

# International Rock Gardener





It seems that Turkey and her plants are always a topic of interest. Our friends in Prague and in the NRV, the Netherlands Rock Garden Club, have this month held study days featuring talks on Turkey which drew enthusiastic audiences. Whatever one's personal plant obsessions, there are examples likely to be found in Turkey to surprise and delight in equal measure. IRG is delighted to be able to continue to bring readers articles on this plant rich country. [The SRGC plans a guided tour to Eastern Turkey in May 2012.](#)

Cover picture: Hybrid seedling from *Narcissus* 'Camoro' by J. Ian Young, see article page 13.

## ---Gardens in the Mountains---

### Mountain Garden of a Dervish by Zdeněk Zvolánek

Old stories tell us that once upon a time a dervish cultivated roses in the mountains of Isparta. Since then this mountain has been called Dedegöl, which means the rose of the dervish. Dedegöl is a huge mountain massif between the lakes Egridir and Beysehir in Turkish Western Anatolia. It has been called the roof of the Isparta province.

Why is this a relatively unknown place for all western rock gardeners? The reason is that at the peak time of British collectors there was no road crossing the highest part of the Dedegöl massif shown on any map. So nobody collected alpinists there and no article was written about Dedegöl. There is nothing about it in the old reference books.

One day (in 1990) I saw on a newer map a small road ascending from Yenisarbademli (from the Beysehir Lake side) and since that lucky discovery I have visited this great mountain three times and never regretted it. The axis of Dedegöl Dağları or Dedegöl Mts runs in a north-south direction. The northern part is close to Sultan Dag (above Akşehir), the southern part wedges into Bolkar Dağları. The entire 120 km long top ridge is at high altitude and surely some remote parts are still unexplored. Its microclimate is suitable for alpinists: there is plenty of snow in winter and continually developing clouds between the two big Anatolian lakes at other times.

I will write about the portion around the highest peak - the Dedegöl Tepesi, shown below, which is a mere two metres lower than 3000m high.



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The shorter and more pleasant access to this area is from the east. The asphalt road goes from Yenisarbademli village to a longer, unnamed, pass at an elevation of 1800m. From this place with a fine vista we must go down through the pine forest taking one of two dirt roads. There is springwater and wild open places to camp. The shepherding community stays close to the water and they are quite friendly to tourists. Neither MacDonalds nor toilets are available at present.



*Cistus laurifolius* photo © 2010 Zoya Akulova

The eastern road offers, in August, seed of the hardy *Cistus laurifolius*. The opposite access road from Egridir Lake via village Aksu is quite long and it is in bad condition in its highest elevations.



We found there, at a small slope, red berries of [Putoria calabrica](#), a flat semi-shrub, which is hardy in the gardens of Central Europe. It is a plant designed for hot and dry places of the Anatolian Highlands, where it shares mineral soils with silver pancakes of [Convolvulus compactus](#). Pink flowers resembling Asperulas and Putoria bloom for long periods in summer - see page 11.

*Convolvulus compactus* in the garden of [Franz Hadacek](#).

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We always had only one day to hike the northern slopes of the limestone giant mountain and I reached the summit only once (while Joyce Carruthers waited for me in a sunny sheltered place 350m lower). The summit area is very cold and its rough fell fields are decorated with deep green cushions of [Silene oreades](#) (with flowers not in first class condition), [Eunomia oppositifolia](#), and the rosettes of [Saxifraga luteo-viridis](#) - to name a few from my deteriorating memory.



*Saxifraga luteo-viridis* [photo Leif and Anita Stridvall](#)

All the summits of Earth are poor hermits, seemingly living only on plenty of fresh air. A much better flora is found below 2700m, where are two plants fighting for the title of Queen: the blue [Asyneuma compactum](#), which is hard to grow on after transplanting from the seed pot, and the pale (rose) pink [Aethionema subulatum](#), which is a superb rock garden plant (see portrait, page 9).



