



THE

FRITILLARIA

GROUP



The Fritillaria Group of the Alpine Garden Society
Journal 39



**Committee members and contact details can be found on
our website: www.fritillaria.org.uk**

A small specialist journal such as ours relies heavily upon contributions from the members. The Editor welcomes all articles on the genus *Fritillaria*, in cultivation or in the wild, short or long. Please share your thoughts, insights and images with your fellow enthusiasts. The journal won't happen without you.

A Plant at the Spring Show



Fritillaria bucharica Uzbekistan

The picture on the back cover is of *Fritillaria cf pinardii*
Photographed near Acipayam, SW Turkey

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THE *FRITILLARIA* GROUP OF THE ALPINE
GARDEN SOCIETY

AGM and Autumn Meeting, Sunday, 2 October 2016
Theydon Bois Village Hall, Coppice Row,
Theydon Bois, Essex CM16 7ER

PROGRAMME

- 9.30 Doors Open and Coffee. Plants and Bulbs will be on sale during the day.
- 10.00 Annual General Meeting
- 11.00 **“38 years of breeding *Fritillarias* (Petilium group): the taxonomy and development of new cultivars for cut flower production, pot culture and gardens”**
by Willem Wietsma
- 12.30 Lunch Break
- 14.30 **“The Flora and Historical Treasures of Armenia”**
by Pietro Roseo
- 15.30 Raffle
- 16.00 End of Meeting
- Entry fee £2.00 for members of the *Fritillaria* group and £5.00 for non-members. All Visitors Welcome
Photographic exhibit

Further information can be found on our website
www.fritillaria.org.uk

**Members and guests are advised to bring their own lunches
– there are pubs in the area but they can be very busy at
Sunday lunchtime.**

Chairman's Chatter

By Bob Wallis

Summer is now here and most of us have now finished our various trips to see *Fritillaria*, and indeed many other things, in the wild. It is now time to turn our thoughts to seed sowing, repotting and replanting. To this end we have two excellent speakers for our autumn meeting. Pietro Roseo has been to the trans Caucasian countries many times now and will show us some of the wonderful flora that abounds in that area. In the morning, Willem Wietsma will show us the fantastic strides that he has made in creating and selecting new hybrids and cultivars of the *F imperialis* group. Hopefully we will have progressed with our repotting and seed sowing enough to turn out to Theydon Bois. If you are able to put something of interest (not necessarily *Fritillaria*) into the car, then please bring it along for everyone's enjoyment. It is the day after the Loughborough Autumn Show and just a short trip down the motorway from there so there should be a few things.

Some of us went to Gothenburg Botanic Garden at the end of May and were delighted by the peat garden and its wonderful plantings of rare things in great quantity. The Joint Rock Garden Committee awarded a First Class Certificate (FCC) for *F camschatcensis* forma *flavescens* which was growing in partial shade in the high humus soil and had made a patch about a metre wide. Not to be outdone the "normal" black form was in several patches but one on the opposite side of the path was almost as large. I also managed to photograph *F cirrhosa* but had missed the flowering of *FF dagana* and *roylei*, both of which were growing well in these conditions. The compost was made up largely of Swedish moss peat and coarse granite sand and was on a north-facing slope in the shade of tall trees.



F. camschatcensis forma *flavescens* in Gothenburg Botanic garden



F. camschatcensis growing in the peat beds in Gothenburg Botanic garden

Exploring and collecting *Fritillaria eduardii* in Tajikistan

Words and images by Kit Strange

This spring I was very lucky to go on a collecting expedition with John Mitchell from Edinburgh Botanic Gardens and Mariyo Bobaiev from Kulob Botanic Gardens. We spent some days staying with Mariyo and his family whilst we went on several field trips North and South of Kulob, to explore different plant communities in this area of Tajikistan.

So on the 26th of April we set off for a particularly off the beaten track place with dense woods, wolves and bears in the forests, to look for *Fritillaria eduardii*. We were accompanied by one of Mariyo's friends who knew the area well. We got into the forests as much as we could with our 4x4 and then we walked. There was an interesting mix of trees. A lot of Walnut, some nice *Crataegus*, and some other species of *Prunus*, some plums I think and maybe some sour cherries too.



