly longer stalks. The genus *Primula* is divided and sub-



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divided into a number of sections and subsections, those described here so far being members of the *Erythrodosum* Sub-section of Section *Auricula*. Another subsection in the same section, named *Arthritica* (meaning 'gouty', though for what reason I know not) comprises four very similar species (*PP. clusiana*, *glaucescens*, *spectabilis*, *wulfeniana*), all occurring in the Alps and restricted to limestone areas. Their entire, shiny, leathery foliage, hard and smooth to the touch, makes them easy to separate from other red-flowered primulas. They are generally said to be difficult to grow well outside, at least in the warmer and drier parts of the UK, but here in the cool, damp north-west of Wales they are not too difficult in a cool partially shaded crevice. I have grown all of them, but this has never been easy, for they tend to be slow growing and unless a free-flowering clone is obtained may produce very few flowers.

My favourites were an especially good clear dark pink form of *P. glaucescens* that was given to me by Frank and Gladys Stallard many years ago, and the very large flowered form of *P. clusiana* known as 'Murray-Lyon' (which Henry Taylor believes may be a hybrid with *P. minima*), which I obtained from Major General Murray-Lyon's garden on his death in the early 1970s. Sad to say I eventually lost both of them, but have recently been promised a plant of the latter by a kind friend.



*P. wulfeniana*

My best offering at present, then, must be a good, free-flowering form of *P. wulfeniana* that was given to me by the late plantsman, author and artist, Duncan Lowe, and which is illustrated here. Although this is quite a small clump it is at least 10 years old, giving some idea of the slow growth rate. The flowers are large (fully 3cm across) and you can see the typical white horny margin to the leaves.

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*Primula marginata* from the south west Alps is one of the best European primulas for any garden, being tolerant of a wide range of soil and climatic conditions, even though it is strictly restricted in the wild to limestone, usually in rock fissures or on grassy rock ledges. It is a very variable plant, both in the size, form, serration and waxy covering (farina) of its leaves, and in the shape and colour of its deliciously scented flowers. ***P. marginata* 'Napoleon'** is one of the best forms, the attached photograph showing off its merits. It is more compact than many selections (some sprawl in an untidy fashion), with more waxy leaves and numerous clusters of soft lilac flowers. It was given to me by its discoverers, Henry and Margaret Taylor, who found it growing in an area of fortifications in the Maritime Alps which were made by Napoleon Bonaparte's army almost two centuries ago. I wonder if any of those troops, holed up in the mountains and sick for home, waiting for orders to advance or retreat, noticed these delicate scented blooms?



*Primula marginata* 'Napoleon'

*P. marginata* loves crevices, as you would expect, and in our more northerly climes quite happily takes full exposure to the sun, although it might appreciate some shade in hotter continental gardens. It is

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easily raised from cuttings taken at almost any time of year, and it is usually possible to find rooted offsets at the edge of a clump. Top-dressing from time to time with gritty compost helps to prevent the clumps 'opening up' and becoming leggy. Propagation by seed is equally easy, as it is with all the primulas described here, except *P. bilekii* which is usually if not always sterile, but of course the seedlings are unlikely to duplicate the desirable characteristics of the parent.

J.E.G.G.



*Primula marginata* 'Beamish Variety' close-up at [Bod Hyfryd](#)