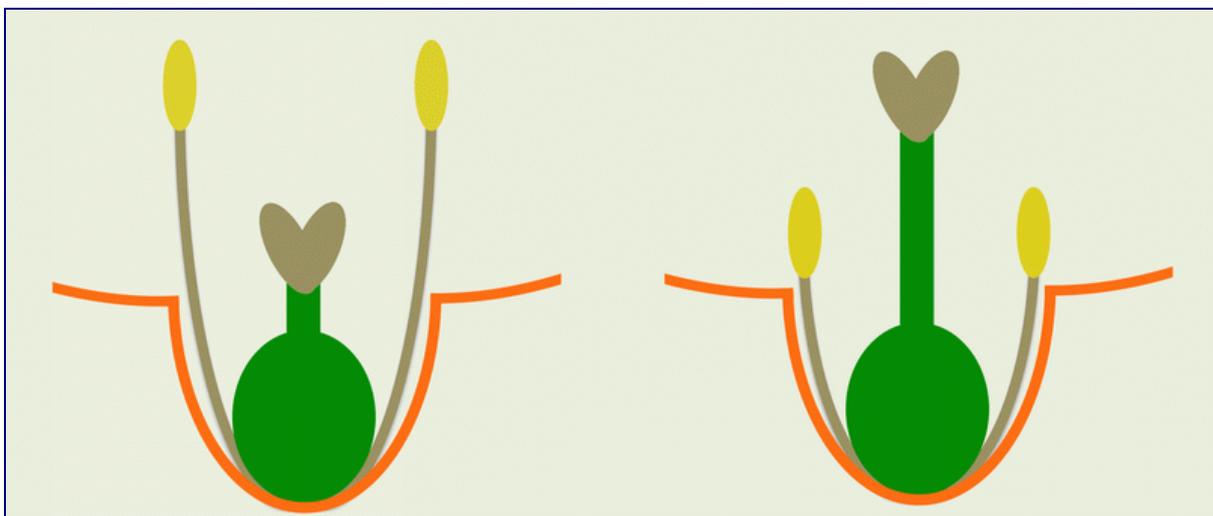
*Asyneuma compactum*  
photos  
[Mojmír Pavelka](#)

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This short article has some illustrations by my younger friend and partner in plant-searching expeditions; Mojmir Pavelka. Mojmir visited Turkey in late spring and photographed many unknown perennials in full flower. The northern slope of Dedegol Tepesi was under snow so Mojmir visited the south facing limestone ridge above the pass with the main road at 2000m in May 2010. Joyce and I discovered this ridge ten years ago and informed our friends about a rare but rich locality of *Linum cariense* in the fissures, cracks and chinks of this pleasant place with a million dollar view. Previously, this superb dwarf golden *Linum* was known only in a small area of the limestone summit of Sultan Dag.



Germination of seed of this species is a tricky matter but cultivation out of doors is quite common and fully rewarding of all the trouble taken. This species is heterostylous like primulas so we must look to have both style expressions in cultivation for possible pollination. Photo, above, by Mojmir, shows “thrum” type style.



[Heterostylous](#) : Having flowers with styles of differing length - thrum, left and pin, right.

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There is an explanation why *Linum cariense* is not present at the opposite peak Dedegol Tepesi: the peak was covered in the last glaciations with a 7km long glacier which ended just under the ridge populated with *L. cariense* and other delicate survivors.



*Linum cariense*, showing “pin” type style

photo [Zdenek Rehacek](#)



The companion of the *Linum* here in the eroded limestones is *Asyneuma compactum*, (see page four) the blue beauty that soon goes into dormancy after setting seed.

Left: the habitat of *Linum cariense*

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A big surprise for me is another companion of this special refugee ridge community: [\*Tanacetum armenum\*](#) (below). This is a promising plant, new to me, which I had overlooked when it was out of flower.



The members of this strong wind tolerant community have attractive, low-growing habits. One example is the yellow *Astragalus pelliger* with its densely globular yellow flower heads.



*Astragalus pelliger*



*Onobrychis cornuta*

photos Mojmir Pavelka

Slopes under the ridge have bright signals of the basic prickly shrub of Turkey, *Onobrychis cornuta*, which can make beautiful cushions up to one metre in diameter with elegant but cruel, grey thorns. Josef Jurášek “scientifically” tested legumes for ripe seed by kicking the bottom of the shrub with his leather boot. Mojmir portrayed one local *Onosma* without a name, (there are 100 taxa of *Onosma* in Turkey) which may provide intensive, if short-lived pleasure in a crevice.

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Above: *Onosma* sp.



Also interesting are the local small *Polygala pruinosa*, left, and [\*Cerastium purpurascens\*](#).

One perfect alpine waits for me somewhere at an altitude of 2300-2600m on Dedegol Tepesi (playing with me the fairy tale of Sleeping Beauty). It was described in 1978 as *Aubrieta anamasica* Peşmen & Güner and it seems to me that it must be a superb species because it has **bright purple flowers circa 3 cm in diameter** !

Jurášek distributed seed under this name of a species from Sultan Dag with small lilac flowers and the last expedition led by Pavelka did not

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have time to search for this saxatile species at higher and more distant ridges. This plant is probably a narrow endemic occurring only in a small remote cliff community on this large mountain.