The lush forest

All around us the forest was lush, and very steep, and on the track we did encounter some grazing cows too, small alpine sized ones, even though I did not really see that much grass there. There were a few alpine meadow areas but they looked too steep for the cows to get on. A few tantalising glimpses of something orange/red in the undergrowth, and I was ready to throw myself down the steep slope to see; but no, we carried on walking. Eventually we came upon a ravine going up with a dry stream bed at the bottom and there stood many *Fritillaria eduardii*, all looking very happy.



Fritillaria eduardii in woodland

All the plants were up to about 4' or about 120 cms, but I think the most common size was probably closer to 3', 90cms. They were quite substantial plants, with a good colour range of bright orange, to deep orangey- red with a good crown of flowers. We had caught them just right. They were mostly in good condition, despite growing in the dense shade of the large walnuts and at unbelievably steep angles in the

woodland. The soil was good solid leaf mould on top for the first few inches and then really thick loam for the rest: really rich soil.

As I was in charge of the collecting book I did all the notes on the plants. Here is what I wrote: Dense woodland glade, plants on steep banks along little ravine, *Juglans*, *Prunus sogdiana*, *Acer turkestanica*, *Crataegus* sp and *Exochorda albertii*. Leafmould light, specimen altitude: 1977 meters, Collection number KEEKT 027. Material collected, Herb and live. Bulbous perennial up to 1 meter, leaves glossy, and arranged opposite. Flowers from 4 to 9, nectaries white at base, anthers and stigma white. Flower colour mainly orange with a hint of red.



A nice reddish orange

As we had the appropriate permits, we got onto the collection of live material and herbarium material for Edinburgh Botanic Garden and Kulob Botanic Garden. Some of the bulbs were really a very long way



Collecting herbarium material for Kulob Botanic Gardens,
John Mitchell to the right.

down. The tallest one was about 1', 30 cm, down, and with a 4', 120 cm height above ground, they were almost as big as me. We collected enough material for both Botanic Gardens, and were very happy. It was a very successful day and we saw plants we did not think we were going to see.

This habitat is quite unusual as it is in dense shade. In other places where we saw it, in the Varsob gorge for instance, it grows on ledges on rock faces, where people cannot reach it. This happens because there the people collect the plants to sell on the side of the road, and the plants have found refuge in places where the people cannot go.

It was very interesting to see the different types of habitat this *Fritillaria* grows in. I think it shows more about the plants' resilience to grow

anywhere rather than how difficult it may be. The different types of habitat gave us food for thought for sure, and sometimes you cannot always go by what you are told about plants. You sometimes have to go and have a look yourself!



Collected plants in bird bags (linen bags)



Ready to go home: l to r, our guide, John Mitchell and Mariyo Bobaev

The Seed Distribution 2016

By Pat Craven

If you have seed or bulblets available, please do donate. The seed list really does depend upon all members contributing if they can. And remember that donors get priority when requests for seed are being dealt with.

Details of this year's distribution are on the Group's website and will be emailed to all members for whom we have an email address. If you don't have online access, and wish to receive the information and/or the seed list in printed form, please contact me by email, phone or letter.

If you are unsure that we have your email address, or have changed it in the last year, please email patcraven24@gmail.com

KEY DATES

Deadline for donations: 24 August 2016 (If your donation will be later than this, please send details of species and whether it is seed or bulblets).

List publication: 28 August 2016 (If you want a list, but have not received one by 3rd September please inform Pat Craven).

Seed Manager: Pat Craven, 24 Leven Road, Yarm, TS15 9JE, UK. Email: patcraven24@gmail.com Tel: 01642 780109

Wild-collected seed in plant society seed exchanges

Representatives of plant societies met, hosted by The Royal Horticultural Society, on May 13th 2016, to consider common procedures for adoption by their seed exchanges. The following is a summary of their deliberations and the implications for Groups such as ours. Although the main target of the Nagoya Protocol is the pharmaceutical industry, its remit stretches to horticulture as well.

The meeting considered the implications of the Rio Convention on Biological Diversity (CBD), and compliance of seed collectors with laws and regulations concerning collection of plant material in the countries of origin of the seed. It was noted that there could be an impact on the reputation of an organisation that distributed or exchanged wild-collected seed that did not have necessary permits.

