

The Pontic Alps

Summer on Lazistan's High Passes

A Greentours Trip Report

24th July to 6th August 2013

Leader: Başak Güner

Day 1 24th July to Trabzon

The group arrived quite late in Trabzon and went to the hotel directly.

Day 2 25th July to Genesis

We enjoyed our breakfast with the nice sea view from the top floor of the hotel then left Trabzon behind driving along the coast road towards Rize. On the way there were many tea and corn plantations some in small flat areas and some in steep hills. Soon we turned inland where *Corylus avellana* and *Alnus glutinosa* were quite common along the river. The sun was shining and warm weather helped us to see many butterfly species with Cardinal, Short-tailed Blue, Queen of Spain Fritillary, Eastern Dappled White and many blues to identify. Roadside banks were also full of plant species. White flowered *Campanula alliarifolia* and similar but purple flowered *Campanula rapunculoides*, *Erigeron acer*, *Eupatorium cannabinum*, *Origanum vulgare* and *Calamintha sylvatica* were the very common ones and among them were *Sedum stoloniferum*, *Trifolium pratense* with its big pink globose flower heads, and *Vicia villosa*. We enjoyed tea at this spot and drove on a little bit further for another short stop then went to the hotel to check-in and have lunch. By the time we were at the hotel it had started to rain gently.

After lunch we only drove a short distance to the graveyard of Sivrikaya village where we saw very brightly coloured and showy plants such as magenta pink *Geranium psilostemon* and the mauve *Geranium ibericum*, two more *Campanula* species; big flowered pinkish purple *Campanula lactiflora* and smaller bluish but many more flowered *Campanula latifolia* both very tall plants contrasting with the soft orange colour of the *Papaver lateritium*. While some banks were covered with *Rhinanthus angustifolius*, others were coloured with *Hypericum hyssopifolium* and *Trifolium pannonicum*. We also noted our first *Dactylorhiza urvilleana* there.

Next stop was by a drier slope, I say drier meaning the habitat otherwise everywhere very wet and some plants like *Gypsophila elegans* were carrying the drops like jewels giving us great macro photo options. On the same bank we noted *Polygala alpestris*, *Minuartia circassica* and *Teucrium chamaedrys* subsp. *chamaedrys*. *Cirsium obvallatum* also took our attention before we got on the bus to go to next location.

After a little search we stopped by the wet area where we normally see *Lilium ponticum*. They were already finished but we enjoyed more *Dactylorhiza urvilleana* and some ferns. Also we spent time in a cosy tea house chatting before we finished the field part of the day.

The hotel staff put the fire on for us so we left our boots to dry while having dinner after checklist.

Day 3 26th July Anzer Yaylası

Sun was shining this morning as we took off for Anzer Yaylası. It was almost lunch time when we arrived at Anzer but of course we made several stops along the road. Along these stops there were many attractions like a great group of dirty yellow flowered *Salvia glutinosa*, with purple drooping flowers *Cirsium hypoleuca*, huge yellow flowered daisy *Telekia speciosa* and *Impatiens noli-tangere* with its big but delicate hanging flowers. Celia spotted an unusual tree that has inflated big bulb-like fruits which turned out to be *Staphylea pinnata*. As we were about to get in the bus to go on a Silver-washed Fritillary came by to be photographed. With a nice drive along the river with spruce trees all along the way we reached Anzer discussing whether the taste of famous Anzer honey deserves 1000 TL for a kilo.

The yayla was full of colourful flowers so soon we forgot about the honey and focused on flowers again. Here and there were huge clumps of *Delphinium formosum*, its purple colour was making a great contrast with white of the *Valeriana alliarifolia* that was covering the hillsides. Road banks were also coloured with *Coronilla varia*, *Geranium pyreniacum*, *Vicia cracca* and *balansae*, *Lathyrus rotundifolius* and many others you can see the names in the plant list :)

Lunch was taken by a bridge then we drove up to 3000m to find some alpine species like *Draba hispida*, *Minuartia recurva*, *Tripleurospermum melanolepis*, *Veronica gentionoides*, *Campanula tridentata*, *Gentiana septemfida* and *pyreniaca*. *Centaurea appendicigera* was in perfect flower as well as *Corydalis conorrhiza* and the endemic *Silene lazica*, whilst *Asperula gracilis* was forming mats in some parts of the scree. We turned back from the top and made several stops at the most flowery parts. After a quick stop by *Corydalis alpestris* found a great alpine meadow and soon we were all scattered around trying to find the best shots. *Centaurea nigrifimbriata* was a highlight though there were many others that deserved that accolade such as *Hedysarum hedysaroides*, *Coronilla orientalis*, *Geranium psilostemon*, *Anthemis marshalliana* and *Sedum spurium*. It was already late afternoon and we headed for the hotel making only a few quick stops for *Delphinium dasystachium*, *Asyneuma amplexicaule*, *Campanula collina*, *Arnebia pulchra* and *Alcea hoheneckerii*.

We arrived at the hotel and enjoyed our dinners.

Day 4 27th July Mor Yayla

It was cloudy this morning but we didn't mind too much knowing the weather conditions are always much better on the other side of the Ovit Pass and yes there it was sunny and warm. The habitat had also changed quickly from lush to drier steppe. First stop was by a dry hillside populated with *Populus tremula* in places. In the open areas it didn't take long to spot the bright red *Sedum sempervivum*. *Helichrysum armenium* clumps were shining bright yellow and orange making contrast with the blue of *Teucrium orientale*.

We aimed to go to the top of Mor Yayla directly but stopped twice; once to have a close look at giant *Centaurea macrocephala* where two White Admirals flew by while Sandy took pictures Idas Blue and then to photograph the huge colony of *Verbascum armenium*. Just below the steepest last section of Mor Yayla we found a very flowery area and couldn't resist stopping. Our driver prepared lunch for us while we were enjoying the flora. *Carduus lanuginosus* got our attention first and then we were all scattered around taking pictures of *Geranium sylvaticum*, *Vicia canescens*, *Stachys macrantha* and *balansae*, *Campanula stevenii*, *Lallemantia canescens*, *Silene*

alba ssp. divaricata and *Silene saxatilis*. After lunch we went to top and viewed the seven lakes from 3200 meters. There was also an interesting flora here including *Dracocephalum aucheri*, the endemic *Silene pungens*, as well as *Aster alpinus*, *Nonea versicolor* and *Dianthus sp.* We then drove down and walked through a short scree to find another endemic *Viola odorantissima* also noting on the way the lovely *Vavilovia formosa*.

First afternoon stop was for *Campanula glomerata* where we also found an *Orobanche lutea*? Spotted Fritillary and Blue Argus were also seen here. We had our afternoon tea and then next stopped by *Centaurea glastifolia* and lastly *Centaurea pulcherrima* (a steppic form with very pale bracts). Driving back to the hotel as soon as we reached the Ovit Pass a very thick fog covered everywhere meaning a very slow drive took us to the hotel.

Day 5 28th July Ovit Dağı and Sivrikaya meadows

The very thick fog from yesterday was still around as we drove to Ovit Pass. The group put their gear on and we started to walk into the blankness. Not to get lost we kept so close to each other all the time and followed the stream up. By the stream there were *Primula auriculata*, *Pedicularis nordmanniana* and *Rhynchocorys stricta*. The light in the fog wasn't enough for the two gentians; *Gentiana pyreniaca* and *septemfida*. Alpine Accentors and Water Pipits were hopping around. We came to a point that we felt we should go back because everywhere started to look similar and the fog was getting even thicker. We walked back to the vehicle with no problem and on the way back identified more plants like *Aster caucasicus*, *Senecio taraxicifolius* and *plathyphillus*.

We drove to a cosy cafe where we had had tea before. The fire was on, tea was ready, what else could we want. The boots and the socks were all taken off and placed by the fire to dry. The owner of the cafe prepared the famous local dish called 'Muhlama' that is basically a cheese fondue.

Getting dried a bit we drove to another misty and wet location but full of flowers. In the meadow we walked into were *Traunsteinera sphaerica* and *Gymnadenia conopsea* growing next to each other as well as *Solidago virgurea ssp. alpestris*. So as to not get lost we decided to follow the road down looking at the roadside bank flora, which was very rich with plants like *Pedicularis atropurpurea*, *Saxifraga rotundifolia*, *Aquilegia olympica*, *Inula orientalis* and *Centaurea macrocephala*.

To spend the rest of the day we drove to the town of Ikizdere and wandered around.

Day 6 29th July To Barhal

We left Genesis behind after breakfast then drove on over the Ovit Pass and stopped to find *Pelargonium endlicherianum*, which was there with some fresh flowers on. *Xeranthemum annum* was also in flower. We made a brief stop at the town of Ispir to do some shopping and after I'd bought bits and pieces I came back to the van and found no one. The group were in a shop that sell cheese, nuts and dried fruits. The owner was giving us all sorts of different stuff to taste and we were almost too full to have lunch. After this little break we drove for a while through the impressive deep Coruh gorge covered with quite different flora than we'd seen so far and stopped by the delicate *Dianthus orientalis*. Several quick stops to stretch our legs and photograph some plants such as *Echinops orientalis* and *Paliurus spina-christi*.

It was lunch time when we arrived at the Dört Kilise that is a big Georgian monastery built in ninth century. We had a look around, had lunch and then looked at the flora around. The drier road

banks were brightened by *Origanum rotundifolium* and a white-flowered endemic *Alcea calvertii*. Soon we were in Yusufeli town and while our driver was getting petrol we were enjoying our ice-creams.

Last section of the journey was productive for butterflies.

Day 7 30th July Yaylalar & Olgünlar

After a very heavy rain at night the clouds had cleared in the morning. Aiming to be at Olgünlar by lunch time we set off. On the way to Yaylalar we found several very good spots that held many plants attractive to butterflies like Eastern Dappled White, Heath Fritillary, Turquoise Blue, Scarce Copper, Southern White Admiral, Meadow Brown and Common Blue. *Cirsium pubigerum* and *Tanacetum macrophyllum* were the most attractive plants for butterflies as well as *Hypericum perforatum* and *Lysimachia vulgaris*.

