



THE ALPINE GARDEN SOCIETY CENTRAL SUSSEX GROUP



NEWSLETTER

APRIL 2007

Mr. Bob Charman Flora of Iran

Covering 3000 miles in three weeks from the last to weeks in April to the first in May, we were treated to a selection of the over 800 images taken by Bob from Iran's two major mountain chains. The S branch of the Alpine- Himalayan belt is occupied by the Zagros extending from the Turkish border NW to SE for 1600km. to the Strait of Hormoz at the mouth of the Persian Gulf, and form a series of parallel ridges rising to 4548m in Zardeh Ku.h, the valleys generally between 1500 and 2000m The very rugged topography in High Zagros is in contrast to the more rounded topography of the Elburz.

This northern branch, the Elburz (Alborz) south of the Caspian Sea represents a continuation of the system which runs through Turkey south of the Black Sea and in Iran runs for a distance of 960 km by 70 to 130km. generally up to 2500m, but with many summits from 3600 to 4800m. Substantial areas of these mountains are of limestone with a number of volcanoes, most long extinct and much dissected, although the shape of the towering conical peak of Mt Damavand (5671m) to the north of Tehran, suggests that it is far from extinct (cf Mt Ararat in Turkey)



Exploration took place in the Zagros around Arak (west of Qom), Khonsar, Daran, Shahr-e-Kord, Chelgerd, the Dasht-e-Laleh conservation park. Darreh Tarik, S. of Aligudarz, W and S of Khorramabad, the Razan Pass Ganjnameh and Hamadan. Continuing NW to Sanadaj, Merivan, Nowsud and Chenareh close to the Iraq border, then N to Saqqez, E to Takab, Takht-e-Suleiman and Zanjan. Into the Elburz over the Rudbar Pass to Khaikhal, the Asalam Pass and down to the Caspian Sea with excursions into the mountains above the Caspian to Chalus and finally south over the Kandavan Pass back to Tehran. Thanks to David Robbins for information on locations. I have taken the liberty of rearranging the order of Bob's photos to hopefully follow his itinerary – my geographical instincts!

The flora of Iran is exceptionally rich, with over 8,000 species, 450 endemic, many of the desert or semi-desert. Starting 80 km N. of Arak in semi-desert, *Iris songarica* about 2ft. high with hard and sharp leaves, the flowers a soft greyish lavender-blue, lightly spotted and veined – impossible to grow! In this environment *Ixiolirion tartaricum*, an Amaryllid with umbels of dark blue funnel-shaped flowers, a *Jurinella* with red and white anthers, while *Fritillaria gibbosa* (218/360, 267/39, 273/257, 278/Cover, 295/71) already had seed inflated pods. Working southwards, an oncocyclus, *Iris meda* (276/262, 277/262, 294/Cover, 415) is endemic to NW Iran, a lovely heavily lined plant which Paul Furse aptly called Honey Gold. With grass-like foliage, yellow flowered *Merendera montana* (also in



Tulipa stapfii - David Millward

the Elburz) and *Anemone biflora* (142/297, 186/272) seen in orange, yellow and red forms, is compact and nearly stemless on scree. On a pass S. of Khonsar, *Iris hymenospatha* ssp. *leptoneura* is a relative of *I. persica* with curved leaves with whitish flowers carrying a yellow crest. A member of the Berberis family, *Leontice armenaica* has grey-green foliage and yellow flowers and grows in stony ground, together with minute *Fritillaria zagrica* (286/555), curled foliage and dark purplish-brown flowers with yellowish blotches at the tips of the tepals. *Colchicum crocifolium* (kesselringii) has white and narrow petals with the odd pink one – lots of seedlings. South of Daran *Merendera* including *M. wendelboii*. With two leaves *Tulipa biflora* (188/116) has

yellow-centred white flowers, flushed red or mauve on the outside. There are about 10 red tulips in Iran, among them *Tulipa stapfii* (NW Shahr-e-Kord and Kuhrang) with a black or yellow base to each tepal. In cultivated fields covered with tulips, the bulbs remain undisturbed because they are below plough depth. *Eremurus* do not appear to be eaten by sheep and survive in semi-desert as spectacular clumps – shown were green and white *E. spectabilis* (SRGS113Cover) and the more compact *E. persica* (282/515) with flesh-pink flowers. *Muscari* and an *Onosma* with yellow and pink flowers and *Ornithogalum* with white and green buds were everywhere. A Goatsbeard, *Tragoponum* with white and mauve flowers was quite a sight. There were big clumps of carmine-flowered *Onobrychis cornuta* (288/203) and thousands of *Scilla persica* (142/357) with their blue, pointed flowers on horizontal pedicels. Like a large glossy-yellow celandine, *Ranunculus kochii* (166/289) was quite common. The only rose with simple leaves and spotted flowers, *Rosa persica* (*Hulthetmia berberifolia*) is a steppe plant and although very pretty, difficult in cultivation, at least until we get even longer hot summers.

