

Yunnan

China's Autumn Flowers

A Greentours Reconnaissance Report

September 2009

by Chris Gardner

Day 1 Hong Kong to Kunming

Day 2 Kunming to Pianma

Our flight to the west Yunnan town of Baoshan left on time and in forty minutes we landed in the verdant hills. Ashu and Nongbu were there to meet us and soon we were tucking into the first of many delicious Chinese meals before heading north towards Lushui. All was very green and gold with the autumn rice harvest as we made our way towards the Burmese border passing through Lushui and climbing into increasingly lush hills topped by clouds eventually passing through areas flanked by tracts of virgin evergreen forests including stands of *Rhododendron sinogrande*. There were the fragrant pink blooms of a shrub and stands of *Anemone hupehensis* lined the way with no doubt many other plants to be found tomorrow, but by now it was getting dark. We spent the night in the border town of Pianma!

Day 3 Gaoligongshan

After a decent breakfast of fried noodles and dumplings we headed back over the verdant Gaoligongshan winding up through the misty forest before stopping by a stream crossing. Exploration of the verges produced louseworts, stands of handsome *Anemone hupehensis*, abundant *Impatiens delavayi* and a smattering of its blue cousin *Impatiens subcalcarata*. Ashu then drew our attention to two magnificent plants of *Swertia bimaculata* each 1.2 metres tall and almost as wide with large star-like white flowers delicately speckled with black spots. Golden-spectacled Warblers, Great Tit and Grey-headed Canary Flycatcher buzzed about us as we photographed these superb plants. Continuing up we stopped by another promising area with lots of a powder blue *Cicerbita* sp together with the deep purple monkshood *Aconitum duclouxi* and its climbing cousin *Aconitum tsaii* which was twined around a bamboo stem. A second unusual *Cicerbita* followed this one with large plumes of small reddish-brown tubular flowers, strung with spider webs all bejewelled in the mist.

Just over the low pass, a mere 3000 metres, we stopped for the deep cerise drumsticks of *Allium wallichii* and these occurred further down too before we reached an open area with tall grass and scrub. *Swertia macrosperma*(?) was common here along with a small *Hypericum* sp and stands of *Satyrion ciliatum* an orchid, although its flowers were over. However, a short way down and we found a few spikes in good condition with deep pink flowers. Stands of the pretty columbine-like flowers of *Halenia elliptica* followed along with a tall spike of an *Herminium* sp. There were brief stops for a shrubby campanula and the graceful racemes of a pendant *Indigofera* and then a good lunch in Lushui.

We now back-tracked yesterday's drive for a bit and then turned off onto the old cobbled road to Yunlong seeing some classic rural landscapes with immaculate terraces and neat farms nestled into the green mountains. A scented white-flowered climber hung down in places and Ashu spotted a bright yellow *Meremia* sp before we made it to Yunlong and bagged the last two rooms in town, in a decidedly better hotel than last night.

Day 4 To Shaxi

We climbed into the pine clad hills east of Yunlong passing many people on their way to market with animals and loads of crops to sell there. As we rose through the woods we started to see more flowers with a pretty purple centred blue *Codonopsis* sp and then its larger relative *Codonopsis convolvulacea* with wide open pale blue flowers. Growing close by was a colony of a white *Goodyera* ladies tresses orchid with attractive white veined leaves, and a lovely darkest purple form of *Geranium delavayi*. Rounding another bend we came across a number of handsome *Swertia cincta* with attractive green and purple flowers the nectaries proving irresistible to bees.

[The following extract is included for completion but the location will not feature in the tour

Bouncing along the cobbled road we paused for a fine pink lousewort and a spike of *Spiranthes spiralis* and then began to descend stopping again at a wet flush where purplish-red *Clematis ranunculoides* was growing. Lunch was taken in a small town before we continued passing through patches of forest where we found a beautiful deep purple balsam and more country road followed before we encountered a fine colony of tall pink *Satyrion ciliatum*. The final stretch to smooth tarmac produced little flora but as we continued there were some splendid rural landscapes with golden rice terraces, with harvested crops neatly stacked in mini-stooks.]