Further on we spotted some superb Pelargoniums on the road bank. At Olgünlar we got out of the van 300m before the lunch spot and spent more than an hour there photographing all sorts of butterflies. Some of the very exciting ones were Twin spot Fritillary, Caucasian Spotted Fritillary, Nickerl's Fritillary, High Brown Fritillary and Silver spotted Skipper.

Esat had prepared the lunch and Ismail from the Kackar Pension prepared 'Muhlama'. After lunch we walked up to the valleys and found a fine specimen of *Swertia iberica* as well an Apollo sitting on a *Dactylorhiza umbrosa*.

We drove back to Yaylalar and took a walk along a path going into the forest. Dark and pale pink flowered *Melampyrum arvense* was the first attraction and *Erigeron acer*, *Sedum hispanicum album* and *spurium* and *Carlina bieberstenii* were also encountered. We also managed to find endemic *Utritchzia armena*. It was getting windy and rainy so we headed back stopping once to photograph *Alcea apterocarpa*.

Day 8 31th July Pisenkaya

We were joined today by my friend Kate Clow and drove up past Barhal Church until we reached a rocky place with some good flowering *Campanula choruhensis*. From here we drove back down and took a different road up towards Pisenkaya. Although we had seen it many times already we couldn't resist stopping for an incredible display of *Campanula lactiflora* which was also rich in butterflies such as Silver-washed Fritillaries, Southern White Admirals and many blues. Driving up we stopped by a beehive house and the owner showed us some winter damage caused by bear which broke in and stayed for three months before leaving! Then there were some old water mills and we spoke to a very old couple who lived in the hills. Short stops were made for *Alceas*.

Day 9 1st August To Laşet

A sunny morning welcomed us today. Before we left this beautiful village we visited the mosque, a building that was originally a ninth century church. The 'Hoca' of the mosque who holds the key was not around so we could only see it from the outside.

Because of the big dam construction the Artvin road was open only at certain times so not to miss the morning crossing we drove to Yusufeli, had a quick shopping and arrived at the junction just in

time before they shut the gate for a few hours. After a long drive we first stopped at the view point where you could see Artvin city on one side and the deep valley on the other side. A very fresh Scarce Swallowtail was photographed here. A little bit further on after crossing several tunnels we stopped by a cafe that had very similar view to the view point and a great atmosphere for a lunch with many trees like olive, walnut, fig, pomegranate and Pavlonia around.

We kept on driving after lunch until we reached our beautifully located Laşet Bungalows. It was early afternoon when we arrived so we decided to take a walk around before dinner. A side track we took was home to some new plants for us like soft pink flowered *Ononis arvensis*, bright pink flowered *Lathyrus tuberosus*, *Cerinth minor* and *Centaurea salicifolia*.

After walk we relaxed for a while and had a delicious dinner.

Day 10 2nd August Cam Pass

Another sunny day, another superb breakfast and another idyllic location. Our day got even better by visiting several locations on Cam Pass where we have seen many new plants, some birds and a mammal.

First stop was by a great view point where you could see miles of hills and forest and fields. *Gentianella caucasica* was the first attraction there. The little outcrop on one side of the pass was full of meadow flowers. *Campanula latifolia*, *Scabiosa caucasica*, *Aster amellus*, *Achillea millefolium*, *Geranium psilostemon* and *ibericum* were the common ones and among them were *Linum hirsutiissimum*, *Tanacetum coccineum* and *Saxifraga paniculata*.

The lower side of the road was also rich. Several male Linnets posed for us and as we walked we had great views of a weasel chasing a lizard. Good clumps of dirty pale lilac *Aconitum orientale* and deep blue *Aconitum nasutum* were making a plant show in the middle.

We drove to the otherside of the pass from here and stopped by the roadside where the government have been planting cedar trees. There were choice flowers among them where we photographed many butterflies like Lederer's Heath, Scarce Copper, Idas Blue and Silver-washed Fritillary. One of the most popular plant for them was *Centaurea pulcherrima*.

We also witnessed a Golden Eagle that was being chased by a Long-legged Buzzard and also a Black Vulture flew over.

We drove a bit further on to where we had lunch first then looked around. The stream side was rich for certain plants like *Filipendula ulmaria*, *Sangisorba officinalis*, *Inula oculus-christi* and *Tanacetum balsamita*. On the other side where it was rocky were *Gentiana gelida* and *Gentiana cruciata*, *Campanula crispera* and *Delphinium flexuosum*.

Tawny Pipits didn't like us being there making continuous alarm calls. Some huge stands of *Verbascum speciosum* were photographed as well as a very fresh *Eryngium giganteum*.

Our last location was back on the other side of the pass in the *Picea* forest. The short path to the ghost orchid took a while to reach because of the all sorts of fungi growing there delayed us. Finally we found the *Epipogium aphyllum* and then walked back.

We went back to our nice bungalows to enjoy afternoon tea, checklists and dinner.

Day 11 3rd August Yalnızcam Pass

Today we wanted to have an adventure and headed for a completely new location for the tour. For this new location we first drove up and over Cam Pass then took a dirt road going into fields and villages. Roadsides were very rich and colourful. *Salvia nemorosa*, impressive grey-green *Onopordum turcicum*, *Arctium minus* and *Lathyrus tuberosus* were only some of the plants. Soon we were on the main road that goes to Ardanuç and as we got higher it got mistier and suddenly a local market appeared by the road side and many men were riding horses in the misty fields.

After buying bits and pieces we drove onto Yalnızcam Pass and over and suddenly the sun came through the mist and next thing we knew we'd arrived at the most incredible flower valley I have ever seen in my life. I can't begin to list all the different flowers that were there but seemed that the whole tour had been rolled in to one and dropped into this valley. There were many of the flowers we previously have been seeing such as campanulas, delphiniums, hypericums as well as some new ones including *Pimpinella peregrina*, *Linum hypericifolium*, *Silene multifida*, *Polygala alpestris*, *Galeopsis bifida* and *Viburnum lantana*.

We had lunch at this lovely spot and kept on photographing a little more afterwards. When we finally finished here we took the same road to go back and had to stop several times seeing interesting birds. Once Christina spotted a big bird sitting in the hay field turned out to be a Lesser Spotted Eagle. Soon a Short-toed Eagle and a Long-legged Buzzard were flying together as Celia spotted a White Stork in another field. Another exciting bird was a Hoopoe that posed nicely for Sandy. When we were back on Cam Pass the sun left us and the mist was back.

Day 12 4th August Çıldır and Aktaş Lakes and to Kars

We had our last breakfast in Laset and started our journey towards the Georgian border to visit two lakes. After Cam Pass we first stopped near Ardahan to view the *Centaurea glastifolia* and its shining appendages. A handsome Yellow Wagtail was watching us from the wire.

On the way to Çıldır town we had to stop several times to look at Bee-eaters, Cuckoos and Long-legged Buzzard. Before approaching Aktaş Lake, we looked around the steppe area and found some more and beautiful plants with rare *Dianthus seguira* growing by the road along with *Silene dichotoma*. Two beautiful *Verbascums* were growing there too, *thapsus* and *varians*. Soon we were by the Aktaş Lake and while Esat prepared lunch we focused on the birds. The shore was almost covered by Dalmatian Pelicans, Ruddy Shelducks and Armenian Gulls. Several Great crested Grebes were in the open and a Ringed Plover was feeding in the mud. A couple of White-winged Black Terns and a Montagu's Harrier flew over.

Potentilla anserina and *Cirsium rhizocephalum* was growing right by the picnic site. After lunch we drove to Çıldır Lake. Christina and Celia wandered off and Sandy and I were chasing a Quail call but soon gave up and joined the ladies. *Cirsium pubigerum* plants looked very interesting with fruiting heads.

The lake wasn't so promising but we noted Green Sandpiper, Ferrugineous Duck, Little Grebe and Coots. The cold wind got stronger in time so we headed for Kars along the road next to Çıldır Lake. One stop to stretch our legs produced an impressive *Echinops orientale* and lovely pink *Phlomis pungens*. Several more stops produced lovely landscape photos and Rose-coloured Starlings.

When we arrived at the hotel in Kars, the group had some time to wander in the city before checklist and dinner.

Day 13 5th August Ani and Küyüçük Lake

A sunny but windy day started by driving towards Ani. Long-legged Buzzards and Black Kites were flying around and some of us even had chance to photograph them.

When we arrived at Ani we agreed to meet two hours later and started to wander around. The different plants we noted there were *Peganum harmala*, *Consolida regalis*, *Lepidium vesicarium* and *Dianthus zonatus*. It was very windy for birds but we still managed to find some like Pied Wheatear, Tawny and Water Pipits, House and Crag Martins, and Eastern Rock Nuthatch.

From Ani we started to drive towards Küyüçük Lake trying to find a short cut. We found a route but it turned out to be the long way. A huge colony of Rose coloured Starlings made us stop first, before we then discovered an old Armenian Church still in very good condition but now being used as a hay storage by the villagers.

Lunch was taken by a shady riverside. At the lake we noted Avocet, Black-winged Stilt, Green Sandpiper, Whiskered and White-winged Terns and many many Ruddy Shelducks and Coots and Armenian Gulls.

Day 14 6th August to home

Systematic List Number 1 Flowers

Blue indicates the species seen this year.