In addition to the CBD, there are restrictions on the utilization of genetic material acquired from signatory countries (<https://www.cbd.int/abs/nagoya-protocol/signatories/>) after October 12th 2014, the implementation date of the Nagoya Protocol. However, the definition of utilization does not include cultivation, whether for private or commercial use. Development of new named cultivars through breeding or selection is included, as is use of the genetic material for developing new drugs etc. So far as seed exchanges are concerned, in the absence of any document laying out the mutually agreed terms for utilisation, we should inform recipients that there is a 'no utilization' restriction on relevant seed. They should also be made aware that if there is no documented link back to the source of the seed and any paperwork relevant to the collection of that seed, then it becomes extremely difficult for future utilisers to carry out the necessary checks to establish the status of the plant material. That also applies to any recipients of the progeny of the seed.

Legality of wild-collected seed

A paragraph such as the following should be included with a society's seed list.

The XXX Society has sought assurances that all wild-collected seed offered in this list has been collected in accordance with the laws of the source countries and that its distribution is allowed under the terms of any permits to collect the seed.

There also needs to be guidance to contributors. This should be along the following lines.

The reputation of the XXX Society is at risk if we offer seed that has been collected illegally, or that does not have permission for distribution. This could do harm to future attempts to people who want to collect legitimately. The XXX Society is not able to check every seed submission, so please do not submit seed that would put our reputation at risk. Please also retain documentation giving any relevant permission for as long as possible.

The Nagoya Protocol

Societies that have seed exchanges could include with their seed lists a paragraph such as the following. They would then be complying with the legal constraints that apply in the UK.

Genetic material collected from the wild since October 12th 2014 is covered by the Nagoya Protocol, which is legally binding in the EU, including the UK. For material from signatory countries, unless there is written consent from the country of origin, 'utilization' is not permitted. This includes development of new named cultivars and hybrids as well as production of new drugs and other products. Cultivation, privately or commercially, is permitted. Unless explicitly stated otherwise, you should not assume that seeds in this list have consent for utilization as described above.

Plants at the Spring Show 2016

Images by Laurence Hill



Fritillaria alfredae glaucoviridis



F. alfredae platyptera



Fritillaria dasyphylla



Fritillaria rixii



Fritillaria bucharica Pulkahim



Fritillaria ojaiensis flower

The Yellow Bells of Southwest Turkey

Words and images by Bob Wallis

This talk is based on travelling quite a lot in western Turkey, looking for habitat; species of fritillaries and other bulbs that we knew were there; and putting it together in a tour that works for a group of people in a bus and maybe occasionally going off in 4x4s or minibuses to be able to get up the relevant mountains. This talk is mainly based on that putative trip so it is more or less an advert for you, but I hope you like it.

The first mountain is called Baba Dağ ‘Baba’ is Turkish for ‘Father’ and of course Dağ with a silent “g” is mountain, so it’s the Father Mountain, and it’s an example of a coastal mountain. There are mountains all around the Mediterranean that have a similar sort of climate zone and a similar sort of altitude that give rise to a great degree of endemism. It’s a mountain of about 2000m in altitude, so it gets frost and snow in the winter, but it sits next to a warm humid sea. What you get from the combination of cold air and warm humid air is, of course, precipitation. One of the main reasons these mountains have such strange habitats with such strange plants on them is that they have this combination of cool air and precipitation yet they’re sitting in a Mediterranean climate zone. What’s more, they’re isolated within their own climate zone so the plants evolve in isolation. In the summer they’re still cold on top, with a marked temperature difference between the top and the base: 45° C is quite possible low down, but never on the mountain. The hotter it gets at low levels, the more fog forms at the top, so we have a mist belt as well and a lot of plants grow there. So we have a high degree of

endemism, a lot of very local plants and that's why these coastal mountains are exceptionally interesting.