Our guest house at Shaxi was very pleasant, tastefully decorated in rustic Chinese style with bunches of bright red chillies hanging up and cobbled courtyards.

Day 5 Lanping Road and Northern Cangshan

After a comfortable night we set off first north towards Lanping climbing slowly into the relatively low pass of just under 3000 metres. Stopping first on the other side we found the white spiked shrubs of a *Sideritis* sp and then a meadow area with several lovely pink and white *Spiranthes chinensis* growing with many other long finished orchids. Back up at the pass the grassy slopes were studded with many *Satyrion ciliatum* and purplish *Delphinium delavayi*

whilst on the rocks tumbled a yellow *Saxifraga* and the long lanceolate-leaved rosettes of another *Saxifraga* sp with white flowers.

[The following extract is included for completeness but the location will not feature in the tour.

We descended and took lunch in Eryuan before climbing into the northern reaches of the Cangshan, driving up through extensive pine forest. Roadworks held us up for an hour but unfortunately the flowers didn't as there was nothing new to note and instead we enjoyed the pleasant autumnal countryside on the drive back. Not the most productive of afternoons!]

Day 6 To Lijiang and Wenghai

Things got really good florally today. We left our very pleasant guest house at Shaxi and drove towards Lijiang taking a back road up and over a 3000 metres pass. As we climbed up we found the reddish purple *Clematis ranunculoides* and a superb colony of *Satyrium ciliatum*, the latter mixed with at least three species of edelweiss and two musk orchids. The pink spikes of *Satyrium* were scattered everywhere it seemed even in areas of rough meadow and as we descended through open pinewoods there were the large deep blue flowers of *Delphinium grandiflorum*.

After lunch near Lijiang we went into the hills towards the village of Wenghai. Pine cone collectors were busy along the lower stretches of the road, which gradually revealed a steady stream of good new plants with first a tall spike of *Cimicifuga foetida* and a very handsome catmint before we came across a colony of purplish *Delphinium ceratophorum* growing among some limestone rubble. Exploration of wet meadows produced a few *Gentiana sino-ornata* and *Gentiana yunnanense*, the latter becoming increasingly common as we progressed. There were one or two good inflorescences of *Salvia digitaloides* as we reached flatter ground at the top of the rise, then a fine clump of *Cyananthus longiflorus* before we dropped down to the village. Two species of yellow balsam were abundant here and damp cliff held a wonderful population of *Corallodiscus lanuginosus* with many plants in full flower, the delicate tubular purple and white blooms on wiry quivering stems. As well as these lovely plants there was a fine tumbling yellow saxifrage and the pretty *Arenaria barbata* with delicately fringed palest pink flowers. Our return journey also yielded more plants with purplish *Gentiana cephalantha* hanging from the roadside banks.

A tasty barbecue for dinner included lots of delicious squid and mushrooms.

Day 7 Yulong Shan and Tiger Leaping Gorge

Entering the extensive Yulong Shan we passed through areas of scrub and pine stopping to find plenty of *Cyananthus longiflorus*, *Delphinium grandiflorum*, a delicate *Allium* sp and the very handsome white scabious *Pteroccephalus hookeri* before we dropped into a little valley for a longer foray. Here there were plenty of dark blue *Gentiana primuliflora* opening in the sunshine along with white *Gentiana yunnanense*, purple and yellow *Pedicularis alopecuroides* (?), pale yellow *Pedicularis hirtella*, the delicate chasmophyte *Silene longicornuta* was tucked in a rock crevice with pretty lilac-pink flowers. Elsewhere were the softly fringed white flowers of

Swertia pubescens, yellow *Saxifraga eregia* and a twining mass of blue *Aconitum tsaii*. Moving up onto the flatter plateau areas we were confronted with many tall spikes of soft yellow *Salvia digitaloides* and deep yellow *Spenceria ramalana* colouring the turf, along with the deep purple of *Dracocephalum forrestii* and blue *Gentiana primuliflora*.