Equisetaceae

<i>Equisetum arvense</i>	Scattered, Cam Pass, Pişenkaya ?
<i>Equisetum fluviatile</i>	Marshy areas on Cam Pass, Çıldır Gölü ?
<i>Equisetum palustre</i>	Marshy areas on Cam Pass
<i>Equisetum telmateia</i>	Sivrikaya

Lycoposidaceae

<i>Lycopodium clavatum</i>	Ortan where common on mossy banks
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Pteridophyta

<i>Adiantum capillus-veneris</i>	Çoruh Valley, Çamlık
<i>Asplenium scolopendrium</i>	Sivrikaya, Barhal
<i>Asplenium septentrionale</i>	Demirgören Valley, Karagol
<i>Asplenium adiantum-nigrum</i>	Demirgören Valley
<i>Asplenium trichomanes</i>	Sivrikaya, Barhal
<i>Athyrium distentifolium</i>	Sivrikaya
<i>Athyrium filix-foemina</i>	Cam pass woods
<i>Cystopteris fragilis</i>	Ovit Dağı, Karagol
<i>Dryopteris abbreviata</i>	Widespread e.g. Çamlık, Sivrikaya
<i>Dryopteris limbosperma</i>	Anzer Yayla, Mor Yayla
<i>Gymnocarpium robertianum</i>	Taşkıran
<i>Matteucia struthiopteris</i>	Locally common e.g. Ovit Dağı, Olgunlar
<i>Phegopteris connectilis</i>	Pişenkaya
<i>Polypodium vulgare</i> agg	Sivrikaya, Cam Pass etc
<i>Polystichum aculeatum</i>	Sivrikaya, Ovit Dağı
<i>Polystichum lonchitis</i>	Ovit Dağı, Mor Yayla
<i>Pteridium aquilinum</i>	Widespread e.g. Sivrikaya, Ovit Dağı
<i>Pteris cretica</i>	Sivrikaya
<i>Telypteris phegopteris</i>	Karagol

Cupressaceae

<i>Juniperus communis</i>	Widespread e.g. Anzer Yayla, Ovit Dağ
<i>Juniperus oxycedrus</i>	Olgunlar, Ovit Dağı, etc
<i>Juniperus sabina</i>	Yaylalar

Pinaceae

<i>Abies nordmanniana</i>	Locally dominant e.g. Cam pass, Yaylalar
<i>Picea orientalis</i>	Very common and widespread, the dominant coniferous species e.g. Çam pass, Yaylalar
<i>Pinus sylvestris</i>	Locally common e.g. Pişenkaya, Yaylalar, Çam pass

Aceraceae

<i>Acer campestre</i>	Taşkıran
<i>Acer platanoides</i>	Çamlık, Ovit Dağ, Demirgören Valley
<i>Acer pseudoplatanoides</i>	Pişenkaya
<i>Acer trautvetterii</i>	Barhal and Pişenkaya

Anacardiaceae

Rhus coriaria
Cotinus coggygria

Widespread, long, wide pinnate leaved shrub/tree
Smoke bush, Barhal area

Apiaceae

Many more species of this difficult family were seen but not identifies ?

Astrantia maxima

Scattered, lovely pink form, widespread e.g. Anzer
Yayla, Pişenkaya etc.

Bupleurum falcatum

Olgunlar-Dibe Yayla

Bunium microcarpum ssp.
bourgai

Ovit Dagı

Carum meifolium

Ovit Dağı

Chaerophyllum astrantiae

Olgunlar

Chaerophyllum macrospermum

Olgunlar

Conium maculatum

Çıldır Gölü

Daucus carota

Scattered ,Ovit Dağı

Eryngium billardieri

Aktas Lake

Eryngium campestre

En route to Yaylalar , Anzer Yayla.

Eryngium giganteum

Superb big silvery species mainly around Ovit Dag, but scattered elsewhere too

Foeniculum vulgare

Yaylalar

Falcaria vulgaris

Demirgören Valley, Çıldır Gölü ?

Heracleum platytaenium

Widespread e.g Ovit Dagı, Anzer Yayla

Pimpinella saxifrage

Çıldır Gölü ?

Pimpinella peregrina

Yalnizcam

Pimpinella rhodantha

Sivrikaya, Ovit Dağı

Prangos ferulago

Dibe Yayla ?

Sanicula europaea

Çam Pass

Xanthogalum purpurascens

Mor Yayla

Asclepiadaceae

Cynanchum acutum

Cam Pass

Cynanchum fuscatum

Anzer Yayla

Asteraceae

A superb array of this family was on show, however, thistles are not the easiest to identify and a number eluded me!

Achillea latiloba

Sivrikaya

Achillea millefolium

Mor Yayla, Ovit Dağ

Actium platylepis

Sivrikaya, Anzer Yayla

Antennaria dioica

Ovit Dağ ?

Anthemis marscheilliana ssp
pectinata

Locally very common on higher meadows and alpine turf, golden-yellow daisy, fine-cut soft grey leaves e.g Ovit Dağ, Mor Yayla, Pişenkaya

Anthemis melanoloma ssp
melanoloma

Creamy flowers with drooping ligules, unbranched seen at Sivrikaya pastures

Anthemis tinctoria

Mor Yayla

Arctium minus

Burdock, scattered e.g Ovit Dağ

Artemesia absinthium

Cam Pass

Artemisia vulgaris

Mor Yayla

<i>Aster alpinus</i>	A few at Mor Yayla
<i>Aster amellus</i>	Taller than <i>alpinus</i> with branched inflorescence, Mor Yayla, Ovit Dağ, etc
<i>Aster caucasicus</i>	Mor yayla, Anzer Yayla,
<i>Carduus hamulosus</i>	Çıldır Gölü ?
<i>Carduus lanuginosus</i>	Mor Yayla
<i>Carduus nutans</i>	En route to Çıldır Gölü ?
<i>Carlina biebersteinii</i>	Mor Yayla, Dibe Yayla , Laset
<i>Carlina vulgaris</i>	Mor Yayla
<i>Centaurea appendicigera</i>	Gorgeous creamy flowered cornflower, widespread on gravelly slopes or rocks in mountains e.g Ovit Dağ, Anzer Yayla, Mor Yayla etc.
<i>Centaures dealbata</i>	Laset
<i>Centaurea glastifolia</i>	Bright yellow with slender winged stems. Widespread, Mor Yayla, Ardahan (common)
<i>Centaurea helenioides</i>	Large yellow flowers with woolly phyllaries, en route to Anzer Yayla, Sivrikaya
<i>Centaurea hypoleuca</i>	Anzer Yayla
<i>Centaurea macrocephala</i>	Another large yellow species with brownish phyllaries. Mor Yayla
<i>Centaurea nigrifimbriata</i>	Blue alpine cornflower, black-edged phyllaries, Widespread e.g Sivrikaya, Ovit Dağ, Pişenkaya etc.
<i>Centaurea pseudoscabiosa</i>	Taşkıran ?
<i>Centaurea pulcherrima</i>	Widespread in alpine meadows, pink with papery pale brown phyllaries, Pişenkaya, Taskiran, etc
<i>Centaurea rhizantha</i>	Anzer Yayla
<i>Centaurea salicifolia</i>	Laset
<i>Centaurea triumfettii</i>	Mor Yayla
<i>Cicerbita racemosa</i>	Shorter species lilac-blue, scattered e.g. Anzer Yayla, Mor Yayla, Sivrikaya
<i>Cichorium intybus</i>	Abundant along roadside, chicory, Mor Yayla
<i>Cirsium adjaricum</i>	Yaylalar
<i>Cirsium echinus</i>	Widespread e.g. Mor Yayla, Anzer, spiny thistle with creamy nodding flowers on roadsides
<i>Cirsium hypoleucum</i>	Common deep pink thistle of woodland edge, nodding flowers e.g Anzer Yayla
<i>Cirsium kosmeli</i>	Cam and Yalnizcam Pass
<i>Cirsium obvallatum</i>	Cam Pass
<i>Cirsium pseudopersonata</i>	Sivrikaya, Ovit Dağ
<i>Cirsium pubigerum ssp glomeratum</i>	Barhal area, pale pink flowered, tall
<i>Cirsium rhizocephalum</i>	Aktas Lake
<i>Crepis willdenowii</i>	Sivrikaya
<i>Conyza canadensis</i>	En route to Laşet, Sivrikaya ?
<i>Doronicum balansae</i>	Anzer and Mor Yayla

<i>Echinops orientale</i>	Fine stands near Barhal, round thistle heads with blue flowers, Mor Yayla, Ovit Dağ
<i>Erigeron acer</i>	Widespread, pale pink species e.g Çam pass
<i>Erigeron annuus</i>	Sivrikaya, tall plant with small white flowers in the shady borders
<i>Erigeron caucasicus</i>	Tall deep pink species, Ovit Dağ
<i>Eupatorium cannabinum</i>	Hemp Agrimony, tall with broad white corymbs, Barhal area , Ovit Dağ, Pişenkaya etc.
<i>Gnaphalium supinum</i>	Widespread e.g Ovit Dağ
<i>Gnaphalium stewartii</i>	Sivrikaya
<i>Helichrysum armenium</i>	Similar to plicatum but leaves are revolute
<i>Helichrysum plicatum</i>	Common pale yellow with deeper centre e.g Ovit Dağ
<i>Inula helenium</i>	Widespread e.g Taşkiran, Sivrikaya, typical tall <i>Inula</i> , Barhal, Laset
<i>Inula oculus-christi</i>	Çam Pass
<i>Inula maeri</i>	Barhal
<i>Inula orientalis</i>	Lovely orangey-yellow species in tidy clumps, Sivrikaya, Ovit Dağ etc.
<i>Jurinella moschus</i>	Anzer and Mor Yayla
<i>Mycelis muralis</i>	Çıldır Gölü
<i>Logfia arvensis</i>	Scattered
<i>Onopordum acanthium</i>	Cam Pass
<i>Onopordum taurica</i>	Ardahan, Yalnizcam, Cam Pass, Big dark green plant with semi-drooping flwr heads
<i>Onopordum turcica</i>	Ardahan area, Big grey-green plant
<i>Petasites albus</i>	Widespread e.g Ovit Dağ, some huge leaves on show
<i>Pilosella hoppeana</i>	Widespread e.g Anzer Yayla, Mor Yayla, pale yellow daisy with ovate hairy leaves
<i>Prenanthes cacalifolia</i>	Sivrikaya
<i>Prenanthes purpurea</i>	Barhal area ?
<i>Reichardia glauca</i>	Scattered throughout
<i>Scariola viminea</i>	Yaylalar
<i>Scorzonera cana</i>	Ovit Dağ
<i>Scorzonera tomentosa</i>	Yaylalar
<i>Senecio pseudo-orientalis</i>	Anzer Yayla, Mor Yayla
<i>Senecio dorio ssp. umbrosus</i>	Mor Yayla
<i>Senecio platyphyllus</i>	Anzer Yayla
<i>Senecio racemosus</i>	Ovit Dagi
<i>Senecio taraxacifolius</i>	Anzer and Mor Yayla
<i>Senecio vernalis</i>	Anzer Yayla, above Sivrikaya
<i>Solidago virgaurea</i>	Fine white flowered species on Cam Pass
<i>Tanacetum balsamita</i>	Ovit Dağ
<i>Tanacetum macrophyllum</i>	Cam Pass
<i>Tanacetum coccineum</i>	Sivrikaya
<i>Tanacetum parthaneum</i>	Another tall handsome daisy, broad yellow flowers and large, broad leaves, widespread e.g Ovit Dağ, Anzer Yayla etc.
<i>Telekia speciosa</i>	Anzer and Mor Yayla
<i>Tripleurospermum melanolepis</i>	Mor Yayla
<i>Tripleurospermum oreades var. tchihatchewii</i>	