[Aubrieta anamasica](#) is waiting for me and my gentle care, but Dedegol becomes, in some ways, more distant every year. I am every year a little bit older and my perfect driver Joyce Carruthers is driving the sky blue asphalt roads (with silver lines) of heaven now. I hope that somebody will organise an expedition to rescue this best wild Aubrieta for us. ZZ.

## ---Plant Portrait---

***Aethionema subulatum*** Boiss. & Heldr. (syn. *Eunomia subulata*) by Joyce Carruthers

This plant is probably a Czech introduction of a striking dwarf alpine sub-shrub from Western Anatolia. The very active Englishman, John Watson, brought plenty of Turkish rock garden plants into cultivation (1965-1985) but missed this Lycian beauty. Josef Jurášek distributed the first seed from the small Küpe Dag Mountains above Seydisehir. He gave us a small plant that died only a few weeks after planting in a crevice in full sun. There are more reasons for such a short existence and sad fate of a new un-established plant: extremely bad weather, neglect by the owner and the wrong nursery substrate with peat or leaf-mould. During a long period without rain, these sorts of humus will completely dry out and in this state they are not able to absorb water. Leaf-mould contains plenty of pathogenic fungi waiting for hot and wet conditions in the garden. Sometimes during a hot day with a sudden thunderstorm, some tender plants are killed with a shock or stroke of “steaming” wet conditions. Later, when we mixed our own lean mineral substrate and raised plants from our own seedlings, we lost only one *A. subulatum* from a dozen plants. Seedlings from established plants are able to cope with hard conditions.



Our seeds were from the huge, relatively unknown, mountain range called Dedegol Daglari, which has its highest peak (2998m above sea level) between the Egridir and Beysehir lakes. We found this species on a long northern slope of the highest peak- Dedegol Tepesi- at the elevation 2600–2800m in tundra like fell-fields. There this pioneer plant grows in association with the blue *Asyneuma compactum*, yellow [Anchonium elichrysifolium](#), and tight green cushions of white and rose *Silene oreades* (which is considered by some to be a synonym of *S. saxifraga*). This species

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is endemic to Western Anatolia, preferring stony slopes and crevices at altitudes from 2000 to 2800m.



*Aethionema subulatum* foliage

*Aethionema subulatum* in the alpine region is only 5cm tall in seed, forming compact caespitose mats about 25cm in diameter. It is a glabrous semi-shrub, woody at the base, with many simple flowering stems. Grey-blue leaves are all sessile subulate, 5-7 x 0,5mm in size, densely covering both sterile and flowering stems. Petals are pink, 5 x 3 mm with suborbicular blade. This species develops a large red eye in the centre of flowers after pollination. There is a long flowering period in May. The inflorescence is compact, not elongating in fruit. Siliculae (seed capsules) are ovate with 2 seeds. All the characters of this species with subulate leaves are so distinct from other members of the genus or family Cruciferae, that every gardener can recognize or determine it after growing it for one season.



Ed: Anyone puzzled by botanical terms may find [Jim Shields' handy glossary](#) to be useful.

*Aethionema subulatum* in the garden

[More on Turkish Aethionemas in IRG 12 of 2010](#)

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---Plant Portrait---

***Putoria calabrica*** by ZZ photos by Mojmír Pavelka

*Putoria calabrica* (L.f.) DC. is a [synonym](#) of *Plocama calabrica* (L.f.) M.Backlund & Thulin.

My first meeting with this unusual rock garden plant was in the small flat scree fields in [Denver Botanic Garden](#) in Colorado in 1983. I was surprised that this tiny Mediterranean semishrub is hardy there and I wished to grow it one day in my rock garden. A second meeting happened in Turkish Western Anatolia, namely in the lower slopes (1200m) of Dedegol Mts. It was in late August and some 25 years after admiring the plant of Panayoti Kelaidis. We saw a short eroded slope near the road with a bare surface and a monoculture of [Putoria calabrica](#) with red fruits.



Left: Seed of *Putoria calabrica* photographed by [Joaquín Ramírez](#)

Seed proved fertile and germinated well, in spite of [reports of complications in pollination](#), so a few mats quickly developed in an area of open soil in the Beauty Slope. Juicy red berries followed on the mats with glossy leaves and terminal clusters of several purple-rose flowers. So this plant has shown its ability to add some autumn colours to our gardens.

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The third meeting was in a locality of *Convolvulus compactus* somewhere in the highlands north of the town of Antalya. The locality was very hot and dry and the soil was just mineral without any humus content. Plants made small flat pancakes covered with fruits. *Putoria* has mildly rank smelling leaves, highlighted in its common name of "Stinking Madder". Its [medicinal applications](#) have been studied.