[The next extract is included for completion but the location will not form part of the tour.

We continued to Yak Meadow where we took the cable car up to the high grasslands, however, we found very little here botanically so enjoyed the walk in the mist and came down again.]

From Lijiang we drove the famous Tiger Leaping Gorge where we spent the night in a small hotel that looked straight out at the towering cliffs that rise above the Yangtse River below.

Day 8 To Zhongdian

In the morning the cliffs were wreathed in mists that ebbed and flowed across the dark rocks and bamboo clad slopes. We climbed up out of the gorge with moody views along it and down to the murky coloured Yangtse below driving north into extensive pine forests. We stopped in an area of open pine with rocky and gravelly substrate and soon found two lovely new gentianaceae pink *Swertia delavayi* and similar *patula* which was lilac with purple veins. Scrambling hairy stems of *Cyananthus longiflorus* were also common with deep purple flowers and there were the white globes of *Pterocephalus hookeri*, louseworts and a few tall stems of a very peculiar flower which looked a bit like a silene and a bit like a dianthus but wasn't either and is probably an aster!

From here we climbed further winding our way upwards finding a population of *Gentiana cephalantha* on the way and then passing banks almost smothered in the loose trailing cushions of a yellow saxifrage. Branching off the main road we passed more and more saxifrage and then stopped at a colony of pale blue *Lomatogonium bellum*. Blue skies were now pushing away the clouds and revealing some superb mountain vistas with elegant firs draped in Spanish moss in the foreground. Streamsides a bit further on had lots of soft blue, white centred *Comastoma pulmonarium*, white *Gentiana yunnanense* and little mats of deep blue *Cyananthus macrocalyx*. However, the best were left to last with first a marshy area thronging with the elegant striped blue trumpets of *Gentiana sino-ornata* that was followed not long after by its equally lovely cousin deeper blue *Gentiana veitchiorum* growing in much drier grassland. A great way to finish a productive day.

Day 9 Tianchi Hai

A fine sunny day saw us crossing the Zhongdian Plateau studded with villages preparing for winter with tall timber racks hanging with hay, turnips and barley and the fields around coloured scarlet by the abundant senescing *Euphorbia nematocarpa*. The pinewoods along the rough dirt road towards to Tianchi Hai held a mixed population of *Gentiana veitchiorum* and *haynaldii* and as we progressed we found the pretty blue *Lomatogonium rotatum* and a small flowered *Cyananthus*. Climbing up into the hills the road was lined almost the whole twenty

kilometres by thousands and thousands of powder blue *Comastoma pulmonarium*. Closer to the lake there were the first deep purple *Gentiana delavayi* and taller *atunsiense*, but at the lake itself awaited true beauty. The silvery waters of the lake were backed by fir forests and around the edge were many dwarf rhododendrons among which grew the stunning light blue trumpets of *Gentiana arethusae* each perfect flower lined with darker blue. One clump contained at least fifty open flowers and as many buds! The big blue flowers glowed with the backlit sunlight, but the autumn glory didn't end there as the marshy flushes around the lake were full of deep blue *Gentiana sino-ornata* in a variety of colour forms and markings, together with the pretty palest lilac *Lomatogonium forrestii*.

After a quick snack we started down finding only the an unusual sedum-like *Saxifraga* sp with dense inflorescences and more dazzling displays of *Comastoma* as we bounced down the potholed track and back to town with clear mountain views all around including rugged Shika Shan where we'd be heading tomorrow.

