

ISRAEL

A Greentours Tour Report

March 2nd – March 11th 2012

Led By Oron Peri

March usually is the best time for spring flowers as well as for Birdwatching. Migrating birds cross Israel twice a year, in autumn on their way South to Africa and in spring back to Europe. Some days one just needs to look up to the sky and would be able to see thousands of birds flying.

Winter has been good this year with plenty of rain in the centre and north of the country. Temperatures were lower than average, as a result, all plants started flowering with two – three weeks delay this year and so we were lucky to find still many early flowering species that usually bloom in February while for other species it was too early. Israel's mild climate and different habitats, from snow on Mt. Hermon to arid desert in the South is home to a huge number of species, plants, mammals, birds and insects. Despite its size, Israel has just over 230 Natural Reserves.

Day 1 March 2

Group arrived into Ben-Gurion Airport in the evening and soon we had transferred to the hotel in Tel-Aviv, right on the coast.

Day 2 March 3 Coastal area and Mt. Carmel

It rained at night and by the time we left the hotel but the weather forecast was in our favour. We headed north along the coastline, to make our first stop in a small natural reserve in the Sharon area. This part of the country was completely taken over by citrus orchards in the past, only a few hills have been saved. The habitat is interesting as it is sandy with areas of shallow sand on sandstone. On our arrival to the site a noisy group of Rose-collared Parakeet were feeding on the trees in front of us, while a White-throated Kingfisher sat on a low telephone cable. This site is one of the few locations where *Ophrys flavomarginata* can be seen, accompanied by many *Anacamptis papilionacea* of different shades, from almost white to dark reddish-purple. *Allium tel-avivense*, *Allium erdeli* and the only area to see *Gagea dayana*, all were in full bloom. *Leopoldia maritima* was growing side by side with a dozen *Tulipa agenensis* with wavy-undulate leaves and orange flowers which were not yet open, in the past this form was considered to be *Tulipa agenensis* subspecies *sharonensis*. Some flowering shrubs such as the scented broom, *Retama raetam*, and yellow-green flowered *Anagyris foetida*, and the rare (in Israel) *Lavandula stoechas* side by side with white-flowered *Cistus parvifolia*. It started to rain again, luckily it was the last rain for the rest of the trip.

Second stop was only few km north, in another natural reserve on the coast. This is one of the most popular sites during this period as thousands of the rare and endemic *Iris atropurpurea* grow together with some other beauties such as the tiny but showy *Malcolmia crenulata*, the dark blue flowered *Alkanna strigosa*, *Lupinus palaestinus* and again *Tulipa systola*.

We continued on our way north with a stop for lunch on the coastal road. After lunch another short stop, this time for birds as we passed near the fishery area of Kibbutz Maagan-Michael, where at the nearest pool we could easily watch Black Storks, Grey Herons and a group of Eurasian Spoonbills together with Glossy Ibis, all didn't seem to be bothered by our presence.

We left the coast and headed east to Mt. Carmel. Though many species were late this spring we managed to still find some *Scilla cilicica* in bloom as well as the very rare *Orchis paniculata*, many *Orchis galilaea* in different color forms, *Ophrys lutea* and *Ophrys mammosa*. It was already late afternoon when we left M. Carmel and headed to our country hotel in Kibbutz Ein-Harod, in front of Mt. Gilboa. Before entering the Kibbutz another pair of White-throated Kingfishers welcomed us, sitting on the electricity line.

Day 3 March 4th Mt. Gilboa and Nazareth

It was a ten minute walk to reach the Kibbutz dining room, birds are everywhere in the gardens; Palestine Sunbirds, Laughing Doves, European Goldfinch, Hoopoe, Syrian Woodpecker and many others, all used to human presence. After breakfast we headed to Mt. Gilboa, this ridge is situated between two valleys, Izreel Valley and the Jordan valley; Mt. Gilboa is probably the best site for another member of the *Oncocyclus* iris group: *Iris haynei*. This year all irises started blooming with 2-4 weeks delay, knowing it is too early we still hoped to find it in the lower areas.

We made a few stops on Mt. Gilboa, first for *Allium israeliticum*, newly renamed as it was treated until recently as *Allium orientalis*, many *Allium neapolitanum*, *Arisarum vulgare*, *Tulipa agenensis*, many red *Anemone coronaria*, *Ranunculus asiaticus*, *Cyclamen persicum*, the lovely pink *Raphanus rostratus*, and an early surprise; *Arum palaestinum* with a 40cm long, purple-black spathe. Just before lunch as we went down to the Jordan Valley we have found two clumps of *Iris haynei* in full bloom, this species has very large, stunning violet-purple flowers. While making the queue for photographing the Iris Oron noticed a few caterpillars of *Papilio alexanor* feeding on a *Ferula communis* plant. This is one of the four species of the genus *Papilio* in Israel.

In the afternoon we went to the *Iris bismarckiana* site near Nazareth, but here as the previous *oncocyclus* site, there were many buds but unfortunately no flowers. We saw many clumps of *Aspodeline lutea* in its orange form, *Muscari neglectum*, *Ornithogalum neurostegium* subspecies *eigii*, and others could be seen. Though we could not find *Iris bismarckiana* flowering this year in the wild we instead visited a not too distant private botanical garden where 700 wild plants from Israel and Palestine can be seen, amongst them a couple of the desirable Iris. It started to get dark as we headed back to our hotel, not before we have managed to see a group of Common Cranes flying at a low altitude on the left side of our vehicle.