<i>Tussilago farfara</i>	Sivrikaya, Ovit Dağ (Leaves ?)
<i>Uechtritzia armena</i>	Yaylalar
<i>Xeranthemum annuum</i>	Abundant in drier valleys, tall pink daisy with pointed petals, widespread e.g Mor Yayla, Pişenkaya
Balsaminaceae	
<i>Impatiens noli-tangere</i>	Widespread in wet areas, a balsam e.g Anzer Yayla
Berberidaceae	
<i>Berberis crataegina</i>	Anzer Yayla, Barhal area
Betulaceae	
<i>Alnus glutinosa glutinosa</i>	Widespread e.g Ovit Dağ, Anzer Yayla, Mor Yayla etc.
Boraginaceae	
<i>Anchusa azurea</i>	Tall blue ‘borage’, Sivrikaya, etc
<i>Anchusa leptophylla</i>	More slender with deeper blue flowers, Mor Yayla
<i>Arnebia pulchra</i>	Anzer Yayla, Çam Pass
<i>Cerinth glabra</i>	
<i>Cerinth minor</i>	Pişenkaya, Laset
<i>Cynoglossum officinale</i>	Yaylalar
<i>Cynoglossum montanum</i>	Reddish flowers, spiny disc-like fruits, widespread e.g Demirgöre Valley
<i>Echium italicum</i>	En route to Yusufeli from Yaylalar ?
<i>Echium russicum</i>	En route to Çıldır Gölü
<i>Echium vulgare</i>	Widespread e.g Sivrikaya, Anzer Yayla etc.
<i>Lappula barbata</i>	Demirgören Valley
<i>Nonea pulla ssp. monticola</i>	Cam Pass
<i>Nonea versicolor</i>	Mor yayla
<i>Myosotis alpestris</i>	Widespread in mountains e.g Ovit Dağ, Yaylalar
<i>Nonea pulmonaroides</i>	Çam Pass
<i>Onosma aucherianum</i>	Mor Yayla
<i>Onosma isauricum</i>	
<i>Onosma tauricum</i>	Yaylalar
<i>Symphytum asperum</i>	Widespread, blue flowers Ovit Dağ, Pişenkaya etc.
Brassicaceae	
<i>Arabis draboides</i>	
<i>Arabis caucasica</i>	Mor yayla
<i>Berteroa mutabilis</i>	Yaylalar area
<i>Bunias orientalis</i>	Sivrikaya ?
<i>Capsella bursa-pastoris</i>	scattered
<i>Cardamine raphanifolia ssp. acris</i>	Wet areas, scattered; Ovit Dağ, Anzer Yayla
<i>Cochlearia sintenisii</i>	Anzer area
<i>Coluteocarpus vesicaria</i>	Yaylalar, Coruh Valley
<i>Crambe orientalis</i>	Kars
<i>Dentaria bulbifera</i>	Yaylalar
<i>Descurainia sophia</i>	Kars area
<i>Draba brunnifolia</i>	Ovit Dağ, Anzer Yayla

<i>Draba hispida</i>	Ovit Dağ, Anzer Yayla
<i>Draba rosularis</i>	Ovit Pass
<i>Erysimum alpinum</i>	Mor Yayla
<i>Fibigia macrocarpa</i>	Yaylalar (Fruits) ?
<i>Hesperis matronalis</i>	Cam Pass
<i>Isatis glauca</i>	Scattered. Woad. Mor Yayla.
<i>Lepidium vesicarium</i>	Ani
<i>Neslia apiculata</i>	Sivrikaya
<i>Thlaspi arvense</i>	Sivrikaya, Anzer Yayla

Buxaceae

Buxus sempervirens

Camelliaceae

Thea sinensis

Widespread in plantations – Tea e.g Güneyce

Campanulaceae

Asyneuma amplexicaule

Slender purplish-blue spikes in meadows, clasping leaves, Anzer Yayla, Mor Yayla

Campanula alliarifolia

Tall white species. Widespread, e.g. Ovit Dağ, Çam Pass etc.

Campanula aucheri

Large blue bell in alpine turf, pale centres, corolla pubescent outside e.g. Mor Yayla, Ovit Dağ

Campanula betulifolia

En route to Anzer Yayla ?

Campanula choruhensis

A few plants in flower on rocks at Taskiran

Campanula collina

Locally common on higher passes e.g. Anzer Yayla. Spikes of well spaced purplish bells

Campanula crispa

White flowered cliff dweller on Cam Pass

Campanula glomerata

Widespread, dense pale blue – dark blue flowers, stiff bracts and leaves. Mor Yayla, Pişenkaya.

Campanula lactiflora

Locally abundant e.g. Ovit Dağ, Anzer, tall with huge heads of pale lilac to mid-blue flowers

Campanula latifolia

Scattered, tall with large hairy bells. Anzer Yayla, Mor Yayla etc.

Campanula persicifolia

Ayder

Campanula rapunculoides

Locally abundant along roads, tall, slender with lilac top purple bells in spikes. En route to Çamlık and Pişenkaya.

Campanula sibirica

Rather wiry, species with sparse spikes, flowers generally held upright. Ovit Dağ, Sivrikaya.

Campanula stevenii

Delicate pale blue species on long wiry stems e.g. Ovit Dağ, Mor Yayla

Campanula tridentata

Similar to *aucheri* but more purple and preferring rocks to turf, dark centres. Widespread in mountains e.g. Ovit Dağ, Mor Yayla

Jasione supina

Dwarf with round blue ‘globularia-like’ flowers, Ovit Dağ, etc ?

Cannabaceae

Cannabis sativa

Yaylalar ?

Humulus lupulus

Yaylalar ?

Capparaceae

Capparis ovata

En route to Yusufeli

Cleome steveniana

Caprifoliaceae

<i>Lonicera caucasica</i>	Yaylalar
<i>Lonicera xylosteum</i>	Anzer area
<i>Sambucus edulis</i>	Widespread and common e.g Anzer Yayla,Mor Yayla etc.
<i>Sambucus nigra</i>	Scattered en route to Anzer
<i>Viburnum lantana</i>	Scattered e.g. Demirgören Valley,Yaylalar ?
<i>Viburnum opulus</i>	Scattered e.g. En route to Çamlık ?

Caryophyllaceae

<i>Cerastium armeniacum</i>	Olgunlar
<i>Cerastium cerastioides</i>	Yusufeli
<i>Cerastium dahuricum</i>	Anzer Yayla
<i>Cerastium gnaphaloides</i>	Cam Pass
<i>Cerastium purpurascens</i>	Çam Pass
<i>Dianthus calocephalus</i>	Mor Yayla
<i>Dianthus carmelitarum</i>	Sivrikaya,Ovit Dağ
<i>Dianthus erythrocoleus</i>	Mor Yayla,Yaylalar
<i>Dianthus micranthus</i>	White flowered species on Cam Pass
<i>Dianthus multicaulis</i>	Pale pink species at Mor Yayla, Cam Pass
<i>Dianthus orientalis</i>	Widespread e.g en route to Laşet from Yusufeli, fimbriate petals, long wiry stems, on cliffs
<i>Dianthus seguieri</i>	Aktas Lake
<i>Dianthus zederboueri</i>	Mor Yayla
<i>Dianthus zonatus</i>	Ani
<i>Gypsophila elegans</i>	Sivrikaya
<i>Gypsophila glandulosa</i>	Ovit Dağ
<i>Gypsophila silenoides</i>	
<i>Herniaria glabra</i>	Anzer Yayla,Mor Yayla
<i>Minuartia aizoides</i>	Mor Yayla and Ovit Dag
<i>Minuartia circassica</i>	Scattered, similar to <i>juniperina</i> , but distinct greyish leaves and broader petals.Ovit Dağ,Anzer Yayla,Pişenkaya etc.
<i>Minuartia erytrosepala</i>	Mor Yayla
<i>Minuartia imbricata</i>	Ovit dagi
<i>Minuartia juniperina</i>	Fine-leaved tallish species on alpine tundra at Anzer Yayla,Mor Yayla etc.
<i>Minuartia recurva</i>	Anzer Yayla
<i>Sagina procumbens</i>	
<i>Silene alba ssp. divaricata</i>	Mor Yayla
<i>Silene armeria</i>	En route to Karagol
<i>Silene compacta</i>	Widespread e.g En route to Çamlık,Ovit Dağ etc.
<i>Silene cappadocica</i>	Çam Pass
<i>Silene caryophylloides</i>	En route to Ovit Dağ
<i>Silene dichotoma</i>	Aktas Lake
<i>Silene lazica</i>	Anzer Yayla
<i>Silene lucida</i>	Mor Yayla, deep red calyx, linear leaves less than 1.5 mm En route to Sivrikaya, Yalnizcam Pass
<i>Silene multifida</i>	Mor Yayla
<i>Silene otites</i>	Mor Yayla