Day 10 Shika Shan and to Deqen

Although all looked cloudy down in the town as we rose up on the seven kilometre cableway to 4300 metres we passed through the clouds and emerged into a sun-drenched mountain landscape with blue skies and amazing views down onto the cloud sea below and distant ranges of mountains. Walking out across the high turf we soon began to see many *Gentiana arethusae* but whereas yesterday's population was quite uniform these were much more varied. Reaching a small knoll we found an equally handsome new species, *Gentiana georgei* with large purple trumpets emerging from tight rosettes of leaves. Various other flowers were scattered in small numbers including yellow *Caltha scaposa* and the odd *Primula deflexa* flowering out of season. On an area of scree there were the large hairy throated purple-blue flowers of *Cyananthus longiflorus* - a very fine alpine. It had been fantastic morning in the mountains and after lunch back in town we headed out towards some much larger ones, winding our way through the dramatic landscapes that led to the impressive Baima Shan. After two and a half hours we climbed up to over 4000 metres encountering many lovely pale blue *Gentiana hexaphylla* and purple *Delphinium beesianum*. We didn't stop as we passed through the superb clear scenery, since we had planned for a full day tomorrow, instead we continued onto Deqen and our hotel in the town beyond. From our rooftop vantage we were we able to watch the clouds disperse and reveal the magnificent Meli Shan, including Kawa Gebo, Yunnan's highest peak at 6740 metres with huge glaciers flowing from its flanks.

Day 11 Baima Shan

We were up early to witness a glorious sunrise on the pointed peak of Kawa Gebo and its sister peaks seeing the transition from soft pink to gold from the rooftop of our hotel. A fine day looked in store as we drove up towards the Baima Shan with huge scree fields flowing down the flanks from impressive, ragged limestone peaks. We wasted little time in setting off for the nearest screes climbing past alpine turf studded with *Lomatogonium cartharticum* and then large flowered *Delphinium beesianum*. Climbing up through the dwarf rhododendron scrub we encountered the first of many, many stunning *Gentiana georgei*, far and away the commonest

species at the higher altitudes, growing in turf and looser ground with large lilac-purple trumpets. We moved onto higher looser scree stopping to catch our breath at this rarified altitude (4550 metres) and a Golden Eagle sailed overhead as we planned our next move. Ashu had scampered on up further and shouted down that had found THE flower. I climbed up to the ridge where other than a superb view of vast areas of raw scree and mountains there was a half-decent inflorescence of *Saussurea medusa*. We encountered many rosettes of this species during the morning, but relatively few flowers, perhaps suggesting a biennial flowering pattern – next year many be much more productive. Unfortunately no other species we found but then time meant we couldn't explore the other areas that stretched out from this ridge and would no doubt yield more plants. We descended finding the small light to mid blue flowers of *Gentiana nanobella* in plenty in another area of scree and a succession of gorgeous clumps of *Gentiana georgei*. Near the bottom Basak had found the little yellow flowered *Cyananthus lutea*.

After lunch we still had enough energy to find some lovely populations of pale blue *Gentiana hexaphylla* growing on the lower turf and an unusual purple brassicaceae before we returned to the pass to search for *Aconitum hookeri*. Strangely only one plant was found. Returning to Deqen the afternoon sun was illuminating the autumnal colours of the many *Sorbus* trees and Kawa Gebo was also still showing at the viewpoint near the town.

Day 12 Return to Zhongdian

An even more dramatic sunrise greeted us this morning with the entire range free of cloud and glowing golden in the early sunlight, the snowfields and fractured glaciers all crystal clear. We left afterwards and had breakfast in town before driving up once again to the Baima Shan, stopping for more mountain views but no botanising at all. Continuing onto Zhongdian through the remarkable convoluted landscape, contouring the plunging valleys where some how little farms clung to the sides and eked a living from the dry ground. Near Zhongdian we spent some time in the botanic reserve that has been created there and found many deep blue *Gentiana veitchiorum* and pale blue *haynaldii* as well as some fine tall *Delphinium yuanum* with deep blue flowers and then as we left a third mystery gentian that eluded all our attempts to identify it! The back road into Zhongdian passes some grassland with lots more *Gentiana veitchiorum* and damp areas still with plenty of bright yellow *Pedicularis longiflora* ssp *tubiformis* and *Gentianopsis grandis*. This rounded off our plant-hunting and we soon reached the hotel to prepare for tomorrows departure.