Baba Dağ is a wonderful mountain. Owing to the fact that it's a high mountain, right next to a sandy beach for landing on, people jump off it on parascenders. So there's a road to the top. It's a dirt road but it is perfectly ok for a hire car or a mini-bus. We go up this road, through *Pinus brutia* forest, with an understory of *Cistus* and *Quercus coccifera* (Kermes Oak), and lots of other things. At 1000m you come to an area of cedar forest. Cedar forest occurs right round the Mediterranean Basin and is more or less always associated with mist zones in the summer time, and that's where we find some very interesting plants.

fact As we drive up the mountain, the first thing we notice is little yellow bells sticking out from underneath the undergrowth—growing in the roots of trees and on mossy rocks, in pine-needle duff and bits of bark. They're growing in very humus-rich soil, on degraded limestone, in quite deep shade. They only reach about 800m in altitude, starting flowering at 100m asl in February, then ending in April at the top of their range. This is *Fritillaria forbesii*, recognised by its very narrow leaves, bright-green foliage, and rather nice green-yellow bells. I'm sure many of you are growing *F. forbesii*, with varying degrees of success. Mr Forbes was up here and collected another plant endemic to this place, *Chionodoxa forbesii*. This covers a huge area, starting in the cedar forests and onto the limestone screes higher up. Very restricted in the wild – endemic to this mountain and a very few others nearby—but when you find it, it's there in its thousands and hundreds of thousands. All sorts of other forest-dwellers are here, such as *Corydalis wendelboi* and *Cyclamen alpinum*. Baba

Dağ is also the first mountain where *Crocus mathewii* was found. It really is a superb mountain, and certainly worth a day. It would be crowned off by the fact that when you get to around 1100m, where the cedar forest starts, you can find the white *Sternbergia candida*, the only white species of the genus, and endemic now to this mountain. We've looked for it in other locations cited in the Flora of Turkey, but have never found it in any other place. I think it is now restricted to this mountain, and in a very small band. There's quite a lot of it within that band, but the band itself is small. It has foliage that can grow to 2ft long in the late spring/early summer, before it goes dormant. It is a beautiful species which came into cultivation in the early 1970s, when it was then propagated by twin-scaling. Those twin-scaled bulbs rarely flowered. We bought them, and I'm sure many of you did as well, but we were never able to flower them. We were very fortunate to have been given some seed by Jim and Jenny



Fritillaria forbesii



F. sibthorpiana subsp *enginiana*

Archibald, who had several different clones. We now have seedlings that flower very well. We even have some hybrids between this species and *Sternbergia fischeriana*.

On Day 2, we go up the Dalaman river from its source, which is very near Dalaman Airport. This is low altitude, so very much a Mediterranean climate zone, with all the flora associated with it. There is, however, a marked difference between the south slopes, which have very little vegetation, and the north slopes, which have lots. It's a big area of what we call *phrygana*, which is a kind of overgrown shrubbery, with lots and lots of plants in it. By the time we get there, in late March, they're starting to go over, but there are still plenty of the orchids which are characteristic of the Turkish Mediterranean coast. I have a very lumping attitude towards these orchids and I'm going to stick them all into 4 or 5 different species, because the taxonomy took a big explosion once, but has now come back to a more consolidated way of looking at it. *Orchis anatolica*, with its very long upturned spur, is probably the commonest orchid found throughout Turkey. There's also a lot of *Barlia robertiana* around, which is quite an early-flowering orchid. I was surprised when I started writing the *Fritillaria* monograph that the type locality for *Fritillaria elwesii* is actually the Dalaman River valley. I always assumed that it was further east in the Cilician Taurus mountains.

One of the reasons we wanted to go to the Dalaman River was to find *Fritillaria sibthorpiana* subsp. *enginiana*. By the time we got there, in late March, we saw a number of plants in the first stages of forming fruit. We saw one in flower, and thought, Oh dear, we're too late. But being good botanists, we realised that if we went higher up, where it was cooler, we might find it in flower.

So we got back in the car and got up to around 800m, where there was a farming community with a few odd houses around. There, growing by the roadside, were lots of flowering *Fritillaria sibthorpiana* subsp. *enginiana*. It has a pair of broad leaves at the base and another pair up the stem, with quite a nice bright yellow flower. It's a really beautiful species, not too difficult to grow. The only thing you have to look out for is not to water it too much if it's going to get frosty. It just needs to be a little bit drier if it's going to get really cold. Quite a neat little plant, only 6 – 8 inches tall, only described in the late 1990s it has now made it into Volume 11 of the Flora of Turkey. It is endemic to the Dalaman River drainage and the hills around it.

