

# **Yunnan and Sichuan Expedition, 2016**



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Christopher Parsons, Stella Rankin and David Rankin

(view looking back towards Tian Bao Shan)

## **Table of Contents**

Acknowledgements	3
Introduction	4
Aims and objectives	5
Report introduction	6
<b>Primulas</b>	7
Bullatae section	7
Candelabra section	8
Crystallophomis section	9
<b>Meconopsis</b>	11
<b>Corydalis</b>	14
<b>Overview</b>	16
<b>Appendices</b>	17
Itinerary	17
Initial Primula sightings	18
Initial Meconopsis sightings	19

## **Acknowledgements**

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A huge thanks as well to David and Stella Rankin, who as well as being great friends, made this whole trip possible. It was only through their many trips to this beautiful country that they were able to fully share some of the experiences they have had there with us all. I hope I am as fit and as adventurous when I reach their age!

Thank you as well to an amazing group of people who participated in the trip, namely Ed Shaw, Peter Edge, Ngaire Burston and Chris Parsons. They helped to share this experience and everyone one of them added an extra layer of fun, education and enjoyment to the whole experience. Considering that I had only met 3 of them once before it was amazing that there wasn't one cross word the whole trip and we are already beginning to plan the next expeditions!

The trip wouldn't have been possible without the amazing drivers, Yang Kun and Zhou Ming. I am also very grateful for the student who accompanied us and was invaluable in his food ordering skills and day to day translations, Chen Kaiyun.

Whilst there Xiao Wu spent a lot of time showing us around the Lijiang Field station and showing us all some of the amazing plants that he grows there.

I am also thankful for the Meconopsis book, The Genus Meconopsis by Christopher Grey Wilson (2014) that was very important and key in identifying some of the Meconopsis seen on this trip.

Thank you as well to Pam Eveleigh who helped greatly with the Primula identifications from our pictures.

## **Introduction**

My name is Graham Gunn, I am thirty two years old and I have been employed in horticulture for seventeen years. I am currently manager of Kevock Garden Plants in Lasswade, Edinburgh and I have worked for them for over 3 years.

My interest in horticulture began at a young age as I grew up on a farm and my parents also had a large fruit and vegetable patch. It was at the age of fifteen that my Dad saw a job advertised in a farm shop down the road for some weekend help. I always remember my parents arguing over this as my Mum wanted me to have a 'normal' job with good money and not work on farms as all of our family had always done.

I will always remember my first day at the farm shop as the first day in which horticulture found me. This was an incredible place to work with a very family based work force, and a great introduction to horticulture. More than I could have asked for at such a young age. Whilst there, I learnt a huge amount of information in growing fruit and vegetables, bedding plants and trees and shrubs. They did all of the propagation themselves from seed sowing, cuttings and pricking out and this taught me the importance of each plant's individual requirements and this has stuck with me throughout my career.

I continued to learn different aspects of horticulture within my work and I also went on to obtain a second class upper division degree in Agricultural Crop Production from the Royal Agricultural College in Cirencester. This helped with my scientific knowledge of the subject and enabled me to continue to add to my knowledge of horticulture.

Horticulture eventually led me to Kevock Garden Plants where my horticulture career took a new turn and a new line of plants to begin to get interested in. Kevock Garden Plants specialises in alpine, bog and woodland plants and when I started there a great number of these plants were completely new to me. Over the years David and Stella Rankin have spent a huge amount of time teaching me and the other members of staff the plants that they sell and show. They also told us of many mystical, far off lands where some of these plants grow and I quickly got the bug of wanting to travel and see them in the wild.

At a young SRGC meeting Chris Parsons mentioned that he had got a travel bursary from winning Young Horticulturist of the year and he didn't know what to do with it. This led to David and Stella thinking of a trip to China where they could show us some of the plants they know so well and pass some of their knowledge on to a new generation of people. Naturally, we were all thrilled by the idea and we couldn't wait for the adventure to begin.

## **Aims and objectives**

The main aim for the trip was for David and Stella to share their knowledge and experience of people, places and plants gained on eleven previous expeditions with a new group of young horticulturalists. This was over the course of a 3 week expedition in June 2016 to Yunnan and Sichuan where they were to show us some of the most important places they know. This would involve us seeing many rare and unusual plants in their natural environment and also introducing us to expeditions in China and developing Chinese connections.

## **Objectives**

I had several objectives for this trip to China and they were all intended, in some way, to increase my knowledge within the field of horticulture and help with future expeditions.

The first of these was to further my knowledge of plants by exploring different habitats and studying a wide range of plants, including lots of new species. It was also important to identify new plants and possibly find some plants that haven't been seen in the wild for a long time. This is very important as some florally rich, but vulnerable areas are beginning to be heavily developed with this knowledge slowly being lost.