Day 4 March 5th Galilee region

This morning we left the area of the valleys and headed north to the Galilee region. After some 15 km we saw a hill just covered with deep-blue *Lupinus pilosus*, we just had to stop for some photos of this site. Next stop was in a *Pinus halepensis* forest just as we entered the Lower Galilee region. Great parts of this forest are carpeted with *Cyclamen persicum* in all its color forms and one cannot miss the typical scent. Many orchids are growing there such as *Ophrys lutea*, *Ophrys galilaea* and *Ophrys omegaiifera* subspecies *fleischmannii*. But the main reason for this stop was the yellow showy *Astragalus aleppicus*, *Acanthus syriacus* and a nice colony of a green form of *Fritillaria persica* which we found in perfect condition.

Leaving the forest we crossed the Galilee region passing through vast centenary Olive groves that cover the area, some of the trees are of impressive size, carpeted underneath with *Silene aegyptica*. We took a beautiful road that climbs into the mountains to reach the Upper Galilee Region, on the way we made a stop to look at the view of the villages underneath us while we could see the Mediterranean Sea at the horizon. Our next destination was not far from Kefar-Vradim, we walked up a hill in order to find the extremely rare, endemic *Orchis israelitica*. We found it growing together with hundreds of *Anacamptis papilionacea*. These two species cross to create lovely hybrids *Orchis x feinbruniae*. We also found a few late *Hyacinthus orientalis*, *Gagea chlorantha*, *Ornithogalum lanceolatum*, the tall rounded pink *Valeriana dioscoridis* and carpets of the tiny but very showy *Veronica syriaca* as well as *Romulea bulbocodium* and *Symphytum brachycalyx*.

From there we went for lunch in a restaurant near to the pass through Pkeeyn, an ancient village where Muslims, Druze, Christians and Jews are living together since early times. In the early afternoon we drove up to Mt. Meron [1280m], this is definitely the greenest part of the country with dense evergreen Mediterranean forests. This mountain is home to more than 20 species of orchids, but we managed to see only a couple of species as it was too soon this season and there was still some snow at the top of the mountain. Other species where in bloom in the lower part such as *Anemone coronaria* in its different color forms, *Ranunculus millefolius*, *Hyacinthus orientalis*, etc..

We still had an hour drive to reach our hotel situated in Neve-Ativ on Mount Hermon. We were quite surprised to find the whole area still under snow! Luckily our rooms which are very comfortable wooden cabins [heated swimming pool as well] are well heated. We all stood to photograph the beautiful sunset as sun disappeared behind the high mountains of the upper – Galilee while Jackals where calling in the nearby fields.

Day 5 March 6th Mt. Hermon, Golan-Heights, Lake of Galilee

After a very good breakfast we went up to the mountain. Mt. Hermon is where Lebanon, Syria and Israel meet. As the mountain was completely covered by heavy snow this year we have made only one stop at 1650m, where in a small rocky area snow has already melted. As we got out of our minibus we noticed Red Fox [*Vulpes vulpes*] just 50 meters from where we stood looking for food in between the rocks. Many tiny *Viola modesta* in its yellow form, *Corydalis triternata* and *Rosularia libanotica* where already in bloom. We headed a few kilometres south to find ourselves in the Golan Heights, where we made a stop in Odem. This forest of mainly mature *Quercus caliprinus*, *Quercus boissieri* and *Pistacia atlantica* is home to some rare species. At the base of the trees thousands of *Cyclamen coum* where surprisingly still in bloom together with *Corydalis triternata*, some very nice specimens of *Ornithogalum lanceolatum* and the white flowering umbels of *Lecokia cretica*.

We went down for lunch in the nearby Druze village of Mas'aade where we had a typical Falafel, Humus and Labbane cheese. After having our cardamom flavored coffee accompanied by baklava we continued south and made another short stop we found three species of *Gagea* growing side by side: *Gagea chlorantha*, the star-shaped *Gagea commutata* and a rare species in this region, *Gagea bohémica*.

We crossed practically all the Golan heights in order to reach a small natural reserve, Nov, where hundreds of the very rare *Iris grant-dufii* here in excellent condition. The clumps grow in damp conditions, together with an interesting starry white form of *Romulea bulbocodium*, while on the drier parts thousands of unusual magenta form of *Anemone coronaria* that can be seen only in this location. As we were walking in the tall grass we came across Tree Frogs [*Hyla savignyi*].

We left Nov and headed south to the border with Jordan with a panoramic stop for photos of the Northern villages of Jordan just across the Yarmuk river. On this specific location we have seen various shrubs of

Salvia palaestina growing side by side with *Glaucium aleppicum*, while on a small wall, a couple of day active, Israeli Fan-Fingered Gecko enjoyed the sun. In the late afternoon we arrived at Lake Galilee, where at the Baptism site on Jordan River one can feed the huge cat fishes, and the naturalized Nutria, while White-throated Kingfishers, Pied Kingfishers, White – Spectacled Bulbul, Pygmy Cormorants and Black-crowned Night Herons were seen close-up. From there it was an hours drive back to our hotel on Mt. Hermon for the night.

Day 6 March 7th Jordan Valley, Dead Sea

Leaving the green parts of the country we took the road south through the Jordan Valley crossing the Palestinian territory just under the Samarian and Judean deserts. Here we were once more into completely different habitats with semi-desert conditions and of course a different flora.