Day 13 To Hong Kong

Our flight left on time at 9.55 and we arrived in Hong Kong for a night with lots of delicious calamari before our tour to Borneo began.

NB

The tour will also include a visit to the Hongshan, the range to the north of Zhongdian, but there was insufficient time to visit this location, although the June tour always finds many good plants there, so no doubt it will prove a worthwhile location with hopefully *Gentiana caelestis* and possibly other *Saussurea* species.

Systematic List Number 1 Flora

The following represents the main flowers seen during the autumn visit to western China, however, many non-flowering and fruiting species were seen and are included. The flora of Yunnan amounts to 15000 species so for obvious reasons the full flora is a monumental task and to this end many woody genera remain unrepresented at this moment in time. Also a number of genera are particularly difficult e.g. anemone and therefore they could not be identified in the field, for others such as legumes, saxifrages and asteraceae we currently have no floras available so these also remain unknown for now.

Scientific name	Notes
Pinaceae	
<i>Pinus yunnanense</i>	The widespread pine
<i>Abies delavayi</i>	The widespread fir
Ranunculaceae	
<i>Anemone demissa</i>	White flowers, alpine turf of Shika Shan
<i>Anemone hupehensis</i>	The familiar garden species common on the Gaoligongshan. Tall, large leaved white flowers with deep pink reverse.
<i>Aconitum duclouxii</i>	Handsome very deep purple flowers, simple pedicel ovate bracts. Gaoligongshan
<i>Aconitum tsaii</i>	Unusual climbing species with mid-blue flowers and reddish stems that twine. Gaoligongshan, Yulong
<i>Aconitum hookeri</i>	Baima Shan
<i>Caltha scaposa</i>	A few on Shika Shan
<i>Delphinium beesianum</i>	Large purple flowers, Baima Shan, Zhongdian
<i>Delphinium delavayi</i>	Lanping on rocky slopes
<i>Delphinium ceratophorum</i>	Fine deep blue-purple species at Wenghai
<i>Delphinium grandiflorum</i> subspecies <i>mosoyense</i>	Lovely deep to mid-blue flowers, dissect leaves West of Lijiang, Yulong
<i>Delphinium yongningense</i>	Possibly this species at Yulong, although flowering time seems out. Spicate with dissect leaves, purple flowers
<i>Delphinium yuanum</i>	Zhongdian botanic reserve, tall dark blue with many flowered branched inflorescence
<i>Clematis ranunculoides</i>	Purplish-red bells, widespread e.g. Wenghai, Yulong
<i>Clematis chrysocoma</i>	An attractive pink flowered species on Yulong Shan, growing as a small scrambling shrub
<i>Cimicifuga foetida</i>	Wenghai
<i>Cimicifuga</i> sp	Large species in flower on Gaoligongshan
Brassicaceae	
	Purple flowered cress on roadside, Baima Shan