Silene pungens Scattered everywhere
Silene saxatilis
Silene vulgaris Mor Yayla
Stellaria graminea
Stellaria kotschyana Ovit Dağ
Stellaria media Scattered e.g. Ovit Dağ

Celastraceae

Euonymus latifolius

Ceratophyllaceae

Myriophyllum spicatum

Chenopodiaceae

Chenopodium album

Chenopodium foliosum Mor Yayla, Çıldır Gölü

Cistaceae

Helianthemum nummularium Widespread rockrose e.g. Anzer area

Convolvulaceae

Convolvulus arvensis

Widespread e.g. Mor Yayla

Calystegia sepium

Anzer Yayla

Calystegia silvatica

Cornaceae

Cornus sanguinea

Widespread e.g. Taşkiran

Corylaceae

Carpinus orientalis

Common on northern slopes e.g. Pişenkaya

Ostrya carpinifolia

Widespread e.g. Pişenkaya, Taşkiran

Corylus avellana

common

Corylus maxima

planted

Crassulaceae

Sedum album

Dibe Yayla

Sedum hispanicum

Mor Yayla

Sedum maximum

Pişenkaya, Olgunlar

Sedum pilosum

En route to Sivrikaya

Sedum sempervivoides

Stunning scarlet species at Mor Yayla

Sedum spurium

Widespread and very common pink species e.g. Ovit Dağ, Anzer yayla etc. White forms on Cam Pass

Sedum stoloniferum

More delicate than *spurium*, scattered e.g. Anzer area

Sedum tenellum

Ovit Dağ

*Sedum gracile*X*pallidum*?

Anzer Yayla

Sempervivum armenum

Ovit and Pisenkaya

Datisceae

Datisca cannabina

Laset

Dipsacaceae

<i>Cephalaria gigantea</i>	Abundant at Sivrikaya and Laset area
<i>Knautia involucreta</i>	En route to Anzer
<i>Scabiosa caucasica</i>	Locally abundant on higher turf, large mid-blue flowers e.g. Sivrikaya, Ovit Dağ, Çam Pass etc.
<i>Scabiosa columbaria</i>	Yaylalar
<i>ssp. columbaria</i>	
<i>Scabiosa crinita</i>	Yalnizcam Pass
<i>Scabiosa rotata</i>	Sivrikaya

Elaeagnaceae

<i>Hippophae rhamnoides</i>	Laset
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Ericaceae

<i>Rhododendron caucasicum</i>	Higher slopes where often the dominant shrub. Ovit dağ, Anzer Yayla etc. (Leaves)
<i>Rhododendron luteum</i>	Widespread e.g. Anzer Yayla (Leaves)
<i>Rhododendron ponticum</i>	Widespread e.g. Ovit Dağ (Leaves)
<i>Vaccinium arctostaphylos</i>	
<i>Vaccinium myrtillus</i>	Widespread, delicious berries e.g. Ovit Dağ
<i>Vaccinium uliginosum</i>	Widespread e.g. Anzer Yayla, Pişenkaya

Euphorbiaceae

	Sorry but this family was totally ignored! Several species of <i>Euphorbia</i> were evident but all were well past their flowering peak.
<i>Euphorbia macroceras</i>	Sivrikaya
<i>Euphorbia myrcinites</i>	Barhal

Fabaceae

<i>Albizia julibrissin</i>	Yaylalar
<i>Argyrolobium biebersteinii</i>	Scattered, planted in towns
<i>Coronilla orientalis</i>	Ovit Dağ, Anzer Yayla
<i>Coronilla varia</i>	Anzer Yayla, Sivrikaya
<i>Hedysarum hedysaroides</i>	Ovit Dağ, slender pink sainfoin
<i>Lathyrus pratensis</i>	Widespread e.g. Anzer area
<i>Lathyrus rotundifolius</i>	Widespread e.g. Anzer Yayla, Mor Yayla
<i>Lathyrus tuberosus</i>	Near Ardahan, Laset
<i>Lotus corniculatus</i>	Widespread e.g. Ovit Dağ, Mor Yayla
<i>Medicago sativa</i>	widespread
<i>Melilotus officinalis</i>	Widespread e.g. Ovit Dağ
<i>Onobrychis transcaucasica</i>	Ovit Dağ
<i>Onobrychis montanum</i>	Anzer yayla
<i>Robinia pseudacacia</i>	Widespread, planted e.g. Taşkiran
<i>Trifolium alpestre</i>	Çam Pass
<i>Trifolium arvense</i>	Widespread e.g. Ovit Dağ, oblong woolly heads, like a hare's foot
<i>Trifolium campestre</i>	
<i>Trifolium fragiferum</i>	En route to Çıldır Gölü ?
<i>Trifolium medium</i>	Yaylalar
<i>Trifolium pannonicum</i>	Widespread and common large creamy-white clover e.g. Anzer Yayla, Mor Yayla

<i>Trifolium pratense</i>	
<i>Trifolium repens</i>	Widespread e.g. Ovit Dağ
<i>Trifolium rytidosemium</i>	White forms at Ovit Mount.
<i>Trifolium spadiceum</i>	Sivrikaya, Ovit Dağ, Anzer area
<i>Vavilovia formosa</i>	Mor Yayla
<i>Vicia balansae</i>	Anzer Yayla
<i>Vicia alpestris</i>	
<i>Vicia canescens</i>	Anzer Yayla, Mor Yayla
<i>Vicia cracca</i>	Mor Yayla, Anzer, etc
<i>Vicia truncatula</i>	Ovit Dağ
<i>Vicia villosa</i>	Sivrikaya

Fagaceae

<i>Castanea sativa</i>	Widespread e.g. Güneyce ?
<i>Fagus orientalis</i>	Common in forest on northern slopes
<i>Quercus macranthera</i>	En route to Laşet ?
<i>Quercus petraea</i>	Güneyce, etc

Fumariaceae

<i>Fumaria procumbens</i>	Anzer Yayla
<i>Corydalis alpestris</i>	Anzer Yayla.
<i>Corydalis conrhiza</i>	Anzer Yayla. Handsome lilac-blue species in scree
<i>Corydalis rutifolia</i>	

Gentianaceae

<i>Blackstonia perfoliata</i>	Cam Pass
<i>Gentiana asclepiadea</i>	Widespread, fine flowering plants at Karagol
<i>Gentiana cruciata</i>	Çam Pass
<i>Gentiana gelida</i>	Handsome creamy-white species, Ardahan-Kars area
	Ovit Dağ
<i>Gentiana nivalis</i>	
<i>Gentiana olivierii</i>	
<i>Gentiana pyrenaica</i>	Widespread small purple species e.g. Ovit Dağ, Anzer Yayla etc.
<i>Gentiana septemfida</i>	Widespread and common in higher areas e.g. Ovit Dağ, Pişenkaya, Çam Pass etc. large trumpets on long, leafy stems
<i>Gentiana verna</i>	Scattered e.g. Anzer area, deep blue
<i>Gentianella caucasica</i>	Soft-pink gentian, Çam Pass
<i>G. gelida x G. septemfida</i>	Çam Pass
<i>Swertia iberica</i>	Widespread e.g. Ovit Dağ, Cam Pass, Taskiran etc.

Geraniaceae

<i>Geranium asphodeloides</i>	Mor Yayla, also pink form near Ardahan
<i>Geranium cinereum</i>	Both the dark eyed and white centred forms were seen.
	Widespread and locally common e.g. Ovit Dağ, Mor Yayla
<i>Geranium collinum</i>	Cildir Lake
<i>Geranium ibericum</i>	Widespread and common at higher levels especially e.g. Anzer Yayla, Mor Yayla
<i>Geranium psilostemon</i>	Widespread e.g. en route to Ovit Dağ, Anzer Area, tall, deep magenta with black-eye
<i>Geranium pyrenaicum</i>	Scattered e.g. Sivrikaya
<i>Geranium robertianum</i>	Widespread e.g. Sivrikaya

Geranium sanguineum En route to Barhal ?
Pelargonium endlicherianum En route to Barhal ?

Grossulariaceae

Ribes alpinum Demirgören Valley
Ribes orientalis Above Barhal

Hippuridaceae

Hippuris vulgaris Çıldır Gölü ?

