



THE ALPINE GARDEN SOCIETY CENTRAL SUSSEX GROUP

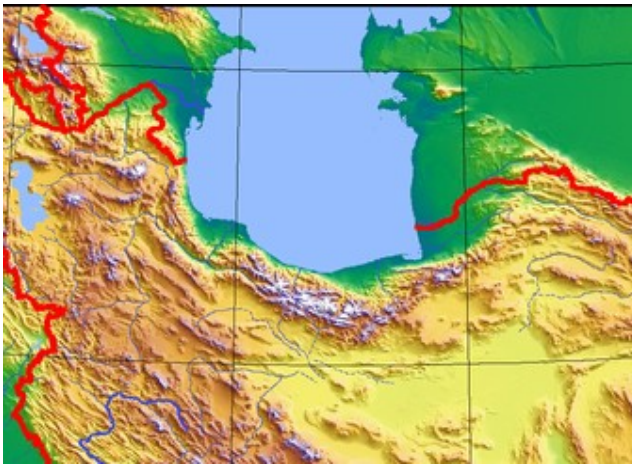


NEWSLETTER

OCTOBER 2009

Dr. & Mrs. R. WALLIS
IRAN CASPIAN TO KOPET DAG

Iran has a multiplicity of climate zones, even with the comparatively narrow band that borders the Caspian Sea – from semi-desert to dense forest. Access is now much easier than when Furze, Archibald and Mathew explored the flora 50 years ago and paved roads now exist when earlier there were mainly dirt tracks. The Caspian Sea is the largest enclosed body of water on earth by area, six times that of Canada's Lake Superior and over 40% of the world's lakes. The Volga River, the largest in Europe is the source of 80% of the Caspian's freshwater inflow, but there is no outflow; evaporation condenses and contributes to the varying water level.



See note at end

We began our journey at the Azadi monument in Tehran built in 1973 to commemorate 200 years of the Persian empire. 330Km to the north west is Zanzan and en route through mud hills lots of plants, some in salty gulleys - *Hulthemia berberfidifolia* (*Rosa persica* – the name given by Paul Furse's to his Land Rover), *Eremurus persicus* (282/515) on south facing slopes and *Astragalus* spp. A view of an ancient bridge and more plants – colour forms of very early (March) flowering *Fritillaria gibbosa* (2'8/360, 295/71) also seen after producing very winged pods, *Iris meda*, (67/262, 71/415) 6 to 8" high with quite variable ground colour and honey scented, one specimen with 20-30 flowers, a worthy Farrer plant! Tulips have identifiable problems – the keys never work, but red or yellow flowered (but never together) *Tulipa montana* is to be found all over the Elburz. Just 2" to 3" tall, mats of *Scutellaria orientalis* (258/418) and a *Salvia* sp. Rising to 5600m. Mt. Demavend (a four day climb) is a splendid looking basaltic volcano and Iran's highest peak. Named after it is *Iris demavendica* with elegant violet-blue flowers with a creamy-white beard on the falls. *Papaver bracteatum* is like a more robust *P. orientale*; growing to about 4ft. sometimes covering hillsides; it has large pinnately-lobed leaves and very large blood-red to purple-crimson flowers, each of the petals with a prominent black basal blotch. A bit higher in snowmelt, gulleys and stream banks, a *Gagea* sp. Above the tree line *Corydalis verticillaris* (287/43) with 1¼" flowers and coiled spur. A Celandine relative, *Ranunculus kotschyi* (166/289), *Tulips biflora*, (188/116), *Scilla siberica* (252/125), *Colchicum triphyllum* with dark anthers, hummocks of pink *Aethionema pulchella*, *Iris acutiloba*, flowers opening from top to bottom, *Fritillaria*



Hulthemia berberfidifolia
Marijn van den Brink

kotschyana (210/293) and in wet, soggy places and wasp pollinated *F. oliveri* (234/348). North west of Kuh e Sebalan at 4800m., *Arnebia echioides* the Prophet Flower. The road over a col went through deep ash beds and on grass cropped by sheep, nomad tents and *Corydalis verticillaris*, *Fritillaria crassifolia* ssp. *Kurdica*, *Merendera raddeana* with cherry-pink flowers, the reticulate *Irus hyrcana* (250/408) with quite a lot of variation from dark blue with yellow growing in patches on a single hillside, *Tulips humilis* in shades of pink 3 – 4” tall with white ssp. *alba* with a dark purple centre, *Oxytropis* ssp., *Astragalus* ssp., *Iris acutiloba* its signal patch variable, *Androsace villosa* (246/389275/40) with silky foliage and white flowers turning to cherry-pink. Approaching the Talysh Mountains towards in the extreme north west of Iran (south west corner of the Caspian). high humidity gives rise to big forests, part of the Caspian and Hyrcanian Mixed Forests ecoregion, an area of lush lowland and montane forests.