Polygalaceae	
<i>Polygala arillata</i>	Attractive red, disc-like fruits with yellow seeds, Gaoligongshan
Crassulaceae	
<i>Sedum</i> sp	Yulong
Saxifragaceae	A confusing family especially as no flora is available at present! Hopefully some IDs will be rectified before the tour begins.
<i>Saxifraga eregia</i>	Yulong, tallish with broad rounded leaves, yellow flowers
<i>Saxifraga</i> sp	Yellow flowers, tumbling clumps on rock face at Wenghai
<i>Saxifraga</i> sp	White flowers, flat rosettes of obovate leaves, Yulong
<i>Saxifraga</i> sp	Yellow flowered species with Erica-like leaves Lanping road
<i>Saxifraga</i> sp	White flowers, large rosettes of linear acute leaves widespread e.g. Gaoligongshan, Lanping, Yunlong
Caryophyllaceae	
<i>Arenaria oreophila</i>	Cushion forming. Balang Shan, Gongga Shan?
<i>Arenaria polytrichoides</i>	Balang Shan, Haizi Shan
<i>Arenaria barbata</i>	Lovely species with pale pink frimbriate flowers, Wenghai
<i>Silene longicornuta</i>	Pretty pink species in rock crevices, Yulong Shan
<i>Silene nigrescens</i>	Scattered in mountains, strongly veined and inflated calyx
Polygonaceae	
<i>Polygonum runcinatum</i>	Common low growing, globular to short-conical flowerheads, pink e.g. Gaoligongshan
Geraniaceae	
<i>Geranium</i> sp	Widespread small pink species
<i>Geranium delavayi</i>	Scattered e.g. Lanping downward pointing pale pink flowers. Also wonderful deepest purple form at Yunlong
Balsaminaceae	No flora available at present
<i>Impatiens delavayi</i>	Abundant in damp places on Gaoligongshan
<i>Impatiens</i> sp	Fabulous deepest purple species, Yunlong
<i>Impatiens subcalcarata</i>	Lovely bluish-pink flowers, Gaoligongshan
<i>Impatiens</i> sp	Tiny flowered yellow species Yunlong
Apiaceae	
<i>Ligusticum</i> sp	
Hypericaceae	
<i>Hypericum forrestii</i>	Very common on roadsides
<i>Hypericum</i> sp	Small shrub in flower on Gaoligongshan

Euphorbiaceae	Various species added red autumnal tints to the woods and meadows
Hydrangeaceae	
Hydrangea heteromalla	A few flowers remained here and there e.g. Gaoligongshan
Rosaceae	
Cotoneaster spp	Various species in fruit
Fragaria orientalis	Very common on banks, in fruit on Gaoligongshan
Filipendula ulmaria	Wet flushes near Lanping
Spenceria ramalana	Very common in meadows at Yulong Shan and scattered elsewhere
Fabaceae	
Indigofera sp	Fantastic long racemed species in flower on Gaoligongshan
Indigofera spp	A number of species from sub shrubs to small trees were seen but not identified
Salicaceae	
Salix brachista	Prostrate species on Shika Shan turf
Salix spp	Other species seen, often planted
Betulaceae	
Betula utilis	Widespread
Fagaceae	
Quercus aquifolioides	Widespread evergreen oak with ovate, obtuse leaves
Quercus spp	Other unidentified species seen including a spiny one akin to coccifera of the Mediterranean
Convolvulaceae	
Meremia hungaiensis	Widespread near Yunlong, a yellow flowered bindweed
Meremia sp	
Aceraceae	
Acer cappadocicum	Yulong Shan
Ericaceae	
Gaultheria forrestii	Attractive deep blue fruited species on Gaoligongshan
Rhododendron sinogrande	Very large deep veined leaves, Gaoligongshan Many more rhododendrons were seen but now is not their time so they are not included in this autumn list
Dipsacaceae	
Ptercephalus hookeri	Handsome scabiose, common at Yulong, globose heads of white flowers and linear leaves