As we entered the Jordan Valley, temperatures rose dramatically, spring was there in its full glory as we stopped near vast carpets of millions of shiny, red, *Ranunculus asiaticus*, different *Papavers*, *Anchusa strigosa*, *Allium qasyunense* and many others, an unbelievable site (sight!). This occurs in the semi-desert areas after good rains. It was really hard to leave this site but we still had a long way ahead.

Next stop was in Sartaba which is the tallest mountain in the area, situated where the Samaria Desert meets the Jordan Valley, in this Biblical scenario we found *Ornithogalum neurostegium*, *Allium erdelli*, *Allium aschersonianum*, *Allium neapolitanum* var *palaestinum*, *Pseudomuscari inconstriatum*, *Bellevalia desertorum*, *Trichodesma boissieri*, *Galuchium arabicum* and many others while from the top of Sartaba we had a fantastic view of the Jordan Valley and the Gilad mountains in neighboring Jordan.

Later on another short stop farther south hoping that blue *Allium ascalonicum* would be in flower but it was still early, instead we were lucky to find a small family of Nubian Ibex, and a Little Owl sitting on a large rock while above us hundreds of White Storks were flying north. We arrived for a late lunch to the site of Qumran on the NW edge of the Dead Sea.

After lunch we went for a short walk outside the restaurant to see few *Moringa peregrina* and the odd-looking *Calotropis procea* in bloom, both African trees at the northerly limit of their distribution, while the lovely Palestine Sunbirds were attracted by the red showy flowers of the parasitic *Plicosepalus acaciae*. Farther down we found a few groups of large yellow-flowered *Cistanche tubulosa*, a showy parasitic plant that parasitises *Atriplex halimus*. We saw quite a few birds: Black Redstarts waving their tails, Tristram's Starlings, Fan-tailed Ravens and others. We left the site for another 40 minutes driving along the Dead Sea, including a photo stop at Lot's wife's site in Sodom to reach our comfortable hotel situated on the coast of the Dead Sea at 420m under sea-level, where we had the rest of the day to take a bath in the Dead-Sea, of which salinity of the water is of 33.7%

Day 7 March 8th Dead Sea, Massada and Negev Desert

A cultural morning as we went to the famous world heritage Masada site. After a short video that showed the story of the site we took the cable car up to the top of the mountain. The view is breathtaking; the Dead Sea extends underneath from north to south, while the Moab Mountains of Jordan situated in front of us, surrounded by the Judean desert from its back side.

While visiting the site we could not ignore wildlife as birds and rodents are used to human presence. Tristram's Starlings, Rock Doves and House Sparrows can be fed from your hand while many Fan-tailed Ravens and a couple of Brown-necked Ravens kept some distance. A small rodent, *Acomis rosatus* can be seen as it is active during day time, while many birds of prey flew north at high elevation.

After lunch at the site we headed in the direction of the Negev Desert. In the first two stops we weren't as lucky as that area was extremely dry this year, only a few small leaves of *Iris yeruchamnesis*, *Drimia undata* and *Pancretium sickenbergi*, the last two are autumn-flowering bulbs but leaves are particularly beautiful.

Oron decided to try to go to the western part of the Negev, more than an hours drive but knowing that it rained a few weeks earlier there was better chance to find things. In the afternoon we arrived at a site with many *Iris mariae*, an endemic *Oncocyclus* Iris that grows in the sandy dunes, it was really worth the drive. In the late afternoon we headed south to the upper Negev Desert where after two hours drive we reached our hotel situated in Mitzpe Ramon on the edge of the Ramon Crater.

Day 8 March 9th

After breakfast we went first to look at the crater from above, from its northern part, not before we stopped to take some photos of few more Ibex [*Capra nubiana*]. Later on as we left two mature males with impressive horns which were resting on the side of the road. Under us in the crevices of the northern wall of the crater many Rock Martins were nesting. From the crater we went to the eastern part of the Upper Negev desert where mountains reach the height of 1000m above sea level. The area which in a good year is a paradise for bulbs was quite dry this year, still we managed to find some rare *Iris regis-uzziae*, a lovely Juno iris that needs very little water in order to bloom. Also many *Tulipa biflora*, *Helianthemum vesicarium* and *Erodium crassifolium*, the lovely *Ornithogalum trichophyllum*, and a few species of *Bellevalia*: *eigii*, *mosheovii* and *Bellevalia desertii*.

On the way a few ancient *Pistacia atlantica* trees still manage to survive, these are the last remains from the era when Mediterranean climate existed many hundreds of years ago. We went back for lunch and a short break in the hotel, to continue in the afternoon when the temperature dropped a bit, first we went down inside the crater in order to 'feel' the dry desert and see some interesting plants. Then another stop north of the crater where many small dark violet colored *Moraea sisyrinchium* opened in the afternoon. Luckily we found also a few stunning *Tulipa systola* in flower.

Day 9 March 10th

We left the hotel after breakfast heading north to Tel-Aviv as it was our last day. We made a few stops in the Northern part of the Negev Desert in two different habitats; the first was in Mashabim, a small area settled by Bedouins. The area which consists of sand dunes is home to some rare plants, the rarest was *Biarum olivieri*, a tiny species known only from 3 or 4 locations in Israel and Egypt, it was already in fruit as it usually blooms in January.