In looking around here we found an area of felled forest, which had obviously been growing on very rocky soil because *Muscari macrocarpum* loves growing amongst loose rocks and stones. The wood detritus around here was just the leftovers from the felling, but the increase in light allowed for an absolutely wonderful flowering of this *Muscari*. It has the most fantastic smell of ripe bananas, which scented the whole hillside. If you grow it in a pot it gets terribly etiolated. Many of you I think will be able to grow *Muscari macrocarpum* in the garden, particularly if the stock comes from these higher altitudes. Nearby and all around this region we have *Fritillaria acmopetala* subsp. *acmopetala*, the narrow-leaved one. It's all over the place, and a good locality for this species.

The next destination is the Bozburun peninsula, which has a mountain range along it, around 800m in altitude. This is a



Fritillaria acmopetala



F. sibthorpiana subsp *sibthorpiana*

beautiful place, heaving with tourists in the summer, but very quiet in March and April. It has superb forests away from the beaches. The forest margins are just wonderful in spring: *Anemone blanda* everywhere, and the leaves of *Cyclamen hederifolium*, with a few *Cyclamen alpinum* as well. Since it's a slightly shady position, you tend to find those two growing together. The *Cyclamen alpinum* can vary quite a lot. The flowers are mainly the usual cerise colour, but there are also significant numbers of pale pink- and white-flowered plants. It's quite a widespread species. All in all, the entire area is a flower garden of Mediterranean flora: poppies and candytuft, orchids and *Anemone pavonina* in various colour forms, red ones and purple ones, and red with white centres, and even *Ranunculus asiaticus* was there with a slightly shinier flower. It is the only place where *Arum creticum* is found in Turkey. Here there is a large white-flowered form, with lovely dark stems to it, nearly 2 feet high. The reason to come here is that it is the type locality for *Fritillaria sibthorpiana* subsp. *sibthorpiana*. Characterised by

one basal leaf and one stem leaf, the flower is a nice bright yellow. Once again, it's quite an easy plant to grow so long as it isn't too wet when it's cold. If it receives a check, it never gets going again and the roots just rot off. Its habitat is semi-shaded, with lots of herbage growing up around it to shade the bulbs and keep them cool in the hot summer. It's always found on the north-facing banks, as all these fritillaries are. The rock here is all limestone and it's very common where it grows, but once again, it's restricted to this one peninsula.

Close by is the Dağca peninsula, our next destination. It's spectacular: very high but very narrow, so you can stand on the road and see the sea both to the north and to the south. You can even see the islands of Rhodes and Kos and Simi in the distance. The reason to go along here is to look for two species: one is the newly described *Fritillaria mughlae*. This species was formerly included in *Fritillaria forbesii* until the botanists realised it was actually quite different. The leaves are very glaucous and quite fleshy and the flower is much greener than that of *F. forbesii*. It grows on serpentine rock at low altitudes. This plant was growing at around 5m above sea level, 20m from the sea itself. This habitat makes it very endangered since it is very close to the tourist beaches and the campsites. It is also near an area of reforestation, where eucalyptus, of all things, is being planted. Nothing will grow under eucalyptus unless it's an Australian native.



Fritillaria mughlae



Fritillaria bithynica

The other species of fritillary we look for here is *F. bithynica*. This was described by Baker way back in the 19th century. It's really quite a complex species. The plants here have three bract leaves in a whorl. The capsule is winged, even the ovary is winged. The flowers are always green. This is classic *Fritillaria bithynica*.