I have never been on an expedition before so it was good to work as part of a team and to share knowledge between ourselves, considering that we have a wide range of horticultural backgrounds and interests between us. This also involved learning the basics of an expedition from taking photos, notes and records to writing a report at the end.

There were also several benefits to myself which included gaining tremendous pleasure from seeing plants growing in the wild and a new confidence and authority in talking with customers and the public at shows about them. There is also a new awareness of how to grow very difficult plants after seeing how they grow in their natural environments.

There is a tremendous amount of knowledge to be learnt on an expedition like this and it is important that this is also shared. One of the ways in which this can be shared is through the nursery. At the nursery we have contact with many designers and many large public and private gardens. We do planting designs for many gardens each year and there are numerous opportunities to share knowledge and ideas and implement things we have discovered.

Finally, it was important to create new links with people in China for future visits and expeditions.

## Introduction to my report

Throughout my brief, but incredibly productive time in China, I was overwhelmed by the quality and the range of plants that we saw. Rather than give a breakdown of every plant and every action that we carried out in these 3 weeks I have decided to focus this report on 3 genera of plants that meant the most to me on the trip.

The plants that I have chosen are Meconopsis, Primula and Corydalis. I have chosen these as our nursery specialises in Meconopsis and Primulas so I have a basic knowledge of these already and was very keen to expand on this. This year at RHS Chelsea Flower Show we exhibited *Corydalis pseudobarbispala* and were absolutely overwhelmed by the comments we had about this plant. Seeing this plant in the wild was a very special moment in my horticultural career and also the other species of *Corydalis* that we saw were incredible in their flower colours and leaf shapes.

The trip was planned to see an overall view of different plants in the areas but I think everybody on the trip was amazed by how many different species of plants we saw, and especially Primulas, Meconopsis and Corydalis.

## Primulas

Overall we saw nearly sixty different varieties of Primula on this trip. David had mentioned that on a previous Primula-orientated expedition they had seen only fifty. All of them were remarkable in their own way and it was also very interesting to see how each of them occupied a very small area on a mountainside. In a few cases there were only a handful of plants and although a couple of them recurred throughout the trip, many were only seen once in a small, specific environment.

For this report I have chosen to talk about 3 of the Primula sections that we saw that were of most interest to me and have had, and continue to have, the biggest impact on my horticultural career.

### Bullatae Section

I feel a very close connection to this section of Primulas as these were recently rediscovered and renamed by David and Stella, along with Jens Nielsen and Pam Eveleigh, following a previous expedition in 2014. We have also exhibited several members of this section at shows and have had great comments from the public about them and so it was very humbling to see some of these growing in the wild.

On this trip we saw *Primula bullata* var. *bracteata*, *Primula bullata* var. *bullata*, *Primula bullata* var. *forrestii* and *Primula coelata*. It was really eye-opening to see the conditions in which these specific Primulas grow and also the limited numbers of some of them.



The first one we saw was *P. bullata* var. *bracteata*, growing in limestone cliffs under pine trees at Nan He Jian near Lijiang. This was a very unique environment to me as I have never seen pine trees growing on limestone. It was even more remarkable to see how the plants had an adapted stem of nearly 20 cm which let it grow away from the limestone. It was unclear whether this was a result of age or as result of the environment in which it was growing.

David showed us the main characteristics of this variety which are the shortness of the flower stem, barely longer than the leaves, the shape of the leaves, narrowing into the stem, and the complete lack of farina.

The second one we saw was *P. bullata* var. *bullata*, also at Nan He Jian, which we also saw growing under pine trees on limestone in a similar environment to *P. bullata* var. *bracteata*, but not on the steepest rock faces. This had the distinguishing characteristics of much taller flower stems, twice as long as the leaves, and masses of farina on the whole inflorescence.



The next day we travelled on to Ma'er Shan and on the way we saw a limestone hillside. On this hillside, we started to walk up and were immediately met by huge clumps of *Incarvillea lutea*. Having only seen the smaller species before they were very striking. All of a sudden we saw huge plants of *Primula bullata* var. *forrestii* with some having twenty flowering stems on them, with up to sixty flowers on a single stem. A single plant could have a thousand or more flowers. The plants were all very robust, and the whole population had these characteristics. We saw more of var. *forrestii* later on Gan He Ba, near Lijiang, and here they were consistently smaller. We think that the robust population should probably be treated as another variety of the plant. They were also very striking in their habit and looked very upright, vigorous and healthy plants thriving again in limestone, under pine trees. It was also noticeable how they really like growing in close proximity to the pine trees, often growing right up to the trunk and not venturing too far from their canopy.

It was really sobering to see the limestone quarry on the side of the hillside expanding and knowing that in a few years it will be very likely that this hillside would be gone, along with this *Primula* and all the other botanical gems in that small, isolated place.