Cannabinaceae	
<i>Cannabis sativa</i>	Occasional roadside weed
Asteraceae	
<i>Anaphalis contorta</i>	Abundant on Gaoligongshan, dense heads of 'everlasting' white flowers and whorls of greyish leaves.
<i>Anaphalis</i> sp	Larger species common at Wenghai
<i>Anaphalis nepalensis</i>	Widespread
<i>Cirsium</i> sp.	An immense thistle with yellow flowers one specimen topping five metres tall. Gaoligongshan
<i>Cicerbita</i> sp	Fine blue flowered species on Gaoligongshan
<i>Cicerbita</i> sp 2	Attractive species with dense cymes on small tubular brownish-red flowers, Gaoligongshan
<i>Ligularia</i> spp	A number of flowering species seen but not identified
<i>Leontopodium</i> spp	At least three species at Wenghai as yet unidentified
<i>Saussurea stella</i>	Peculiar rosettes of long pink central leaves with purple flowers 'thistle' heads in between. Wet areas on Zhongdian Plateau
<i>Saussurea medusa</i>	Some inflorescences and many rosettes on Baima Shan at between 4550 and 4700 metres. A wonderful species with tall woolly domes and rosettes of undulate leaves.
Gentianaceae	
<i>Comastoma pulmonarium</i>	Powder blue flowers with prominent white staminal mass. Common around streams on Zhongdian plateau
<i>Halenia elliptica</i>	Pretty pale blue and white flowers a bit aquilegia-like, with recurved 'horns', abundant roadside weed Yunlong, Gaoligongshan, etc
<i>Swertia cincta</i>	Green and purple downward pointing species, Yunlong, Lanping
<i>Swertia macrocarpa</i>	Common small flowered species Yunlong, Lanping, Gaoligongshan
<i>Swertia macrosperma</i>	Splendid large species with creamy-white flowers with fine purple spots, Gaoligongshan
<i>Swertia patula</i>	Beautiful pale purple form with purple veins, common in gravelly areas of pinewoods north of Tiger Leaping Gorge
<i>Swertia delavayi</i>	Another fine species, pink flowers with darker veins, growing with <i>S. patula</i>
<i>Swertia punicea</i>	West of Lijiang
<i>Swertia pubescens</i>	White flowers with fringed edges, Yulong, pubescent
<i>Lomatogonium carinthiacum</i>	Fine lilac-purple species common in turf on Baima Shan
<i>Lomatogonium bellum</i>	Lovely species with pale blue dark blue-veined flowers, en route to Zhongdian
<i>Lomatogonium rotatum</i>	Small blue flowers en route to Tianchi Hai
<i>Lomatogonium forrestii</i>	Palest lilac, in marshes at Tianchi Hai
<i>Gentiana sino-ornata</i>	Common marsh gentian e.g. Wenghai, Zhongdian, Tianchi Large striped mid-blue flowers, with variable patterns, marshy habitats.
<i>Gentiana yunnanense</i>	Common white gentian e.g. Wenghai, Yulong dense flowered upright habit, black speckles
<i>Gentiana cephalanthera</i>	Purplish flowers set among tight rosette of large, long leaves on trailing stems, Wenghai

<i>Gentiana primuliflora</i>	The common gentian in Yulong grasslands, blue flowers, pairs of cordate leaves
<i>Gentiana arethusae</i>	Simply stunning light blue species with darker stripes, Tianchi Hai, Shika Shan
<i>Gentiana georgei</i>	Lovely purple trumpets, tight rosettes, Shika Shan, very common on Baima Shan
<i>Gentiana haynaldii</i>	Light blue, gray lines in throat, small flowered species common among pines en route to Tianchi Hai and elsewhere.
<i>Gentiana hexaphylla</i>	Beautiful light blue with dark striped trumpets, very common on Baima Shan
<i>Gentiana</i> sp	Lilac flowers, short plant with very characteristic spatulate, keeled calyx lobes, Zhongdian botanic reserve, eluded all attempts to ID it!
<i>Gentiana nanobella</i>	Light to mid-blue flowers, alpine turf and stable scree Baima Shan
<i>Gentiana delavayi</i>	Dark blue-violet flowers on small upright plants, Tianchi Hai, also Baima Shan
<i>Gentiana atuntsiense</i>	Tall bright blue species near Tianchi Hai
<i>Gentiana veitchiorum</i>	Zhongdian Plateau, fine species with deep blue trumpets, striped darker blue and white, drier grasslands
<i>Gentianopsis grandis</i>	Scattered, good colony en route to Tianchi Hai, large purple flowers on wiry stems
<i>Gentianopsis barbata</i>	Smaller than previous with same uneven calyx lobes but flowers 2.5-5cm
Myricaceae	
<i>Myrica rosea</i>	Rose-red racemes, near Lanping
Primulaceae	
<i>Primula vialii</i>	Colony in seed, rare.
<i>Primula secundiflora</i>	Odd flowers en route to Tianchi Hai
<i>Primula deflexa</i>	Odd flowers on Shika Shan, purple tubular flowers
<i>Primula poissonii</i>	Scattered colonies in wet flushes with quite a few flowers, deep magenta with orange eye e.g. Yunlong, Lanping
Boraginaceae	
<i>Sinoglossum ambile</i>	Scattered along roadsides
Scrophulariaceae	Perhaps a fifteen or more species were seen, but many unidentifiable
<i>Pedicularis deltoidea</i>	Small pink flowered species, triangular, dentate leaves Wenghai, Yulong
<i>Pedicularis siphonantha</i>	Quite widespread around Zhongdian e.g. Tianchi Hai, deep pink with white centre and long twisted beak
<i>Pedicularis alopecuroides</i>	Possibly this species at Yulong, yellow with purple galea
<i>Pedicularis hirtella</i>	Pale yellow to pinkish with no beak and obvious large rosette of leaves, Yulong Shan, Wenghai
<i>Pedicularis</i> spp	