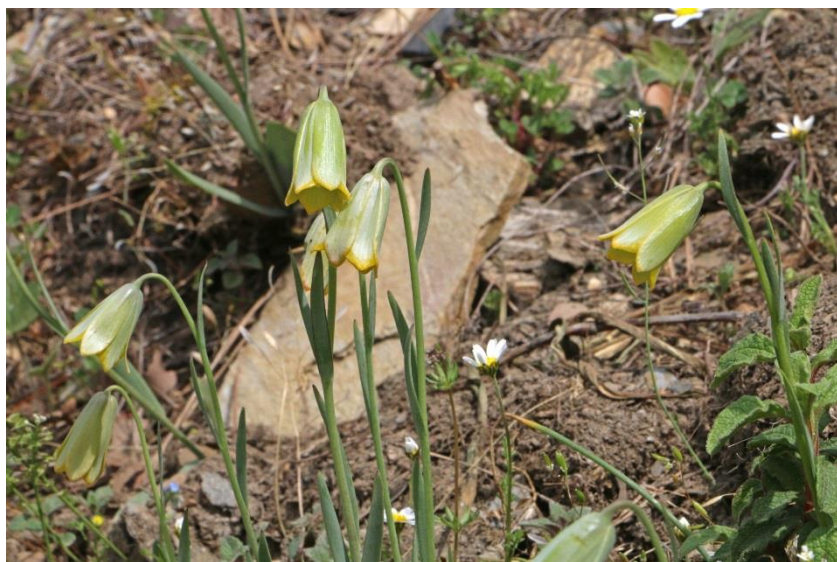
Coming off the peninsula, we head towards Milaş and have a look at the sandstone mountains in the area. The habitat changes completely, with these beautiful wind-eroded round sandstone rocks capped over with rounded umbrella pines, *Pinus pinea*. The whole landscape looks almost prehistoric, but again has a wonderful flora. This is another beautiful, very wild area, but with reasonable roads. *Pinus pinea* grows throughout and it is underneath this pine that you find millions and millions of *Fritillaria dasyphylla*, which was collected nearby, and described by, Baker in 1875. Martyn Rix actually put *F. dasyphylla* into *F. bithynica* in a 1977 article, thus merging Baker's two species.

Recent literature gives these plants a new name: *F. milasense* but in my view, the authors have incorrectly ignored Baker's specimens and taxonomic priority. *F. dasyphylla* is quite common in this region and also unbelievably variable. It looks like *F. bithynica*, but actually has only one bract leaf, and when we found capsules, they had no wings. The flowers are usually striped, but not always. It turns out that we were growing this plant—and had actually won two Farrer medals with it—since 1990 when we collected it much further east. It multiplied up really quite quickly. It's a small thing, only about 4" tall, with fabulous little Chinese-hat like flowers and the very narrow style similar to *F. bithynica*. The pot got zapped in one of the recent very cold winters, though we did manage to salvage a few bulbs, which are only now starting to recover.



Fritillaria dasyphylla (= *F. milasense*), form found W of Denizli

The Boz Dağ range, where we go next, is another mountain range near the sea, just east of Izmir., ‘Boz’ in Turkish means ‘grey’, and I think that refers to the fog which so often envelopes the higher reaches of these mountains. Again, it’s one of the first mountains to catch the rain and the mist and again, it has a wonderful flora. At the lower altitudes it has a typically Mediterranean habitat, with pines and an understory. On the foothills of Boz Dağ we find what Baker called *Fritillaria pineticola*, which Martyn Rix in the Flora of Turkey considers as a variant of *F. bithynica*. *F. pineticola* has one bract leaf, where *F. bithynica* has three, and has a winged capsule. It should probably be included within *F. bithynica*, but it is just a little bit different and it’s just found in this one valley, in this one mountain range, on the seaward side.



Fritillaria pineticola

We are of course very near Troy and here we find *Fritillaria schliemannii*, a much more typical *F. bithynica*: three bract leaves, a green flower and a winged capsule. The *schliemannii* form produces lots of bulbils. This brief overview demonstrates the difficulties of the taxonomy of this species, the pitfalls both of lumping and splitting all these various forms of *F. bithynica*. If you lump them, you have to take account of the next species, which is found on the Gallipoli peninsula. This is an area of intense agriculture, so you have to look very hard for your plants. We were given four localities for *Fritillaria sibirnyi*. We searched all four of them and only found *F. sibirnyi* in one, about a couple of dozen plants in a small area about half the size of a tennis court. This also has a striped flower, a winged capsule and three bract leaves, so this is really just like a striped variety of *F. bithynica*. If you're lumping the others into *F. bithynica*, this should be included as well but things are never that easy!

Going back to Boz Dağ, we eventually found our way up Nif Dağ and it was worth it. We found *Fritillaria carica* in a very yellow form which is typical of the populations east of Izmir. It's much greener further south. You can see lots and lots of these around, growing in a rocky habitat in open pine forest. So there's quite a lot of shade around, but also light because the pines are very tall with no low branches. Again, there are lots and lots of orchids. We also wanted to find *Galanthus gracilis*, which has been collected here many times before, with some clones named after the mountains.