We have seen also the lovely *Leopoldia eburnea*, *Astragalus dactylocarpus*, *Adonis dentata* and the rare *Gagea circumplexa* as well as *Eminium spiculatum*, and *Dipcadi erythraeum* in bud. We had lunch in the outskirts of the city of Beer-Sheva then continued on our way north. Last stop was in the northern Negev Desert, in white limestone hills where clumps of black *Iris atrofusca* were already in flower together with *Tulipa agenesis*, *Ornithogalum trichophyllum*, *Eremostachys laciniata* and many others, all in perfect shape. A real treat as it was our last stop. In the late afternoon we arrived to the hotel in Tel-aviv.

Day 10 March 11th

Early departure.

ARISTOLOCHIACEAE

Aristolochia sempervirens

Mt. Carmel, Upper Galilee

ASCLEPIADACEAE

Calotropis procera

particular small tree with big glossy leaves, Dead - Sea
succulent plant, Negev Desert and Dead Sea

Carraluma negevensis

ASPARAGACEAE

Asparagus aphyllus

Upper Galilee

Asparagus horridus

very thorny, sandy habitat Med. Coast and N. Negev

Bellevalia desertorum

azure flowers, rocky desert slopes Judea Desert, Negev high land.

Bellevalia eigii

creamy color, Negev desert

Bellevalia flexuosa

dark stem, white flowers, common in the Med. areas

Bellevalia mosheovii

dense inflorescence, Negev desert

Bellevalia trifoliata

purple white flowers, damp areas, Izreel Valley

Bellevalia stepporum

Jordan Valley

Bellevalia warburgii

flooded areas, Izreel Valley

Dipcadi erythraeum

dark brown flowers, rare, sand dunes, Negev

Leopoldia eburnea

One leaf, flowers milky white with black teeth, Sandy areas in the
Negev.

Leopoldia maritima

Coastal area

Muscari inconstictum

Dark purple blue open flowers, Judea Desert

Muscari neglectum

Upper Negev Desert.

Ornithogalum lanceolatum

flat rosettes with big white flowers, Golan- Heights

Ornithogalum narbonense

common, often in cultivated fields

Ornithogalum neurostegium

galucus leaves often hairy, semi desert, Judea Desert and Negev

Ornithogalum tricophyllum

Beautiful desert species, thin leaves, large white silvery flowers,
Upper Negev

Ruscus aculeatus

Mt. Carmel

Scilla cilicica

rare, under Oak trees, Mt. Carmel

Scilla hyacinthoides

widespread in Med. areas and coast.

BERBERIDACEAE

Leonotis leonotopetalum

sandy areas in the Negev Desert

BORAGINACEAE

Alkanna strigosa

showy flowers, N. Negev.

Alkanna tinctoria

stunning blue flowers, Coast near Netanya

Anchusa aegyptiaca

annual, white flowers, Jordan Valley

Anchusa azurea

N. Negev

Anchusa strigosa

Tall shrub, with hair like thorns, deep blue flowers, Jordan Valley

Anchusa undulata

Dark purple flowers, Mt. Carmel

Arnebia procambens

Small borag. With tiny yellow flowers Negev Desert

Cynoglossum creticus

Mt. Carmel

Echiochilon fruticosum

semi shrub, bicolor flowers, sandy areas in the Negev

Echium judaeum

widespread

Echium rauwolfii

annual, similar to *A. judeum*, semi desert

Heliotropium maris-mortui

silvery leaves, white flowers, around Dead Sea

Onosma echinata

red stems, white pendulous flowers, N. Negev

Onosma gigantea

Large pendulous yellow flowers, Sharon area

Podonosma orientalis Growing in rock crevices and walls, Mt. Carmel
Symphytum brachycalyx Mt. Carmel, Upper Galilee
Tricodesma boissieri Silvery leaves, Celeste flowers, Sartaba

CAESALPINACEAE

Ceratonia siliqua Carob Tree, widespread
Cercis siliquastrum Mt. Carmel, Upper Galilee

CAPPARACEAE

Capparis aegyptiaca glaucous leaves, cascading habit, walls in Desert
Capparis Zoharyi similar to *C. spinosa*, widespread.

CARYOPHILLACEAE

Paronychia argentea common, low creeping, white papery flowers.
Silene aegyptica showy carpets in Olive groves.
Silene colorata Slender pink, Negev desert
Silene dichotoma Mt. Gilboa
Silene palaestina showy, cerise color, Coastal sands.

CHENOPODIACEAE

Atriplex halimus widespread
Atriplex spongiosa Dead- Sea area, glaucous leaves, puffed green fruits.