Probably the most staggering sight in the Zagros are the fields of red *F. imperialis* (286/561, SRGS113/3) especially stretching as far as the eye can see in the Chelgerd Valley and Dasht-e-Laleh conservation park near Shur Ab west of Shahr--e-Kord. Here also, *F. reuteri* (198/352, 223/83, 286/558) like a more slender *F. michailovskyi* with pure yellow to yellow-brown pendulous flowers and *Gagea*, Near Darreh Tarik striped purple and green, *Fritillaria chlororabdota* and *Dionysia*. On one occasion meeting a Bakhtiari herdsmen with three dogs, goats and sheep, the party were warned to return from the mountainous tracks before dark – “there are pumas up there!”



Fritillaria imperialis - David Millward

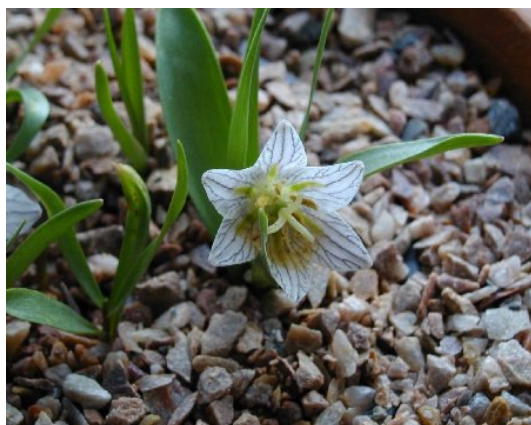


Dionysia haussknechtii -
John Mitchell

West of Aligudarz (Shuleh-abad) on a rock face were the yellow flowers of *Dionysia haussknechtii*. Around Khorramabad *Cephalanthera kurdica* (251/80, 266/479) with flushed pink flowers, *Anemone coronaria* were purple flowered only, mauve flowered *Orchis simia* (188/126, 236/170) with the elongated arms and legs of the Monkey Orchid and *Orchis anatolica* (236/137) at its most eastern distribution. On the Razan Pass 'slow up, fast down, sharp right-hander, and wrecks', pendulous *Fritillaria chlorantha* (144/147) with yellow-green flowers on the outside, yellow within. Above Ganjnameh, *Tulipa humilis* and dark centred *T. oculus-solis*. West of Hamadan *Gladiolus atroviolaceus* preferring wettish habitats with almost black-purple flowers and a 'Moleskin' Iris *I. Meda* x ?, a dark mauve colour with a black signal patch. Further west towards Sanadaj one of the easier Junos to grow, providing water is kept out of the leaf axils, *Iris aucheri* (258/415, 16, 280/192) has deep blue to white flowers with a yellow ridge on the falls.

On limestone scree south of Konsar (and in the Elburz), *Corydalis verticillaris* (287/43) is a large flowered species, the leaves much divided with small narrow leaflets. A False Apollo butterfly between Sanandaj and Marivan with mottled white and black wings, blue spots at the rear edge, obliged by remaining stationary for a photo.

SE of Marivan an aroid, *Eminium albertii* found in a field has velvety black spathes on 6" stalks with heart shaped leaves and narrow leaf-lobes at the base. *Gentiana olivieri* (287/39) is a tufted species with blue flowers usually with a white throat on quite tall stems. The Marivan-Nowsud pass just inside the Iran border proved to be happy hunting ground for fritillaries with pale green, brown tessellated *Fritillaria. straussii*, *F. poluninii* – much excitement at seeing this and a new sub-species of



Fritillaria poluninii



Fritillaria straussii

F. crassifolia. *Fritillaria persica* (288/200) was found in a number of places from Chenareh to Saqqez, white-yellow to purplish in Iran. North of Chenareh *Ophrys reinholdii* (236/138) had a white bar with two downward prongs, a feature which could suggest ssp. *leucotaenia*, while *O. reinholdii* ssp. *straussii* has deep pink

to red, long and narrow sepals and there was a large yellow, *Ophrys schulzei* like an *O. scolopax* with lip dwarfed by huge side lobes, *Orchis punctulata*, and the new *F. crassifolia*. On a roadside S. of Saqqez water loving, yellow-flowered *Rhynchocorys elephas*, and a black *Verbascum*. South of Takab fields of *Tulip* including *T. biflora*, *Fritillaria zagrica* and more *Iris meda*..