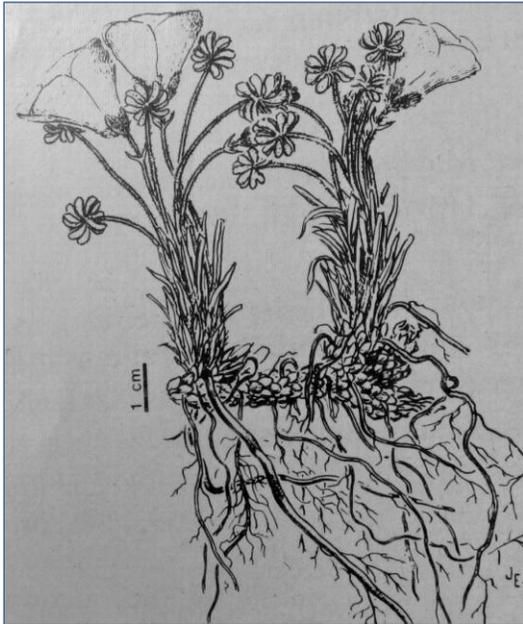
# ---International Rock Gardener---

## ---Plant Portrait---

### ***Oxalis enneaphylla***

**Text and photos: Kirsten Andersen and Lars Hansen, Herskind, Denmark**

*Oxalis enneaphylla* grows in southern Patagonia from Tierra del Fuego to the central Santa Cruz, the adjacent Chile and the Falkland Islands (Las Malvinas). It prefers stony or sandy well-drained soil and not too much rain. It grows in sandy coastal areas, grassy steppe and mountains up to about 1100m (the tree line in these areas is around 1000m) The rainfall in these areas is about 3-400mm a year.



As shown in this drawing from “Flora Patagonica” (left) it grows from an approx. 1cm thick rhizome covered with small fleshy scales. The rhizome branch and spread horizontally into large clumps where the conditions are favourable. The plants are normally between 10 and 30cm across. The leaves have 7 to 15 leaflets (specific name *enneaphylla* means 9 leaflets), they are very variable, they can be pubescent or glabrous in different sizes and the colour can vary from green to orange-brown.

The flowers are on a stem, just above the leaves, they are up to 3cm across and the colour varies from white to pink and lavender. They are often scented. The flowers need light to open, in rainy weather they won't open. Flowering time in nature is from December to January.

Below: *O. enneaphylla*, an exceptional pink form in the wild



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*O. enneaphylla* on the Patagonian steppe



*Oxalis enneaphylla* 'Kila 19' in [the garden](#) of Kirstin and Lars in Herskind.

*O. enneaphylla* is selfsterile, so two plants are required to get a seedset. We have never covered *Oxalis enneaphylla* in the 20 years we have grown it. The temperature in Denmark has several times over these years been below -15C and sometimes below -20C.

In the Patagonian Mountains and Steppe the temperature can be even lower, with or without snow. It might be a bigger problem with the extreme hot and dry Czech summers, but we do not know. Maybe the Moravian grower Jaroslav Baláž could tell us more about that.

K.A. and L.H.

Ed: Kirstin and Lars have travelled widely in South America and have grown a large range of *Oxalis* from seed in their garden in Denmark where they have a fine crevice garden.



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[Ed.: A selection of photos from South America by Trond Høy which were not able to be used in the [IRG 51 of March 2014](#) is now published as a supplement to that issue. Trond repeats his thanks to Kok van Herk for his assistance in checking the plant names. It can be downloaded from [this](#) link.]

More on *Oxalis enneaphylla*: from the pages of the SRGC forum, here are some variations on *Oxalis enneaphylla* from the gardens of our members.



*Oxalis enneaphylla* with dark veins, from Luc Gilgemyn



*Oxalis* 'Ute' pictured by Rudi Weiss who relates that this plant was raised by Gerd Stopp in Chemnitz.

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*Oxalis* 'Sheffield Swan' from Ian Christie and a close-up from Michael J. Campbell

*Oxalis enneaphylla* 'Sheffield Swan' was originally collected in the Falkland Islands by Capt. Peter Erskine VMH, who named it for his former ship [HMS Sheffield](#).



Above: *O. enneaphylla* 'Patagonia'

Above right; *Oxalis* 'Annette'

Right: another very attractive white form of *O. enneaphylla* - these three are all from Wim Boens who has been an SRGC forumist for a long time and is a key member of [the VRV](#).

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Above left, *O. enneaphylla* in Chile 2009, by Philip MacDougall and right in Patagonia, 2008 by Ger van den Beuken. Ger is a former president of [the NRV](#) shares with us some of his photos of *Oxalis enneaphylla* taken on his trip to [southern Patagonia](#) in November 2008. In 2007 Kirsten and Lars travelled with Ger and his wife Mariet along with the SRGC's own Ian and Anne Christie and Ron and Susan MacBeath – our world can be a small world.

The SRGC Forum has many threads where members share photos of their travels to see plants in the wild, as well as all those which celebrate these plants in our gardens – or perhaps share our misery when some plants fail or are attacked by pests or disease – our world can be a tough world! Luckily some of the S. American sorrels make [happy garden plants](#).



A world that is small and tough? Surely that is exactly like the plants that bring us all together?