COLCHICACEAE

Colchicum tunicatum seen leaves in Negev Highland

COMPOSITAE

Achilea santolina
Anthemis bornmulleri Golan – Heights
Anthemis leucanthemifolia Coastal
Anthemis maris-mortuii Dead Sea
Anthemis pseudocotula common, create carpets
Asteriscus graveolens Dead-Sea
Calendula arvensis Widespread through all habitats
Bellis sylvestris Mt. Carmel
Bellis perenis Upper Galilee
Chrysanthemum coronarium coastal, semi desert, Jordan –Valley
Gundelia tournefortii Mt. Carmel, Upper-Galilee, Golan Heights
Helichrysum sanguineum Silvery-white plant with deep-red flowers, Mt. Carmel
Launaea nudicularis widespread
Matricaria aurea Camomila, semi desert and deserts
Scenecio jopensis coastal
Scenecio leucanthemifolius ssp. vernalis Widespread
Volutaria crupinoides syn. *Amberboa crupinoides*, Jordan Valley, Negev
Leontodon tuberosus syn. *Thrinicia tuberosa*, widespread
Picris longirostris syn. *P. damascene*, Deserts
Pulicaria incisa syn. *P. desertorum*, throughout the Deserts
Verbasina encelioides not native, invasive, accept deserts
Scorzonera judaica Yellow flowers, Negev Desert
Scorzonera papposa Pink flowers, Golan Heights

Tragopogon coelesyriacus Upper-Galilee

CONVOLVULACEAE

Convolvulus arvensis Prostrate, medium sized pin flowers, N. Negev
Convolvulus coelesyriacus Mediterranean forests, Mt. Carmel, Upper- Galilee
Convolvulus humilis small pink flowers, white and yellow center.
Convolvulus pentapetaloides small sky-blue flowers, widespread
Convolvulus siculus Small blue flower, white throat, Sharon - Plain

CRASSULACEAE

Rosularia libanotica crevices and walls, Mt. Hermon
Umbelicus intermedius widespread

CRUCIFERAE

Arabis verna annual, pink, Mt. Carmel, Upper-Galilee
Biscutella didyma widespread
Brassica nigra widespread
Capsella bursa-pastoris widespread
Diplotaxis acris large pink flowers, deserts
Diplotaxis harra small yellow crucifer, Upper Negev
Erophila praecox tiny white flowers, serrated leaves
Eruca sativa common
Erucaria rostrata common in the semi-desert reas
Frsetia aegyptiaca Negev highland
Malcolmia crenulata tiny but very showy, pink and white forms, Golan-Heights
Maresia pulchella Tiny but showy plant, coast, sand.
Matthiola livida Common in the deserts
Matthiola longipetala Slender plant, brown flowers, Jordan Valley
Matthiola tricuspidata costal first line, Netanya
Moricandia nitens semi shrub, pink flowers, deserts.
Raphanus raphanistrum large white crucifer with blue veins, semi-desert
Raphanus rostratus tall and showy, pink, Golan Heights
Zilla spinosa thorny shrub pink flowers, Negev

CUCURBITACEAE

Bryonia cretica common in the Med. Areas
Bryonia syriaca Mt. Gilboa

CYPERACEAE

Cyperus capitatus Coastal dunes

ERICACEAE

Arbutus andrachne Mt. Carmel, Upper- Galilee

ESCLEPIADACEAE

Calotropis procera Dead Sea
Caralluma negevensis Upper Negev

EUPHORBIACEAE

<i>Euophorbia chamaepeplus</i>	Annual, Negev
<i>Euphorbia helioscopia</i>	widespread in Med. areas
<i>Euphorbia hierosolymitana</i>	Shrub, rocky areas, Mt. Carmel, Golan Upper-Galilee
<i>Euphorbia oxyodonta</i>	small annual, common
<i>Euphorbia ramanensis</i>	similar to <i>E. hierosalemitana</i> , Negev Highland
<i>Mercurialis annua</i>	common

FAGACEAE

<i>Quercus boissieri</i>	Galilee, Golan Heights
<i>Quercus coccifera</i>	common in the Med. Region
<i>Quercus ithaburensis</i>	Northern Vallies

FUMARIACEAE

<i>Ceratocapnos turbinata</i>	fumaria like, Golan Heights
<i>Corydalis triternata</i>	move, whitish color, Odem, Golan- Heights
<i>Fumaria capreolata</i>	semi climber, Mt. Carmel, Golan Heights
<i>Fumaria densiflora</i>	Upper Galilee, Golan- Heights
<i>Fumaria parviflora</i>	Galilee region

GERANIACEAE

<i>Erodium acaule</i>	rosettes of fine cut leaves, widespread
<i>Erodium crassifolium</i>	Very showy, flower open for half a day, Negev
<i>Erodium gruinum</i>	common annual, red veins
<i>Erodium melacoides</i>	Mt. Carmel
<i>Erodium moschatum</i>	very common annual in the Med. Areas
<i>Geranium dissectum</i>	Izreel Valley, in humid soils
<i>Geranium lucidum</i>	Shiny leaves, Mt. Carmel
<i>Geranium purpureum</i>	common annual, often leaves color turns when mature
<i>Geranium rotundifolium</i>	Upper Galilee
<i>Geranium tuberosum</i>	Widespread

IRIDACEAE

<i>Iris atrofusca</i>	Northern Negev
<i>Iris atropurpurea</i>	stunning onco. endemic to the coast.
<i>Iris bismarckiana</i>	Nazareth
<i>Iris grant-dufii</i>	very rare, yellow iris, damp areas, Izreel Valley and Golan Heights
<i>Iris Haynei</i>	Mt. Gilboa
<i>Iris mariae</i>	purple rose Onco. with large flowers, sandy areas, Endemic to the Negev Desert
<i>Iris Regis-uzziae</i>	a lovely bluish white juno endemic to Jordan and Israel, Negev highland
<i>Morea mediterranea</i>	In Buds, sandy areas in the Negev Desert
<i>Moraea sisyrinchium</i>	widespread through the region
<i>Romulea bulbocodium</i>	Golan Heights, Upper Galilee