Hypericaceae

Hypericum androsaemum
Hypericum armenum Anzer Yayla
Hypericum hyssopifolium Sivrikaya
Hypericum lydium
Hypericum orientale Ovit Dağ
Hypericum linaroides Cam Pass
Hypericum scabrum Corymbs of golden flowers, Mor Yayla
Hypericum perforatum Widespread in meadows e.g. Sivrikaya
Hypericum venustum Olgunlar

Juglandaceae

Juglans regia Widespread orchard tree
Pterocarya fraxinifolia

Lamiaceae

Ajuga orientalis Widespread e.g Ovit Dağ
Ballota rotundifolia Yaylalar
Calamintha grandiflora Woodland edge, large, long tubed pink flowers, scented leaves, e.g. Anzer
Calamintha sylvatica Scattered
Clinopodium vulgare Common in Barhal area
Dracocephalum aucheri Mor Yayla
Galiopsis ladanum Mor Yayla
Galiopsis bifida Yalnizcam Pass
Hyssopus officinalis
Lallemantia canescens Mor Yayla
Lamium album Widespread e.g. Anzer Yayla, Pişenkaya
Lamium tomentosum Mor Yayla
Leonorus glaucescens Yalnizcam Pass
Lycopus europaeus Taşkiran
Mentha aquatica Scattered
Mentha longifolia Widespread and common e.g. Mor Yayla
Origanum acutidens Sivrikaya
Origanum rotundifolium Common in drier valleys, large creamy bracts, widespread e.g. Pişenkaya, Taşkiran
Origanum vulgare Scattered in mountains, roadsides e.g. Sivrikaya ?
Prunella vulgaris Widespread e.g. Sivrikaya
Phlomis pungens Cildir Lake
Salvia brachycantha Sivrikaya, Anzer road (deep red flowers)

<i>Salvia forskahlei</i>	Ortan, lilac-blue flowers,Sivrikaya ?
<i>Salvia glutinosa</i>	Common in damper woodland edges e.g. Anzer area,Çam Pass En route to Çıldır Gölü
<i>Salvia nemorosa</i>	
<i>Salvia sclarea</i>	
<i>Salvia staminea</i>	Cam Pass
<i>Salvia verticillata</i>	Widespread e.g. Anzer Yayla
<i>Scutellaria albida</i>	Small white flowers on spikes, roadsides e.g. Yaylalar
<i>Scutellaria orientalis</i>	Yaylalar,en route to Çıldır Gölü ?
<i>Scutellaria pontica</i>	Pretty pink species, Ovit Dağ
<i>Stachys balansae</i>	Ovit Dağ,Mor Yayla,Pişenkaya
<i>Stachys atherocalyx</i>	Anzer Yayla
<i>Stachys macrantha</i>	Common in higher area, loose heads of long-tubed pink flowers e.g. Sivrikaya,Mor Yayla
<i>Stachys macrastachya</i>	Deep pink dense spikes, Mor Yayla
<i>Teucrium chamaedrys</i>	Widespread e.g. Anzer Yayla,Mor Yayla,Yaylalar
<i>Teucrium orientale</i>	Pretty blue species at Mor Yayla
<i>Teucrium polium</i>	Yaylalar
<i>Thymus praecox</i>	Alpine turf e.g. Ovit Dağ
<i>Thymus spyleus</i>	Sivrikaya?
<i>Thymus transcaucasicus</i>	Mor Yayla

Lemnaceae

Spirodela polyrhiza

Lentibulariaceae

Pinguicula balcanica

Ovit Dag, a butterwort

Linaceae

Linum austriacum

En route to Çıldır Gölü ?

Linum catharticum

Ovit Dağ, Anzer yayla

Linum hypericifolium

Yalnizcam and Cam Pass

Linum tenuifolium

Laset

Lythraceae

Lythrum salicaria

Widespread e.g. Anzer Yayla, Pişenkaya

Malvaceae

Alcea apterocarpa

Barhal area

Alcea hohenackeri

Anzer Yayla

Alcea celvertii

Laset

Alcea dissecta

En route to Olgunlar

Althaea cannabina

Barhal

Malva neglecta

Widespread e.g. Barhal

Monotropaceae

Monotropa hypopithys

Pale yellow saprophyte – yellow bird's nest, woods, Çam Pass

Moraceae

Morus alba

Orchards

Morus nigra

Yusufeli

Ficus carica

Widely planted

Nymphaeaceae

Nymphaea alba

Çıldır Gölü ?

Oleaceae

Fraxinus excelsior

Scattered in damper situations e.g. Pişenkaya

Olea europaea

Olive groves in lower areas, Yaylalar ?

Onagraceae

Epilobium alpestre

Ovit Dağ

Epilobium dodonaei

Like a more slender rosebay willowherb, Pişenkaya, Olgunlar

Epilobium hirsutum

Mor Yayla

Epilobium ponticum

Widespread by streams and wet areas e.g. Anzer area

Chamaenerion angustifolium

Abundant e.g. Ovit Dağ

Circaea lutetiana

Woods, Anzer area

Orobanchaceae

Orobanche alba

Mor Yayla

Orobanche lutea

Sivrikaya

Orobanche mutelii

Orobanche pubescens

Ovit Dağ

Orobanche ramosa

Yaylalar

Oxalidaceae

Oxalis acetosella

Woods, Sivrikaya ?

Papaveraceae

Papaver fugax

Smallish pale orange flowers in Barhal area, Yaylalar

Papaver lateritium

Fine orange flowered species in mountains e.g. Ovit Dağ, Mor Yayla

Papaver orientale

Pişenkaya, Olgunlar

<i>Glaucium corniculatum</i>	Barhal
<i>Chelidonium majus</i>	Barhal area,Sivrikaya
Parnassiaceae	
<i>Parnassia palustris</i>	Widespread e.g. Çamlık
Phytolaccaceae	
<i>Phytolacca americana</i>	Scattered alien
Plantaginaceae	
<i>Plantago lanceolata</i>	Widspread
<i>Plantago major</i>	Widespread e.g. en route Ovit Dağ
<i>Plantago media</i>	Aktas Lake
Plumbaginaceae	
<i>Acantholimon ulicinum</i>	Mor Yayla, spiny cushions with pink flowers
<i>Plumbago europaea</i>	Barhal area ?
Polygalaceae	
<i>Polygala alpestris</i>	Karagol
<i>Polygala anatolica</i>	Larger pink species,Anzer area,Çam Pass
<i>Polygala major</i>	
Polygonaceae	
<i>Oxyria digyna</i>	
<i>Polygonum alpinum</i>	Widespread e.g.Anzer Yayla,Mor Yayla
<i>Polygonum amphibia</i>	Karagol
<i>Polygonum bistorta</i>	Widespread e.g. Mor Yayla, Anzer, Çam Pass,deep pink. Long stems.
<i>ssp.carneum</i>	
<i>Polygonum hydropiper</i>	
<i>Polygonum minor</i>	
<i>Rumex acetosella</i>	Sivrikaya, etc.
<i>Rumex alpines</i>	Ovit Dağ,Anzer
<i>Rumex angustifolius</i>	Mor Yayla
<i>Rumex maritimus</i>	Çıldır Gölü ?
<i>Rumex caucasicus</i>	Anzer Yayla
<i>Rumex cristatus</i>	Widespread
<i>Rumex scutatus</i>	Scattered e.g. Anzer Yayla,Mor Yayla
Primulaceae	
<i>Lysimachia verticillaris</i>	Widespread in woodland edge, spikes of yellow e.g. Anzer Yayla,Pişenkaya
<i>Lysimachia vulgaris</i>	Barhal
<i>Primula algida</i>	Ovit dag
<i>Primula auriculata</i>	Widespread in mountains e.g. Ovit Dağ,Mor Yayla,Pişenkaya etc.

<i>Primula elatior ssp meyeri</i>	Handsome deep pink species, rosettes of crinkled leaves, loose heads e.g. Ovit Dağ, Anzer Yayla
<i>Primula longipes</i>	Ovit Dağ
<i>Primula veris</i>	
<i>Primula vulgaris</i>	Sivrikaya ?
Punicaceae	
<i>Punica granatum</i>	Orchards ,Barhal area
Pyrolaceae	
<i>Pyrola rotundifolia</i>	Woods,Barhal
<i>Orthilia secunda</i>	Woods ,Barhal
Ranunculaceae	
<i>Aconitum anthora</i>	Pale yellow species, common on Çam Pass
<i>Aconitum nasutum</i>	Tall blue species on Çam Pass
<i>Aconitum orientale</i>	Whitish to lilac, slender flowers, large dissect leaves, Anzer Yayla and Çam Pass
<i>Anemone albana</i>	Scattered with a few in flower at Mor yayla
<i>Anemone narcissiflora</i>	Leaves on Anzer Yayla,in flower at Çam Pass
<i>Aquilegia olympica</i>	Anzer area,Barhal area prefers to be among rhododendron scrub Ovit Dağ
<i>Caltha polypetala</i>	
<i>Clematis orientalis</i>	Yusufeli
<i>Clematis vitalba</i>	In flower near Barhal
<i>Consolida regalis var. divaricata</i>	Ani
<i>Consolida orientalis</i>	
<i>Delphinium dasystachyum</i>	Anzer Yayla
<i>Delphinium formosum</i>	Anzer and Cam Pass, in meadows, tall with deep blue flowers, close to <i>flexuosum</i> but I now believe all of the tall delphiniums are this species.
<i>Delphinium flexuosum</i>	Previously recorded for Cam Pass, however, I think these may all be <i>formosum</i> given the their greater height (well in excess of 100cm) and altitude (2400m) and given distribution in the Turkish Flora
<i>Delphinium linearilobum</i>	
<i>Delphinium schmalhauseni</i>	Some of the tall delphiniums with very dissect leaves on the Çam Pass are this species
<i>Paeonia mascula</i>	Pişenkaya
<i>Ranunculus brachylobus</i>	Fine golden flowered species en route to Ovit Dağ ?
<i>Ranunculus sceleratus</i>	Aktas Lake
<i>Thalictrum minus</i>	Sivrikaya,Anzer Yayla
<i>Trollius ranunculinus</i>	Widespread leaves e.g. Barhal ?
Rhamnaceae	
<i>Frangula alnus</i>	Barhal area
<i>Myricaria germanica</i>	
<i>Paliurus spina-christi</i>	Widespread e.g. en route to Barhal