Takht-e Suleyman, a principal Zoroastrian 1st century AD Fire Temple, became a World Heritage site in 2003. The striking feature of the site's interior is a crater lake, about 100 m across, whose blue mirror-like waters reflect the profile of the surrounding buildings 20m above and the mountains that encircle the valley where the city lies. The water, welling up from springs at a constant temperature around 15° Fahrenheit, overflows and runs off in channels at the north and south ends. It provided an opportunity to meet and chat with a very friendly family with three daughters, of whom one was educated in England. A few miles to the east, *Colchicum szovitsii* (294/409) with light purple-pink or white flowers, strongly suffused purple-pink. Both this and *Puschkinia scilloides* (298/394) are often snow melt plant. There were pretty blue *Moltkia coerulea*?

in volcanic detritus, *Iris reticulata* (170/325, 277/299) and many flowered *Fritillaria crassifolia kurdica*, some yellow, some red and in debris on a steep slope larger (yellow) forms.-*Fritillaria kurdica* ssp. *grandiflora*.

Between Zarjan and the Rudbar Pass in the Elburz, *Tulipa humilis* (272/210, 282/490, SRGS89/405) nearly always with one flower and usually three leaves, very variable in colour, the one shown almost magenta. Also here, *Iris reticulata*, *Crocus biflorus* a snow melt species and *Dactylorhiza iranica*.

There is much variation in *Fritillaria olivieri* (234/348) which grows on the edge of streams and in snow melt north of the pass, greenish with brown shading. Above Masuleh it was interesting to see our Sussex Early-Purple Orchid *Orchis mascula*. Near Khalkhal, there is *Pulsatilla albana armena*, with violet-blue flowers, the bearded, yellow flowered *I. imbricata* with a lovely lined crest and a large black boar pottering by *Dactylorhiza iranica* and with lemon-yellow flowers and golden anthers *Paeonia mlokosewitschii*. *Arnebia echioides* (*Macrotomia pulchra*) (109/223) the Prophet-flower is a borage with yellow



Fritillaria crassifolia -
David Millward

I. acutiloba ssp. *lineolata* - David
Millward

flowers and five blackish spots at the petal lobe junctions – said to be the five fingers of the Prophet. Less than 4” high *Allium derderianum* carries a relatively large spherical umbel of whitish tepals with purple-violet nerves on a stiff stem. Yellow flowered *Tulipa sylvestris* (266/379) may grow up to 18”, but only 2” in snow (scree?). From warmer areas *Tulipa montana* is a red flowered species with a greenish-black central blotch, the basal leaves often with wavy red edges. *T. biflora* has white flowers with a yellow centre. Both *Iris acutiloba* (with two patches) and its subspecies ssp. *lineolata* (222/359 , 234/352, 267/49, 277/252) can be seen in the Elburz – single patches whitish to pale yellow and heavily lined, erect standards and tongue-shaped falls which are often pointed Ku-Klux-Klan like, with a blackish or reddish-brown single signal patch Cloud filled valleys may be encountered on the descent through paddy fields to the Caspian Sea. Above Rudbarak *Fritillaria kotschyana* (210/586) was seen in debris on a steep slope above a rough track, in its more usual form, the flowers distinctly tessellated with a green stripe along the centre of each segment and *Allium derderianum* with broad leaves carried on short stiff stalks and a relatively large spherical umbel of whitish tepals. South of Chalus Rosy Starlings in bushes. On the high Kandavan Pass north of Tehran, yellow flowered *Tulipa sylvestris*, usually on 12 to 18” stems, but just 2” in the snow and *T. montana* with red or yellow flowers on tiny stems, also seen near Arak Near the snowline. *T. biflora* (188/116) with two grey-green leaves, has white flowers with a yellow centre. The Juno *Iris pseudocaucasica* (218/384, 273/286) was seen in a lemon-yellow form.

Beetles, a tortoise, a green frog and a snake (safe if moving) added wildlife interest, while a scorpion was found only after one of the party was stung in bed, fortunately with no long term effects. And why was Bob Wallis consuming an onion like an apple? There were also scenes of snow-capped mountains from intervening valleys and of some of the villages with mud and wooden houses – smarter in the northern Kurdistan Zagros. And with a final shot over the lake and fire temple at Takht-e Suleyman we came to the end of a fascinating glimpse of a beautiful country where politics played no part in the enjoyment of the flora. Thank you Bob for our first digital projection which went without a hitch.