JUNCUCEAE

<i>Juncus rigidus</i>	Jordan Valley
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LAMIACEAE

Ajuga chamaepitys subsp *chia*
Eremostachys laciniata

Lamium amplexicaule
Lamium garganicum
Lamium moscahatum
Lavandula stoechas
Majorana syriaca
Parsium majus
Salvia lanigera
Salvia palaestina
Salvia verbenaca
Salvia viridis
Stachys aegyptiaca

prostrate, yellow flowers, Upper Galilee
tall spikes, yellow rusty flowers, South Golan, Jordan Valley,
Northern Negev
widespread in Med. areas
Pink flowers, Mt. Meron
Mt. Carmel, Upper Galilee
rare, sandy area near the coast, Golan Heights
known as Zaatara ,Mt. Carmel, Galilee
Shrub, semi climber, white flowers, Mt. Carmel, Galilee region
silvery leaves, blue-purple flowers, Negev Desert
white flowers, shrub, rocky desert, N. Negev
small perennial, blue flowers, widespread, Mt. Carmel, Galilee
widespread
semi shrub, silver velvety leaves, pink flowers, Negev Highland

LEGUMINOSAE

Anagyris foetida
Astragalus aleppicus
Astragalus callichorus
Astragalus Kahiricus
Astragalus sanctus

Astragalus spinosus
Calicotome villosa

Colutea istria

Crotalaria aegyptiaca
Hymenocarpus circinnatus
Lathyrus blepharicarpos
Lathyrus hirticarpus
Lathyrus marmoratus
Lathyrus pseudocicera
Lupinus palaestinus
Lupinus pilosus
Medicago rotata
Onobrychis squarossa
Pisum sativum
Retama raetam

large shrub, cascading yellow-green flowers, Widespread
tall, creamy flowers, Lavvy Forest
prostrate habit, curly fruits, pink flowers, Jordan Valley, N. Negev
Low habit, coins like leaves, yellow flowers, Sands in the Desert
Prostrate habit, linear, dissected silver leaves, large cerise flowers,
Negev
thorny sub shrub, pink flowers puffed fruits, N. Negev
common, scented yellow flowers on thorny shrub, Mt. Carmel,
Golan Heights, Galilee
shrub, yellow flowers, big puffed fruits, dry rocky habitat,
N. Negev
semi shrub, yellow flowers, Negev Desert
annual, widespread
annual, orange colored pea like flowers, widespread.
similar to the above, Mt. Carmel
Orange color, dark strips.
dark orange flowers, annual climber, Deserts
pinkish flowers, sandy areas near the coast.
stunning blue flowers, northern valleys, Golan Heights
yellow flowers with typical fruits, widespread
annual, typical thorny fruits, widespread
Lovely bicolor pea, N. Negev.
common shrub in sandy areas near the coast and deserts, white
scented flowers
annual, yellow flowers, Mt Carmel
dense prostrate annual with cerise flowers, coastal.
white flowers with pink tubes, common in the Med. region
Common in the Med. areas.
White flowering species, common in the desert
tiny yellow flowers, Deserts
annual climber, white and yellow bicolor flowers, Upper Galilee,
Golan
dark purple flowers, Golan Heights

Scorpiurus muricatus
Trifolium blancheanum
Trifolium clypeatum
Trifolium purpureum
Trigonella Arabica
Trigonella stellata
Vicia hybrida

Vicia narbonensis

Vicia sativa similar to small sweet pea flowers, annual climber, Mt. Carmel, Galilee region
Vicia seriocarpa annual climber, similar to *V. hybrida*.

LILIACEAE

Fritillaria persica Galilee region, Mt. Carmel
Gagea bohemica small flowering species, rare, Golan Heights
Gagea chlorantha only rounded petals, Upper Galilee, Golan Heights
Gagea comutata large star - shaped yellow flowers, upper Galilee, Mt. Hermon
Gagea fibrosa similar to the above, Jordan Valley
Gagea dayana sandy areas near coast and Negev Desert
Tulipa agenensis Mt. Carmel, N. Negev
Tulipa biflora small white flowers, yellow center, Negev Highland
Tulipa systola Highland, Negev

LINACEAE

Linum pubescens Pink flowers, purple center, Mt. Carmel, Mt. Gilboa

LORANTHACEAE

Loranthus acaciae showy red flowered parasitic plant, Dead Sea area
Viscum cruciatum Mt. Carmel, parasitic on Almond trees

MALVACEAE

Abutilon fruticosum Shrub with small dark yellow flowers, Dead Sea
Alcea setosa Pink hollyhock, Jordan valley
Malva parviflora Golan Heights
Malva sylvestris widespread

MIMOSACEAE

Acacia tortilis umbrella like trees, extremely dry areas in Jordan Valley, Negev
Accacia tortilis subsp raddiana curly fruits, Negev

MORINGACEAE

Moringa peregrine cascading tree, like a gigantic Retama, hot Wadi around Dead Sea

OLEACEAE

Olea europea widespread in Med. areas

ORBANCHACEAE

Cistanche tubolosa very showy, yellow flowers, parasitic plant, Dead Sea and Negev Desert

ORCHIDACEAE

Anacamptis x feinbruniae natural hybrid between *A. israelitica* and *A. papilionacea*, rare, Upper-Galilee
Anacamptis israelitica Upper Galilee, rare.
Anacamptis papilionacea Widespread, very common.
Ophrys flavomarginata rare, coastal area
Ophrys lutea widespread
Ophrys omegifera subsp. fleischmannii Mt. Meron [Upper Galilee]

Ophrys sphegodes subsp mammosa Mt. Carmel, Upper Galilee
Ophrys umbilicata common, Mt. Carmel, Galilee region
Orchis galilaea
Orchis punctulata rare, Mt. Carmel.
Serapias levantina widespread, Coast

OXALIDACEAE

Oxalis pes-carpae invasive, not native.