Mojmír Pavelka photographed *Putoria* in Dedegol Mts. in 2010, both in flower and with its showy fruits.



*Putoria calabrica* is a member of the Rubiaceae family and reminds us with its flowers of a small species of genus *Asperula*. Its synonyms are *Asperula cantabrica* and *Emodea cantabrica*. *Putoria calabrica* (L.f.) DC. is a [synonym](#) of [Plocama calabrica](#) (L.f.) M.Backlund & Thulin, this latter being the accepted name on the Kew Plantlist.

Flowers are 13-19mm tall and the lanceolate shiny green leaves are about 10-28mm x 1-7 mm in size. The terminal cluster can be formed from 3 to 13 flowers. The mats are less than 25mm in height and up to 40cm across in my good soil. [Botany.cz](#) informs us that some of these semi shrubs could be up to 30cm tall and more than 1m in diameter in southern Spain, Portugal, Italy and Southern Greece. This charming plant can also be [found in Morocco](#).

Some plants from the Mediterranean areas have pale pink flowers and they grow in altitude from 150m above sea level up to 1100m. They love and look perfect in the crevices on limestone cliffs so this plant is suitable for running in dry garden walls.

A few years ago a rock gardener brought me a branch with small leaves and asked me which *Daphne* he had raised from red fruits. It transpired that the leaves belonged to *Putoria calabrica*.

Later he gave me two seedlings, which were quite compact in growth. They flower from the summer months through to the first frosty days in November.

This photo (right) is of a wet plant, photographed on October 10<sup>th</sup> in bad light conditions, planted in a southern crevice in the alkaline soil of the Beauty Slope.

I suppose that this tiny shrublet will be hardy in crevice garden cultivation (planted in lean soil mixture in a steep south facing fissure). My plants survived the last very nasty winter with many late spring frosts.



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---World of Bulbs---

## Winter flowering Narcissus - the Hoop Petticoat Daffodils

text/ photos by J. Ian Young

Daffodils from the bulbocodium section are often referred to as the hoop-petticoat narcissus because their funnel-shaped flower resembles the shape of the wired petticoats commonly worn by ladies of the 19th century. The reason for this similarity is that these narcissus have very small insignificant petals which are placed about half way along the funnel unlike the trumpet daffodils where the six large petals frame the trumpet (corona).



Section through a typical "hoop petticoat" flower.

One of the other attractive features of this section is that they nearly all flower throughout our winter in the UK. The first can start into flower as early as November and with careful selection from the different species and forms available you can have a succession of flowers until June. Gardeners sometimes take for granted the source of the huge range of plants that are available but I take great pleasure in finding out the origins of the plants that we grow in our garden, especially exactly where the species grow in the wild and under what conditions: all this can be a help in understanding the needs of the plants in the artificial circumstances of cultivation.

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In this case the bulbocodium section narcissus grow over a wide range at either side of the Mediterranean in Southern France, Spain, Portugal, Morocco and Algeria and their habitat varies from almost sea level in France and Portugal to the mountain tops of the High Atlas range in Morocco.



*Narcissus bulbocodium* var *conspicuus* in the garden

*Narcissus bulbocodium* is the most readily available and is offered in most garden centres as dry bulbs in the autumn. *N. bulbocodium* 'Golden Bells' or *Narcissus bulbocodium* var. *conspicuus* are the commonest names appearing.

These daffodils are not grown nearly enough, even in rock garden circles, perhaps because they flower at a time when there are no shows taking place to display them to a wider public.



Left: one year old seedling bulbs and fresh narcissus seeds.

These are all easy to grow; they are perfectly hardy in the garden where they will form good sized clumps, requiring no special attention. They prefer a sunny situation and will grow happily in most garden soils providing it is free draining: if you have a very heavy soil, mix in some gravel to increase the drainage around the bulbs. Being smaller than the trumpet daffodils they are ideal for growing in a trough, on a rock garden or even at the front of a border.

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*N. bulbocodium* has been cultivated in gardens for centuries and many old gardens have



established colonies growing naturalised in grass to which it is particularly well suited. The narrow leaves do not look so untidy or out of place in a small lawn as those with broader leaves like the larger trumpet daffodils.

The bulbs will increase well by offsets and clumps can be lifted and split every four or five years. It is also worth growing from seed as this will result in different clones which will not all come into flower at the same time and so extend further their already long flowering period, (we have flowers on *N. bulbocodium* from March through to June).

Self-sown seedlings may also occur if the ground around the plant is not disturbed. Seedlings can reach flowering size in three years.

*Narcissus bulbocodium* with seedlings growing around it.