From the AGS Bulletin:

Paul Furse – Some Iranian and Turkish mountain plants 134/295 and 142/295; Chris Grey-Wilson – The southern Zagros mountains 153/221; Dieter Zschummel – In the land of the Crown Imperials and Donysias 286/551 and 287/32

From the JRHS:

Patrick Syngé – A plant collecting expedition to the mountains of NE Turkey and N Iran v.86/256; Paul Furse – Iran and Turkey 1962 v.88/166, v.88/199, v.88/247; Paul Furse - Iran and Afghanistan 1964 v.90/462, v.90/504, v.91/18; T.F. Hewer – A botanical expedition to Iran and Afghanistan 1969 v.96/403

From the JSRGC:

Jeff Irons – Two weeks in Iran 113/1

The recently published 'Bulbous plants of Turkey and Iran' – Peter Sheasby

On the web:

Go to Google Earth (XP and presumably Vista but only with broadband) for a very good understanding of the nature of the landscape, especially for the parallel ridges of the Zagros.– just type in a place name.

Lots of background for the Zagros at <http://kallar.persianblog.com/>

Article with photos by John Mitchell in The Caledonian Gardener 2006 -

www.royalcaledonianhorticulturalsociety.org/journal/cg2006.pdf

and one by David Millward in the Scottish RockGarden Club -

www.srgc.org.uk/monthfeature/august2004/content.html

RM

Group Fund Raising Event

We are grateful to Paul and Mary Ingwersen for making their facilities available to us as part of a Fund Raising event for the Groups Funds. This will take place on Saturday afternoon the 23rd of June, at Ingwersens, Birch Farm Nursery near East Grinstead, commencing at 4.30 pm. As part of the Programme, Paul will advise us on selection of plants for troughs, and will demonstrate their correct planting.

An opportunity exists for members to look round the nursery and see the many fine plants still in flower and make any purchases. Afternoon tea will be provided by Jean, Edith and Mary, for which a charge of £3.00 per head will be made.

If you would like to bring along friends or relations please let Jean know on 014903 261892 or e-mail her on jeangriffin@talktalk.net In that way we shall have sufficient food available to feed those who intend to come.

Group Publicity

The Group took up the offer of the South of England Agricultural Society, in commemorating its 40th Anniversary Year, to have free exhibition space at its Spring Garden and Leisure Show held on Sunday the 6th of May and Bank Holiday Monday the 7th of May.

The Chairman, and members of your committee, agreed that we should stage an exhibit with the



aim of attracting new members for the Group. A 12ft long space was allocated to us next to Ingwersens Nursery stand in the Abergavenny building. This proved to be a good site, in the midst of other nursery exhibits, and we were under cover when it rained. With the help of stock plants loaned by Paul Ingwersen, supplemented by plants loaned from members, the display included: *Androsace*, *Arisarum*, *Corydalis*, *Campanula*, *Cyclamen*, *Lewisia*, *Oxalis*, *Petrocoptis*, *Phlox*, *Ranunculus*, *Rhodohypoxis*, *Saxifraga*, and *Sempervivum*. A miniature crevice garden in a large pan, and a miniature rock garden in a large pan, was greatly admired.

Publicity material made for us by Bob Charman, showing some flora of Iran, all contributed to the eye catching display. The Alpine Garden Society provided us with Seed Starter packs, publicity posters, Alpine Gardener Journals, and book marks etc.



A space was reserved in the centre of the exhibit for a demonstration work area, which enabled different members to demonstrate aspects such as: drilling tufa, planting tufa, sowing seeds, potting on seedlings, repotting of sempervivum's, tracing plants characteristics etc.

The sale of the Seed Starter packs proved popular, we were able to help purchases identify the names of the 10 packs of seeds they had acquired, tell them a little about their growth habit and country of origin etc. In some cases we demonstrated sowing their seeds, which they were able to take away with them.

The weather on Sunday was very good, and we had a number of interested visitors. The weather on Monday was wet and cold, but things picked up in the afternoon once the weather improved.

The effectiveness of our participation can only be assessed when we see if we get any new members to our Autumn Programme. Members of the public attending were drawn from a wide geographical catchment area including Kent, Surrey and E & W Sussex. Other local groups may also benefit from our promotional activities, if our visitors take up the offer to join a Local Group near to their homes.

The thanks of the Group are due to Jean Griffin our Chairman, who attended on both days, and to David Brown, Alan Drummond, John and Olive Gilbert, and Celia Jarratt, who all helped staff the stall in shifts over the two days of the Show and to Paul Ingwersen for the loan of his stock plants, which he also transported for us. His *Arisarum proboscideum* brought a smile to the faces of many children, who were intrigued to see a 'Mouse Plant'

For web users, it will be worth enlarging the images.

KM