PAPAVERACEAE

Hypecoum dimidiatum syn. *H. imberbe*, Upper – Galilee
Papaver umbonatum showy, Mt. Carmel, Jordan Valley
Glaucium aleppicum Golan Heights
Glaucium arabicum large orange-red flowers, Jordan Valley

PLANTAGINACEAE

Plantago ovata small, lanceolate leaves, sands in Negev.

PLUMBAGINACEAE

Limonium lobatum syn. *L. thouinii*, annual, Dead Sea
Limonium sinuatum Coastal

POLYGONACEAE

Rumex cyprius Jordan Valley
Rumex occultans Sands, coastal
Rumex vesicarius intense red color, Dead Sea

PRIMULACEAE

Anagalis arvensis Golan Heights, Galilee Region
Cyclamen coum Golan Heights
Cyclamen persicum widespread

RHAMNACEAE

Ziziphus lotus large thorny shrub
Ziziphus spina-christi Widespread, large tree, edible fruits

RANUNCULACEAE

Adonis dentata yellow flowering species, Judea and Negev Deserts.
Anemone coronaria widespread, multi colors in the north, red in center and deserts.
Ceratocephala falcata miniature yellow annual Golan-Heights
Clematis cirrhosa common in Med. forests.
Ficaria verna Upper- Galilee
Ranunculus asiaticus red flowers, widespread
Ranunculus millefolius Upper- Galilee

RESEDACEAE

Ochradenus baccatus perennial shrub, yellow spikes, white fruits, Deserts
Reseda lutea yellow flowering sub shrub, Negev
Reseda muricata perennial, dense white spikes, Dead- Sea
Reseda orientalis delicate annual, relatively big flowers, sandy areas, coast.

ROSACEAE

Amygdalus communis
Amygdalus korschinskii
Prunus ursina
Sarcopoterium spinosum

Mt. Carmel, Galilee region
 Jordan Valley, S. Golan Heights
 Upper Galilee
 thorny cushion, Mediterranean region

RUTACEAE

Haplophyllum tuberculatum
Ruta chalepensis

perennial shrub similar to Ruta, Dead Sea and Negev
 Mt. Carmel

SCROPHULARIACEAE

Linaria haelava

annual, yellow and purple forms, sandy areas in the deserts,
 common

Misopates orontium
Scrophularia rubricaulis
Veronica cymbalaria

annual, pink flowers, like small a snapdragon
 Mt. Carmel, Galilee, Mt. Gilboa
 white flowers, crevices and rocky habitats, Mt. Carmel,
 Galilee region

Veronica syriaca

miniature showy annual, Mt. Carmel, Upper-Galilee, Golan Heights

SOLANACEAE

Hyoscyamus pusillus
Hyoscyamus reticulatus
Mandragora autumnalis
Withania somnifera

Annual, yellow, black center, sands in deserts.
 dark netted flowers, cultivated fields in N. Negev
 Widespread
 Golan Heights, Jordan Valley

STIRACACEAE

Styrax officinalis

common tree in Med forests.

THYMELAEACEAE

Thymelaea hirsuta

Coastal and N. Negev, sand.

URTICACEAE

Forsskaolea tenacissima
Urtica pilulifera

Dead Sea
 Golan Heights

VALERIANACEAE

Valeriana dioscoridis

round pink inflorescence, Med. , Mt. Carmel, Upper Galilee

VIOLACEAE

Viola modesta

tiny yellow pansy, Mt. Hermon

XANTHORRHOEACEAE

Asphodeline lutea
Asphodelus ramosus
Asphodelus tenuifolius

Orange form, widespread
 Widespread including the deserts
 Annual, semi desert & deserts

ZYGOPHYLLACEAE

Fagonia Arabica
Fagonia bruguieri

Negev, Dead Sea
 large flowers, Deserts

Fagonia glutinosa

Fagonia mollis

Zygophyllum dumosum

Prostrate habit, pink flowers, sticky leaves, Sands in the deserts.

long thorns, Dead Sea

shrub, small glaucous leaves, many white flowers, common, Deserts

Israel spring 2012
Systematic list No. 2 - Fauna

Reptiles

<i>Lactera laevis</i>	Lebanon Lizard	Widespread
<i>Laudakia stellio</i>	Roughtail Rock Agama	Jordan Valley
<i>Ptyodactylus puiseuxi</i>	Israeli Fan-fingered Gecko	S. Golan Heights

Rodents

<i>Acomys russatus</i>	Golden Spiny Mouse	Massada
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Mammals

<i>Vulpes vulpes</i>	Red Fox	Mt. Hermon
<i>Capra nubiana</i>	Nubian Ibex	Dead Sea, Jordan Vally, Negev