We found the road up to the Boz Dağ ski resort. The snow was all melting, so the resort was closed, but we still had the use of the road. *Scilla bifolia* is a very common plant in all these mountains,

a typical snow-melt plant with two leaves as the name suggests. There are other plants up there as well. This is the type locality for *Chionodoxa luciliae*, and the only known place where it comes from. Although well-established in the trade, there are only two or three clones available: blue, white and pink. You can see the sort of variations in a population on this one hillside which is much greater than the plants available in cultivation would suggest. There are other lovely plants, such as *Corydalis lydica*, one of the *Leontocoides* section, with big white flowers, where the potato-like tuber is stuck down under a rock and the leaves radiate outwards. It was not far from here that we saw a form of *Papaver macrostomum*, identified from Kit Grey-Wilson's excellent book on poppies, but in a black form. I think it could be a really good garden plant, and you know what gardeners are like about black flowers. You might find it under the name 'Black Magic' in the AGS seed list.

We were unable to visit Honaz Dağ, with its wonderful populations of crocuses, because it's the site of a Turkish military base and strictly off-limits to anyone else. So we headed for the adjacent mountain, one called Ak Dağ, just to the east of Denizli. It has a road into it to a point where it's worth starting to walk. The place is absolutely full of crocuses, *Crocus biflorus* in particular and little *Hyacinthella lineata*: very growable and very showable in a pot. We also found *Crocus baytopiorum*, one of the pale blue ones, growing in large numbers in the snow melt and emerging from underneath very spiky bushes like *Astragalus*. In the past we have also found *F dasyphylla* here.

South of here there's another mountain called Boz Dağ, Grey Mountain, and although the signs say that there's a ski resort on

it, we've never been able to find it. What we have been able to find is a road which takes us up onto a big limestone area very near the summit. As you drive up, you go through a wide band of serpentine before hitting the limestone. So you have the two different rock types and the two different floras associated with them. The first thing that flowers up there is *Sternbergia fischeriana*, yellow everywhere. It's at a much higher altitude than we've ever seen it, about 1200m. It's a lovely plant, really worth growing. Whether it would grow outside, I don't know, but it would certainly be worth a go. We have actually hybridised this plant with the white one, and have some nice cream coloured ones. There are also lots of *Crocus* here: *C. baytopiorum* and *C. biflorus* subsp. *crewei* with the black anthers. There is also a yellow fritillary, which is *F. carica*, but growing on serpentine rather than limestone. It dies out as soon as it hits the limestone.

Coming down to the Dirimli Pass, we arrive at another serpentine area, and the type locale for *Fritillaria serpticola*, with its characteristic convex bells over two or three grey leaves. Up here, growing on the serpentine scree, *Muscari muscarini*, which is very close to *Muscari macrocarpum*.



Fritillaria carica (l) and
Fritillaria serpticola
(r)

Further south roads come up from the coast at Kaş and Kalkan and join up just short of the Sinekçibeli Pass. This is an area of limestone pavement with cedars at high altitude, and pines and junipers lower down. You can walk over this limestone pavement, and it's just wilderness. In fact, I think it would be dangerous to walk too far over the pavement without a GPS, because it would be easy to get lost in limestone grikes. This is the type locality for *Cyclamen alpinum*, which is very tiny here, only about 1 inch, as opposed to the 4 inches at lower altitudes. Here it tends to be always in a pink form; you never see white ones up here. *Anemone blanda* is here as well, and another form of *Crocus biflorus*. It's also the type locality for *Corydalis paschei*, which has a very long pedicel compared to similar related species. It's one of the *solida* group (more correctly sub genus "*Corydalis*") and very easy to grow. There's also *Corydalis wendelboi* up there, which has a very short pedicel. It's up here that we start to find fritillaries. The first one we came across was yellow, and the next one, and the next had a bit of brown in it. This is the taxon which we call *Fritillaria kittaniae*, which seems to be a hybrid swarm between *F. pinardii* and *F. carica*. When you sow seeds of these, you get a complete mix: brown ones, yellow ones and stripy ones.

We end our tour in the lovely seaside town of Fethiye admiring the turtles swimming in the harbour amongst all the little fishing boats before boarding our flight home.

Sadly we were not able to take this tour in 2016 but if you are interested we could try again in a couple of years' time.

More Plants from the Spring Show



Fritillaria thessala reiseri



Fritillaria davisii



Fritillaria pinardii



Fritillaria drenovskyi



£3.50

www.fritillaria.org.uk