Rosaceae

<i>Agrimonia eupatorium</i>	Slender spikes of yellow flowers, meadows. Widespread e.g. Anzer area, Pişenkaya
<i>Alchemilla mollis</i>	Yaylalar
<i>Alchemilla sericea</i>	Anzer Yayla
<i>Aruncus vulgaris</i>	Widespread e.g. Ovit Dağ, Pişenkaya
<i>Cotoneaster integerrimus</i>	Cam Pass
<i>Crataegus monogyna</i>	
<i>Crataegus orientalis</i>	Barhal area
<i>Filipendula ulmaria</i>	Çam Pass
<i>Filipendula vulgaris</i>	En route to Çıldır Gölü ?
<i>Fragaria vesca</i>	Widespread e.g. Pişenkaya, Dibe Yaylalar
<i>Geum coccineum</i>	Anzer Yayla
<i>Geum rivale</i>	Çam Pass
<i>Geum urbanum</i>	Cam and Yalnizcam Pass
<i>Laurocerasus officinalis</i>	
<i>Mespilus germanica</i>	
<i>Potentilla adsharica</i>	Mor Yayla
<i>Potentilla argentea</i>	Mor Yayla, Dibe Yaylalar
<i>Potentilla anserina</i>	Aktas Lake
<i>Potentilla crantzii</i>	Widespread e.g. Ovit Dağ, Anzer Yayla
<i>Potentilla erecta</i>	
<i>Potentilla rupestris</i>	Mor Yayla
<i>Potentilla recta</i>	Mor Yayla, Sivrikaya etc.
<i>Pyrus salicifolia</i>	
<i>Rosa canina</i>	Scattered
<i>Rosa heckeliana</i>	Sivrikaya, Ovit Dağ ?
<i>Rosa villosa</i>	
<i>Rubus idaeus</i>	Delicious! Widespread e.g. Pişenkaya
<i>Rubus sanctus</i>	The widespread bramble
<i>Sanguisorba minor</i>	Widespread e.g. Ovit Dağ, white flowers
<i>Sanguisorba officinalis</i>	Reddish flowers, e.g. Cam Pass
<i>Sibbaldia parviflora</i>	Widespread in mountains e.g. Ovit Dağ, Anzer Yayla
<i>Sorbus aucuparia</i>	
<i>Sorbus umbellata</i>	Mor Yayla
<i>Sorbus terminalis</i>	Anzer Yayla

Rubiaceae

<i>Asperula orientalis</i>	Barhal area
<i>Asperula gracilis</i>	Anzer Yayla, mat-forming
<i>Asperula pontica</i>	
<i>Cruciata laevipes</i>	?
<i>Cruciata taurica</i>	Anzer Yayla, Mor Yayla
<i>Galium incanum</i>	Cream flowered Anzer Yayla, etc.
<i>Galium odoratum</i>	White flowered, in the shade
<i>Galium verum</i>	Yellow flowered, widespread

Salicaceae

<i>Populus tremula</i>	Common and widespread e.g. Anzer Yayla, Mor Yayla
<i>Populus uzbekistana</i>	Widely planted upright tree e.g. Anzer Yayla, Mor Yayla
<i>Salix alba</i>	

<i>Salix caprea</i>	Mor Yayla
Santalaceae	
<i>Thesium procumbens</i>	Anzer Yayla ,Mor Yayla
Saxifragaceae	
<i>Chrysosplenium dubium</i>	Scattered
<i>Saxifraga cymbalaria</i>	Widespread little yellow species, ivy-like leaves e.g. Sivrikaya,Anzer area
<i>Saxifraga paniculata</i>	Widespread, common on rocks e.g.Ovit Dağ,Mor Yayla, encrusted leaves
<i>Saxifraga rotundifolia</i>	Scattered e.g. Anzer Yayla, round, hairy leaves
<i>Saxifraga sibirica</i>	Widespread in mountains e.g. Ovit Dağ, white flowers
Scrophulariaceae	
<i>Digitalis ferruginea</i>	Widespread and common, tall spikes of rust coloured flowers e.g. en route to Ovit Dağ,Anzer Yayla
<i>Euphrasia lebadensis</i>	Ovit Dagi
<i>Linaria genistifolia</i>	Anzer Yayla
<i>Linaria grandifolia</i>	Pretty yellow flowers, Cicek Pass
<i>Melampyrum arvense</i>	Widespread and common cow-wheat e.g. Anzer Yayla,Olgunlar
<i>Odontites aucheri</i>	Slender bartsia with yellow flowers, quite widespread e.g. Mor Yayla
<i>Pedicularis atropurpurea</i>	Largely over, tall spikes dark flowers, Ovit Dag
<i>Pedicularis caucasica</i>	White flowers, low growing. Mor Yayla
<i>Pedicularis comosa</i>	Tall white species,Mor Yayla
<i>Pedicularis condensata</i>	Ovit Dag, dense heads of creamy flowers
<i>Pedicularis nordmanniana</i>	Small pink species Ovit Dağ,Mor Yayla
<i>Pedicularis pontica</i>	Ovit Dağ,Anzer Yayla
<i>Rhinanthus angustifolius</i>	Sivrikaya, Yaylalar, etc.
<i>Rhynchosorys elephas</i>	Pretty yellow flowers, wide lip and obvious yellow beak.Anzer area
<i>Rhynchosorys orientalis</i>	Aktaş Gölü
<i>Rhynchosorys stricta</i>	Sivrikaya,en route to Ovit Dağ
<i>Verbascum armenum</i>	Abundant at Mor Yayla,Anzer Yayla
<i>Verbascum speciosum</i>	Çam Pass
<i>Verbascum trichostylum</i>	Yaylalar
<i>Verbascum pyramidatum</i>	Sivrikaya
<i>Veronica anagallis-aquatica</i>	Widespread e.g. Anzer Yayla
<i>Veronica beccabunga</i>	Scattered e.g. Anzer Yayla, Mor Yayla
<i>Veronica gentianoides</i>	Scattered in mountains, relatively large flowers in spikes,e.g. Ovit Dağ,Anzer Yayla,Mor Yayla
<i>Veronica orientalis</i>	Mor yayla
<i>Veronica peduncularis</i>	
Simaroubaceae	
<i>Ailanthus altissima</i>	
Solanaceae	
<i>Atropa belladonna</i>	Scattered e.g. Anzer Yayla
<i>Physalis alkekengi</i>	Coruh Valley

<i>Hyoscyamus niger</i>	Scattered e.g. Sivrikaya, Anzer Yayla
<i>Solanum alatum</i>	Coruh Valley
<i>Solanum nigrum</i>	Widespread e.g. Barhal area
Staphylaceae	
<i>Staphylea pinnata</i>	En route to Anzer
Tamaricaceae	
<i>Myricaria germanica</i>	Widespread e.g. Taşkiran
<i>Tamarix smyrniensis</i>	
Thymelaeaceae	
<i>Daphne glomerata</i>	Widespread, but few in flower e.g. Ovit Dağ roadside, Anzer area
Tiliaceae	
<i>Tilia rubra</i>	Barhal area
Ulmaceae	
<i>Celtis glabrata</i>	Barhal area ?
<i>Ulmus glabra</i>	Anzer area
Urticaceae	
<i>Urtica dioica</i>	Widespread e.g. Anzer Yayla, Pişenkaya
<i>Parietaria judaica</i>	
Urticulariaceae	
<i>Pinguicula balcanica ssp. pontica</i>	?
<i>Urticularia vulgaris</i>	Çıldır Gölü
Valerianaceae	
<i>Centranthus longiflorus</i>	Yaylalar
<i>Valeriana alliarifolia</i>	Widespread and common, large triangular leaves, huge corymbs of flowers, but largely over. E.g. Sivrikaya, Ovit Dağ, Anzer Yayla etc.
Violaceae	
<i>Viola altaica</i>	Anzer Yayla
<i>Viola arvensis</i>	Scattered e.g. Anzer Yayla, Çam Pass
<i>Viola dichroa</i>	Mor Yayla
<i>Viola odontocalycina</i>	Pretty species in scree at Mor Yayla
Vitaceae	
<i>Vitis vinifera</i>	Grapevine. Widespread
Zygophyllaceae	
<i>Peganum harmala</i>	Ani

Alismataceae

Alisma plantago-aquatica

Çıldır Gölü ?

Commelaceae

Commelina communis

Sivrikaya, pretty blue flowers ?

Dioscoreaceae

Tamus communis

Scattered e.g. Anzer area

Schoenoplectus lacustris

Butomaceae

Butomus umbellatus

Çıldır Gölü

Iridaceae

Crocus scharojonii

Liliaceae

Allium atrovioleaceum

Anzer

Allium guttatum

Yaylalar

Allium olypticum

Olgunlar, Cam Pass, this is possibly the delicate little species seen here

Allium szovitsii

Anzer yayla

Allium schoenoprasum

Ovit Dağ, etc

ssp.sibiricum

Allium sphaerocephalon

Anzer Yayla, Yaylalar

Colchicum speciosum

Leaves,Ovit Dağ

Gagea villosa

Gagea glacialis

Lilium ponticum

Near Ovit Dag

Polygonatum orientale

Scilla winogradowii

Veratrum album

Scattered, large ribbed leaves e.g. Anzer Yayla Pişenkaya

Orchidaceae

Cephalanthera rubra

Pisenkaya

Coeloglossum viride

Sivrikaya,Anzer Yayla,Pişenkaya

Dactylorhiza iberica

?

Dactylorhiza osmanica

Anzer area, Mor Yayla

Dactylorhiza urvilleana

En route to Çamlık, etc slender

Epipactis helleborine

Anzer area

Epipactis veratrifolia

Anzer Yayla

Epipactis persica

Pisenkaya

Epipogium aphyllum

Over 100 in flower near Laşet

Goodyera repens

Limodorum abotivum

Pisenkaya

Neottia nidus-avis

Laset

Gymnadenia conopsea

Barhal area ?

Traunsteinera sphaerica

Sivrikaya

Phlathanthera chlorantha

Leaves, Pisenkaya

Poaceae

Briza macrowiczii ?