BIRDS

Great Cormorant	<i>Phalacrocorax carbo</i>	Coast
Pygmy cormorant,	<i>Phalacrocorax pygmeus</i>	Jordan River
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Coast and Jordan River
Cattle Egert	<i>Bubulcus ibis</i>	Widespread
Little egret	<i>Egretta garzetta</i>	Izreel Valley, Hula Valley
Grey Heron	<i>Ardea cinerea</i>	Izreel Valley
White Stork	<i>Ciconia Ciconia</i>	Common
Black Stork	<i>Ciconia nigra</i>	Maagan Michael
Glossy Ibis	<i>Plegadis falcinellus</i>	Maagan Michael, Jordan River
Eurasian Spoonbill	<i>Platalea leucorodia</i>	Maagan – Michael
Mallard	<i>Anas platyrhynchos</i>	Common
Eurasian Griffon Vulture	<i>Gyps fulvus</i>	Galilee, Golan Heights, Dead Sea
Short –toad Eagle	<i>Circaetus gallicus</i>	Jordan Valley, Golan Heights
Black Kite	<i>Milvus migrans</i>	Common
Common Buzzard	<i>Buteo buteo</i>	Common
European Honey Buzzard	<i>Pernis apivorus</i>	Dead Sea
Common Kestrel	<i>Falco tinnuculus</i>	Common
Lesser Kestrel	<i>Falco naumanni</i>	Sharon
Eurasian Falcon	<i>Falco subbuteo</i>	Mt. Meron
Chukar	<i>Alectoris chukar</i>	Widespread
Common Quail	<i>Coturnix coturnix</i>	Bnei Zion
Common Coot	<i>Fulicia atra</i>	Maagan Michael
Common Crane	<i>Grus grus</i>	Izreel Valley
Spur-winged Lapwing	<i>Vanellus spinosus</i>	Common
Black –headed Gull	<i>Larus ridibundus</i>	Lake of Galilee
Rock Dove	<i>Columba livia</i>	Massada
Eurasian Collared Dove	<i>Streptopelia turtur</i>	Common
Laughing Dove	<i>Streptopelia senegalensis</i>	Common
Common Swift	<i>Apus Apus</i>	Sharon, N. Negev
Pallid swift	<i>Apus pallidus</i>	Upper Galilee
Common Kingfisher	<i>Alcedo attis</i>	Jordan River
White-throated Kingfisher	<i>Halcyon smyrensis</i>	common

Pied Kingfisher	<i>Ceryle rudis</i>	Jordan River
Little Green Bee-eater	<i>Merops persicus</i>	Jordan Valley, Dead-Sea
Rose-ringed Parakeet	<i>Psittacula krakeri</i>	Widespread
Eurasian Hoopoe	<i>Upupa epops</i>	Ein- Harod
Syrian Woodpecker	<i>Dendrocopos syriacus</i>	Common in Med. areas
Crested Lark	<i>Galerida cristata</i>	Common
Bar-tailed Lark	<i>Ammomanes cincturus</i>	Negev
Rock Martin	<i>Ptyonoprogne fuligula</i>	Ramon Crater
Barn Swallow	<i>Hirundo rustica</i>	Sharon, Tiberia
White Wagtail	<i>Motacilla alba</i>	Common
Spectacled Bulbul	<i>Pycnonotus xanthopygos</i>	Common
Dunnock	<i>Prunella modularis</i>	Mt. Hermon
European Robin	<i>Erithacus rubecula</i>	Common in the Med. Areas
Black Redstart	<i>Phoenicurus phoenicurus</i>	Dead Sea
Blackstart	<i>Cercomela melanura</i>	Golan –Heights
European Stonechat	<i>Saxicola rubicola</i>	Mt. Carmel, Upper- Galilee
White-crowned Whtear	<i>Oenanthe leucopyga</i>	Upper- Negev
Song Trush	<i>Turdus philomelus</i>	Mt. Hermon
Common Blackbird	<i>Turdus merula</i>	Common
Blackcap	<i>Sylvia atricapilla</i>	Upper- Galilee
Lesser Whitethroat	<i>Sylvia curruca</i>	N. Negev
Chiffchaff	<i>Phylloscopus collybita</i>	N. Negev
Great Tit	<i>Parus major</i>	Common
Palestinian Sunbird	<i>Nectarinia osea</i>	Common
Southern Grey Shrike	<i>Lanius excubitor</i>	Jordan Valley, Negev
Eurasian Jay	<i>Garrulus glandarius</i>	Mt. Carmel, Galilee
Western Jackdaw	<i>Corvus monedula</i>	Galilee
Hooded Crow	<i>Corvus corone cornis</i>	Common
Brown-necked Raven	<i>Corvus ruficollis</i>	Dead – Sea, Negev
Fan-tailed Raven	<i>Corvus splendens</i>	Dead – Sea
Common Myna	<i>Acridotheres tristis</i>	Sharon area
Tristram's Starling	<i>Onychognathus tristramii</i>	Dead –Sea, Ramon
House Sparrow	<i>Passer domesticus</i>	Widespread
Spanish Sparrow	<i>Passer hispaniolensis</i>	Jordan Valley
Common Chaffinch	<i>Fringilla coelebs</i>	Mt. Carmel, Galilee
Brambling	<i>Fringilla montifringilla</i>	Mt. Gilboa
Common Linnet	<i>Cardulis cannabina</i>	Upper- Galilee
European Goldfinch	<i>Carduelis carduelis</i>	Widespread
Corn bunting	<i>Embriza calandra</i>	Mt. Gilboa, Jordan Valley