The most readily available types flower on stems of between 15 to 30cms but some originating from higher altitudes such as *N. bulbocodium* subsp. *nivalis* can flower on very short stems indeed and are best grown in a trough or pot where they can be better appreciated.

*Narcissus bulbocodium*  
subsp. *nivalis*

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Above: *Narcissus bulbocodium* subsp. *nivalis*

Below: *N. bulbocodium* hybrids



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A very close relative of *N. bulbocodium*, *Narcissus romieuxii*, comes from North Africa and is to be found growing in Morocco, appearing in the mountains of the Rif, the Middle Atlas and the High Atlas. *Narcissus romieuxii* is a beautiful small daffodil with grass like foliage, it has a very large pale yellow flower on a short stem and their trumpets can vary from funnel shaped to being very widely flared like a petunia.



*Narcissus romieuxii* JWB 8913

These are among the first narcissus to flower often starting to bloom in November and with a selection of different forms these will also give flowers all the way through the winter until April.

Despite the fact that *N. romieuxii* comes from North Africa it can be grown perfectly well without artificial heat because it grows at a high altitude where it has to withstand some very cold temperatures.

Right: *Narcissus romieuxii* var. *mesatlanticus* has creamy white flowers.



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*Narcissus jeanmonodii*, another hoop from the High Atlas Mountains in Morocco.



*Narcissus albidus* subsp. *occidentalis*

[www.srgc.org.uk](http://www.srgc.org.uk)

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In Scotland, *Narcissus romieuxii* and most of the early flowering “hoops” are best grown in a glass house and given what is referred to as ‘cold glass’ treatment. The term, “grown under cold glass” means just what it says, that the plants receive the protection of a glasshouse, the watering can be controlled by the gardener, but no artificial heat is applied.



While these bulbs might survive a Scottish winter, the gardener gets a much better chance to enjoy them in a glasshouse and they can be given a drier summer there: this is seldom possible outside in Scotland! In general, summer wet can kill as many plants as winter cold, maybe even more! Even the toughest native prefers some protection in the Scottish climate.



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These unusual dwarf bulbs can bring interest and cheer through the winter; you can even bring them into the house for the day to decorate the Christmas table.

There is a wide range of flower size, as shown here by these little chaps and their larger cousin that is the same diameter as their 5cm thumb pot.



After repotting in the summer, they should be watered in September when they will quickly make roots and put up some leaves, so they must be kept moist all the time that they are in growth. When they are in flower some high potassium liquid feed should be added to the water. Even though this will be in October through to April, it is their growing period and, like all bulbs, they need feeding if they are to grow well and increase. If there is a prolonged period of heavy frost do not water them and give them a little protection with some fleece or newspaper to prevent the compost in the pot being frozen all the way through, if you can plunge the pots in a bed of sand this also helps. Watering is stopped when the leaves start to go yellow, usually in May/June, then the pots should be kept dry in a corner of the glasshouse to enjoy the warmth of the summer before being repotted in a gritty mix in time for the first watering in September. My potting mix used to be two parts grit, two parts loam and one part leaf mould but since I ran out of my loam supply, I substitute two parts sharp sand for the loam content.



*N. romieuxii* JCA805, just opening



*Narcissus x susannae*

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*Narcissus cantabricus*



*Narcissus bulbocodium* var *pallidus*

The same cultivation regime also suits *Narcissus cantabricus*, another member of this group that you are likely to come across, which is distinguished by having white flowers. *N. cantabricus* is found growing over a wide area including Spain, the Balearic Islands, Morocco and Algeria. It is hard to pick a favourite out of these narcissus but there is something special about the pure crystalline white of a good form of *N cantabricus* which also has the bonus of a beautiful scent. There are many different opinions to the precise naming of these narcissus and their numerous sub-species, which may only differ from the type in small details.



*Narcissus cantabricus* var. *foliosus*

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The variety of size, colour and shape of the 'hoop petticoats' is quite delightful



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There are a number of named forms and hybrids that have proved their worth over many years in cultivation and these are worth looking out for along with the species mentioned above. Many are covered on the SRGC website in my [Bulb Log Diary](#) which has been written every week since 2003.

The milky white *Narcissus* 'Camoro' (below) a fertile hybrid between *N. cantabricus* subsp. *monophyllus* and *N. romieuxii* was raised by Margaret and Henry Taylor of Invergowrie.



*Narcissus* 'Craigton Gem', raised by the author, has yellow/white flowers on very short stems.

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The hybrid *Narcissus* 'Don Stead', named in memory of late Scottish raiser of the plant, has large creamy white flowers on very short stems.



Narcissus in the Young's glasshouse in December.