Together with the northern face of the Elburz mountain range they captures the moisture of the Caspian Sea. With up to to 1,600 mm this ecoregion is considerably lusher than the desert, semi-desert, and steppe ecoregions on its borders. The natural forest vegetation is temperate deciduous broadleaved forest, one third of *Fagus orientalis*. The lower slopes below 700m harbour diverse humid forests containing *Carpinus betulus*, *Parrotia persica*, *Zelkova carpinifolia*, *Albizia julibrissin*, *Diospyros lotus* along with *Ilex hyrcana*, *Ruscus hyrcanus* and *Danaë racemosa*. At middle elevations between 700 and 1500 m, Oriental Beech is the dominant tree species in this cloudy zone in pure and mixed stands with

Oaks, Hornbeam Sweet Chestnut Upper mountain and subalpine zones are characterized by Caucasian Oak, Oriental Hornbeam, shrub and steppes. Alpine tundra and meadows occur at the highest elevations
From Wikipedia Caspian and Hyrcanian Mixed Forests

Degenerate beech appears towards the tree line with *Arnebia echioides*, the Prophet Flower, a 4” tall *Nepeta* sp. with large flower, deep yellow flowered *Paeonia tomentosa* on a sunny hillside, *Allium shelkownikovii* just 2” high in basalt rubble, and the Knapweed *Jurinella mochos*. In the misty forest, *Primula veris*, *Corydalis angustifolius*, *Fritillaria kotschyana* (ssp. *grandiflora*?) where well drained, with big herbaceous plants. Near Massulah, *Parottia persica*, the Shuttlecock Fern *Matteuccia struthiopteris*, *Paeonia miokwitschyi*, pale yellow *Coprydalis marsahlliana* (232/158), *Cyclamen elegans* with very pointed petals at 1600m rather than its usual altitude of 200m, and *Rhynchortus elephas* which has failed to germinate in cultivation. Towards lake level, tea plantations. and rice paddies.

The journey now turned eastwards along the lakeside to the Chalus Gorge north of Tehran, where in crevices and under overhangs there is *Dinysia aretioides*, white flowered Juno *Iris pseudocaucasica* (218/392, 273/286) with prominently veined channelled foliage and whitish to icy-blue flowers. In a little wood *Corydalis hyrcana* with deep shiny purple flowers, *Aneomne caucasica* (287/49) like a smaller version of *A. blanda*, *Fritillaria kotschyana* with 2½” flowers. In snowmelt *Galanthus transcaucasicus* (295/66) with bright green reflexed foliage, flowers yellowed by snow and white flowered *Primula vulgaris*.

Rannveig took up the story on moving further east towards the Golestan National Park on the northern slopes of the Elburz where the rainfall is much lower. The specimen seen of *Gypsophila aretioides* (234/343) near Tang Ra must have been 100 years old, on a big trunk forming a low hummock of iron-hard, compressed stems and leaves – another Farrer plant! *Eremurus kopetdagensis*



Gypsophila aretioides habitat Marijn van den Brink

just 2ft. High with yellow flowers, a labiate *Eremostachys* sp., *Iris acutiloba*, green flowered *I. kopetdagensis* and a red flowered *Tulipa montana*. Up a side valley to a hunting lodge accompanied by a guide with a rifle (bandits, wild boar or even a bear?) with a local endemic *Fritillaria raddeana* (273/273, 393/290) with cream-



Kopet Dag landscape Marijn van den Brink

to pale yellow flowers and at the top of the valley, the Iranian endemic golden yellow, bronze parallel striped outside *Crocus almenhensis* in snow melt and dried grass.

Lower down in flat areas, *Fritillaria gibbosa* in a whole range of colours from cream through apricot to deep red, flowers above undulate foliage. *Tulipa micheliana* (*miqueliana*) is a beautiful, stately species from the Kopet Dag and *Anemone petiolulosa* (171/102) a charming plant with bright yellow flowers from here eastwards into the Tien Shan. With white flowers and vertical spurs, *Corydalis chionophylla* (232/165) with purple-tipped white flowers is another speciality of the Kopet Dag – not much in cultivation. Then *Eranthis longistipitata* (252/153) with yellow flowers and *Hyacinthus litwinowii* (206/358) flowers pale blue with a darker tube confined to the Kopet Dag as is bi-



Fritillaria raddeana Marijn van den Brink



Hyacinthus litwinowii Marijn van den Brink



Tulipa micheliana Marijn van den Brink

coloured *Iris fosteriana* seen in the company of *Fritillaria gibbosa* in rubble. Only one *Iris reticulata* was in flower – violet purple, a *Matthiola* sp. with purply-pink stem and flowers with darker petals,

endemic *Scilla khorassanica*. In cliff crevices *Dionysia tapetodes* (154/366, 277/320) seen in habitats and close up of their rich yellow flowers. A view of a mountain near Shahmizad with contrasting vegetation in the bottom of gorges and of the town of Galian. Yellow *Corydalis firouzii* (238/336) has very long curved spurs, *Crocus biflorus*, light purple-pink *Colchicum szovitsii* (294/409), *Iris reticulata* with *Ranunculus kotschyi*. The talk ended with some of the problem Tulips, yet all beautiful often with black basal spots – *Tulipa montana* in yellow and red forms, *Tulipa humilis* (272/210), red species from Golzar, Mahaiat and Dashi, *T. staphii*, and being such a feature of Iran, one on an election

poster!

A spectacular journey across the whole of northern Iran with lots of amazing plants, so many thanks to Bob and Rannveig for visiting us once again. I have been unable to add text to the map, but the Talysh is the green bit and mountains in the south west corner of the Caspian (N to SE), the Elburz are the SW to SE trending mountains and the Kopet Dag are the SW to NE range with Golestan beyond the Caspian.

For web users there are some splendid images of landscape and plants from Marijn van den Brink at www.v-d-brink.eu/gallery where you will find similar images from many other areas.

RM

MEETING 17 OCTOBER

CONSTANTINO BONONOMI - CONSERVATION AND SEED COLLECTING



We do not have an exact title, so the talk may be more general.

Costantino Bonomi from the Trento Natural History Museum is the scientific coordinator of the Trento Seed Bank who will be coming from a conference here before returning to Italy on the 18th. Costantino also heads the Alpine group of ENSCONET (the European Native Seed Conservation Network).

Trento or Trentino is the area around Lake Garda, including Monte Baldo, all extremely rich in flowers – I know as I was there (with Paul) in 1981! Some years since we had an overseas speaker so please be with us.