Briza minor

Briza media

Holcus lanatus

Melica ciliata

Phleum alpinum

Poa alpine

Stipa arabica

Ovit Dağ

Yaylalar

Yaylalar

Mountain meadows, hare's foot e.g. Ovit Dağ

Anzer, etc

Mor Yayla

Potamogetonaceae

Potamogeton natans

Typhaceae

Typha latifolia

Systematic List Number 2 Birds

Little Grebe	<i>Tachybaptus ruficollis</i>	Aktas and Cildir Lake
Great-crested Grebe	<i>Podiceps cristatus</i>	Aktas and Cildir Lake
Cormorant	<i>Phalacrocorax carbo</i>	Seen on Aktas Lake
White Pelican	<i>Pelecanus onocrotalus</i>	breeding colonies on Aktas
Dalmatian Pelican	<i>Pelecanus crispus</i>	breeding colonies on Aktas
Little Egret	<i>Egretta garzetta</i>	Aktas Lake
Grey Heron	<i>Ardea cinerea</i>	Cildir Lake
White Stork	<i>Ciconia ciconia</i>	several at Ardahan area
Ruddy Shelduck	<i>Tadorna ferruginea</i>	Aktas, Cildir, Kuyucuk Lakes
Mallard	<i>Anas platyrhynchos</i>	Aktas Lake
Ferruginous Duck	<i>Aythya nyroca</i>	Cildir Lake
Black Kite	<i>Milvus migrans</i>	Kuyucuk
Black Vulture	<i>Aegypius monachus</i>	Cam Pass
Short-toed Eagle	<i>Circaetus gallicus</i>	Yalnizcam Pass
Montagu's Harrier	<i>Circus pygargus</i>	Aktas Lake
Long-legged Buzzard	<i>Buteo rufinus</i>	Seen in Ardahan area
Lesser-spotted Eagle	<i>Aquila pomarina</i>	Yalnizcam Pass
Imperial Eagle	<i>Aquila heliaca</i>	Cam Pass
Golden eagle	<i>Aquila chrysaetos</i>	Cam Pass
Lesser Kestrel	<i>Falco naumannii</i>	Kuyucuk
Kestrel	<i>Falco tinnunculus</i>	Scattered
Quail	<i>Coturnix coturnix</i>	Widespread and common (only heard)
Coot	<i>Fulica atra</i>	At Lakes
Black-winged Stilt	<i>Himantopus himantopus</i>	Kuyucuk
Avocet	<i>Recurvirostra avosetta</i>	Kuyucuk
Ringed Plover	<i>Charadrius hiaticula</i>	Aktas Lake
Green Sandpiper	<i>Tringa ochropus</i>	Kuyucuk
Yellow-l'ged Herring Gull	<i>Larus argentatus cachinnans</i>	Along Black Sea Coast
Armenian Gull	<i>Larus argentatus armenicus</i>	Seen at Ardahan
Whiskered Tern	<i>Chlidonias hybridus</i>	Kuyucuk
White-winged Black Tern	<i>Chlidonias leucopterus</i>	Aktas Lake, Kuyucuk
Rock Dove	<i>Columba livia</i>	Scattered
Cuckoo	<i>Cuculus canorus</i>	Ardahan area
Common Swift	<i>Apus apus</i>	Common at Ardahan.
European Bea-eater	<i>Merops apiaster</i>	3 seen at Ardahan
Hoppoe	<i>Upupa epops</i>	Ardahan area
Calandra Lark	<i>Melanocorypha calandra</i>	Kuyucuk
Short-toed Lark	<i>Calandrella brachydactyla</i>	Kuyucuk
Shore Lark	<i>Eremophila alpestris</i>	Seen at Ovit Pass
Sand Martin	<i>Riparia riparia</i>	Scattered
Crag Martin	<i>Ptyonoprogne rupestris</i>	Widespread and common.
Swallow	<i>Hirundo rustica</i>	Scattered.
House Martin	<i>Delichon urbica</i>	Scattered.
Tawny Pipit	<i>Anthus campestris</i>	Ardahan area
Meadow Pipit	<i>Anthus pratensis</i>	Seen at Cam Pass
Water Pipit	<i>Anthus spinoletta</i>	Ovit and Cam Pass.
Black-headed Wagtail	<i>Motacilla feldegg</i>	Aktas Lake area
Grey Wagtail	<i>Motacilla cinerea</i>	Common around Yusufeli.

White Wagtail	<i>Motacilla alba</i>	Widespread and common
Black Redstart	<i>Phoenicurus ochruros</i>	Scattered.
Stonechat	<i>Saxicola torquata</i>	Yalnizcam
Northern Wheatear	<i>Oenanthe oenanthe</i>	Scattered.
Pied Wheatear	<i>Oenanthe pleschanka</i>	Ani
Blackbird	<i>Turdus merula</i>	only heard
Common Whitethroat	<i>Sylvia communis</i>	Mor Yayla
Chiffchaff	<i>Phylloscopus collybita</i>	Anzer
Coal Tit	<i>Parus ater</i>	Common at İkizdere
Eastern Rock Nuthatch	<i>Sitta tephronata</i>	Ani
Red-backed Shrike	<i>Lanius collurio</i>	Scattered.
Jay	<i>Garrulus glandarius</i>	Scattered
Magpie	<i>Pica pica</i>	Scattered.
Jackdaw	<i>Corvus moledula</i>	Common at Ardahan.
Rook	<i>Corvus frugileus</i>	Seen at Ardahan area.
Hooded Crow	<i>Corvus cornix</i>	Scattered.
Raven	<i>Corvus corax</i>	Cam Pass
Starling	<i>Sturnus vulgaris</i>	Many seen around Aktas
Rose-coloured Starling	<i>Sturnus roseus</i>	hundreds in Ardahan area
House Sparrow	<i>Passer domesticus</i>	Widespread.
Snow Finch	<i>Montifringilla nivalis</i>	Mor Yayla
Chaffinch	<i>Fringilla coelebs</i>	Scattered.
Serin	<i>Serinus serinus</i>	Scattered
Linnet	<i>Carduelis cannabina</i>	Cam Pass
Black-headed Bunting	<i>Emberiza melanocephala</i>	Kars area

Systematic List Number 3

Butterflies

Papilionidae

Swallowtail	<i>Papilio machaon</i>	1 seen on the way to Laset
Scarce Swallowtail	<i>Iphiclides podalirius</i>	Several seen around Barhal
Apollo	<i>Parnassius apollo</i>	Scattered.

Pieridae

Large White	<i>Pieris brassicae</i>	Scattered.
Black-veined White	<i>Aporia crataegi?</i>	Seen at Ovit and Olgunlar
Small White	<i>Artogeia rapae</i>	Widespread.
Eastern Bath White		1 seen above Ayder
Eastern Dappled White	<i>Euchloe ausonia</i>	2 seen at Aktas Lake
Clouded Yellow	<i>Colias crocea</i>	Scattered.
Brimstone	<i>Gonepteryx rhamni</i>	Camlik

Lycaenidae

Ilex Hairstreak	<i>Satyrium ilicis</i>	Yaylalar
Scarce Copper	<i>Lycaena virgaureae</i>	Scattered.
Sooty Copper	<i>Lycaena tityrus</i>	Yaylalar
Short-tailed Blue	<i>Everes argiades</i>	Ikizdere
Osiris Blue	<i>Cupido osiris</i>	Yaylalar
Silver-studded Blue	<i>Plebejus argus</i>	Several seen above Barhal
Idas Blue	<i>Plebejus idas</i>	Mor Yayla and Olgunlar
Brown Argus	<i>Aricia agestis</i>	Common
Blue Argus	<i>Ultraaricia anteros</i>	Mor Yayla, Olgunlar
Turquoise Blue	<i>Plebicula dorylas</i>	Olgunlar
Anomalous Blue	<i>Polyommatus aedon</i>	Seen at Mor Yayla and Aktas
Meleager's Blue	<i>Polyommatus daphnis</i>	Olgunlar
Turkish Furry Blue	<i>Polyommatus menalcas</i>	Olgunlar
Common Blue	<i>Polyommatus icarus</i>	Common

Nymphalidae

Southern White Admiral	<i>Limenitis reducta</i>	Scattered
Camberwell Beauty	<i>Nymphalis antiopa</i>	Yaylalar
Red Admiral	<i>Vanessa atalanta</i>	1 seen at Mor Yayla
Painted Lady	<i>Cynthia cardui</i>	Scattered
Small Tortiseshell	<i>Aglais urticae</i>	Olgunlar
Comma	<i>Polygonia c-album</i>	Scattered
Cardinal	<i>Pandoriana pandora</i>	Seen on the way to Barhal
High Brown Fritillary	<i>Argynnis adippe</i>	Several seen above Barhal
Dark Green Fritillary	<i>Argynnis aglaja</i>	Scattered. 3/13
Silver-washed Fritillary	<i>Argynnis paphia</i>	Seen at Olgunlar
Queen of Spain Fritillary	<i>Issoria lathonia</i>	Seen at Olgunlar
Twin-spot Fritillary	<i>Brenthis hecate</i>	Olgunlar
Caucasian Fritillary	<i>Boloria caucasica</i>	Cam Pass
Caucasian spotted Fritillary	<i>Melitaea interrupta</i>	Cam Pass
Marsh Fritillary	<i>Euphydryas aurinia</i>	Scattered. 4/13
Spotted Fritillary	<i>Melitaea didyma?</i>	Widespread. 5/13
Knapweed Fritillary	<i>Melitaea phoebe?</i>	Seen above Barhal
False Heath Fritillary	<i>Melitaea diamina</i>	Olgunlar

Heath Fritillary	<i>Mellicta athalia</i>	Olgunlar, Pisenkaya
Nickerl's Fritillary	<i>Mellicta aurelia</i>	Olgunlar, Cam Pass
Lesser Spotted Fritillary	<i>Melitaea trivia</i>	Seen at Cam Pass
Assman's Fritillary?	<i>Mellicta britomartis</i>	1 seen at Olgunlar

Satyridae

Scotch Argus	<i>Erebia aethiops</i>	Scattered.
Meadow Brown	<i>Maniola jurtina</i>	Scattered.
	<i>Maniola megala</i>	1 seen at Ardahan
Lederer's Heath	<i>Coenonympha symphyta</i>	Cam Pass

Hesperiidae

Silver-spotted Skipper	<i>Hesperia comma</i>	Olgunlar
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