Gesneriaceae	
Corallodiscus lanuginosus.	Blue/purple and white flowers and wrinkled leaves, superb colony at Wenghai.
Verbenaceae	
Clerodendron peii.	Common shrub in fruit en route to Wenghai
Lamiaceae	
Salvia digitaloides	Fine pale yellow species, very common on plateau at Yulong
Salvia sp	Purple species west of Lijiang
Dracocephalum forrestii	Purple flowers, narrow leaves, Yulong
Nepeta stewartiana	Possibly this at Yulong
Nepeta sp	Lovely tall species with airy sprays of pale blue flowers at Wenghai
Sideritis sp	Erect white spikes on small to medium shrubs en route to Lanping
Campanulaceae	
Campanula sp	Fine shrubby species below Gaoligongshan
Campanula spp	Various species seen but not identified
Adenophora khasiana	Delicate pale blue bells on tall stems e.g. Lanping, Yunlong, Wenghai
Cyananthus macrocalyx	Pretty small purple flowered species, Zhongdian
Cyananthus sp	Superb species with very large flowers and long tubes, scree on Shika Shan
Cyananthus lutea	Baima Shan, soft yellow flowers
Cyananthus longiflorus	Lovely mauve flowers, hairy throats on trailing stems, Wenghai, between TLG and Haba
Codonopsis convolvulacea	Very common and widespread twining perennial, pale blue flowers
Codonopsis sp	Another widespread species with smaller deep lilac-blue flowers with purple base to petals
Zingiberaceae	
Roscoea sp	A couple still in flower at Wenghai
Liliaceae	
Allium wallichii	Lovely deep cerise hemispherical flowerheads, angled stems. Gaoligongshan c2800m+
Allium	
Polygonatum curvistylum	Woodlands. Sichuan
Polygonatum verticillatum	Probably this species in fruit on Gaoligongshan
Araceae	
Arisaema consanguineum	In fruit on Gaoligongshan
Arisaema elephas	In fruit on Gaoligongshan

Arisaema franchettii

A good population en route to Wenghai, striped with downward pointing spathe tip and broad trilobed leaves

Orchidaceae

Satyrium ciliatum

Pretty deep pink orchid, most were over but a few good spikes remained on Gaoligongshan

Xxx

Thriving colony near Lanping but sadly over by at least a couple of weeks

Spiranthes spiralis

Familiar white orchid, Yunlong

Spiranthes sinensis

Stunning little pink and white orchid near Lanping

Herminium spp

Other small species west of Lijiang

Herminium sp

Very elegant tall species on Gaoligongshan c2800m.