The last *Primula* in this section that we saw was *Primula coelata* and this was most probably the hardest to locate! It was lucky that David and Stella knew roughly where this was from previous expeditions and from word of mouth. As we approached Lugu we went through the second tunnel and then asked the drivers to stop while we went off in search of the *Primula*. We walked back, over the tunnel and along the old road, and saw *Primula bulleyana*, two as yet unidentified *Primulas*, and eventually *P. coelata*. This was after much scrambling up the hillside and trying to spot its leaves in the tiny crevices that it inhabited on the limestone rock face. It was only when we were back on the path and looked carefully up at the rock face that we could see this *Primula* occupying a few protected places. The largest was over 50 cm in width.

The only species in this section that we didn't find on this expedition were *Primula henrici* and *P. rockii*. This last one that is definitely on the next expedition list to find as very few people have ever found this species!

## Candelabra Section

This section includes some of the most common species in cultivation in the UK and is the section in which we sell most of our sales plants. They also have a huge influence in our show displays. We saw a large numbers of species within this section and I have just described a few below.



The first one we saw in this section was *Primula poissonii* at Ma'er Shan but we went on to see this one several more times throughout our trip, always in wet places. We also saw *Primula wilsonii* later on by the road near Shangri La and David mentioned that there are a lot of similarities between *poissonii* and *wilsonii*. It would be interesting to look at these two closer in another trip and see whether they are in fact the same species or even subspecies.

Later on, near the village of Twowu we found plants that don't fit the descriptions of either *P. wilsonii* or *P. poissonii*, so they may be something new.



Whilst at the Lijiang Field station we met Xiao Wu, who was an incredible person with an amazing knowledge of the local flora and a great contact to meet for future visits.

He also showed us meadows of *Primula beesiana* growing with *P. vialii* which was yet to flower. This sight was really one of the highlights of the trip and everyone was amazed at how impressive they were en masse in this environment.



*Primula cockburniana* is another member of this section that I am familiar with as it is always very popular in our show displays due to its colour. It is also a great plant to use for the shows as it slightly smaller than some of the other members of this section and adds a touch of delicacy to our display.

We saw this on a few occasions whilst we were in China but the most impressive was when we stopped by the road side returning back to the hotel after Balang Shan.

It was growing in a meadow by the side of the road in a fenced off area with a stream running through it so the ground was quite damp.

There were two other Primulas growing alongside it, *P. munroi* and *P. poissonii* along with a whole range of other plants. These included Veratrum, Anemones and Pedicularis to name just a few.





We also saw some beautiful swaths, but no meadows this time of *Primula bulleyana* as well. Stella and David had mentioned that they had seen this before on previous trips in profusion and that the numbers we saw this time were very limited.

This made the importance of this trip even more striking and made the sighting of these plants very significant.



The sighting of this *Primula aurantiaca* highlighted the importance of completing this trip in a group. The day began in Lugu and the plan was to drive to Mianning, a drive of around 400km on small mountain roads with very tight bends that the Chinese didn't seem to slow down for! About half way through the journey, as we were all slumbering in and out of sleep, someone suddenly shouted "TING!" This was the Chinese word we learnt very early on and it meant stop.

David had spotted the beautiful orange flowers of *Primula aurantiaca* growing in the damp where a small stream came down to the side of the road. They were growing with *Aquilegia rockii*, *Triosteum himalayanicum* and a member of the Ranunculaceae as yet unidentified.

### **Crystallophomis Section**

For my third choice I chose this section of Primulas as we saw a lot of Primulas in this section and they are also a very important section at our nursery. There are a lot of plants within this section that are in very high demand and we have a waiting list for and also generate a lot of interest at our shows, due to their beautiful colours and flower structures.

We saw a large number of these on our trip and some of them remain unidentified and to add to the confusion they may hybridise easily creating confusion in the naming of them. Therefore, I have decided to talk about the 3 that I enjoyed the most on the trip and I felt were the most unique.

### **Primula melanantha**



Seeing this Primula summed up the benefit of going on this trip with Stella and David, because without their prior knowledge we would have never known it was there, or where to look for it.

The colour of the flower made it very hard to spot so it was good to know what we were looking for!

*P. melanantha* was seen just below the summit at Zheduo pass and it was a very misty, damp day. Again, we only saw a very small handful of plants and David and Stella only knew of this location and one other where populations of this Primula existed.

This was quite a heavily grazed area and it looked like the margins of this isolated area were gradually getting broken down, so it may be another plant that is in a very perilous location.

### *Primula szechuanica*



*Primula szechuanica* was seen at one of our most diverse locations for Primula sightings at Hong Shan. At one stop we saw 6 different species of Primula all within a few 100 metres of each other.

This is also a very interesting Primula as it is sometimes sold in the UK under this name but very often turns out to be *Primula halleri* or another related plant.

I had never seen this plant before in cultivation or in pictures so it was a very humbling experience just to spot it growing by a water cleaning unit by a river. The area had recently been cleared and gravelled and this was just growing amongst the gravel.

The flowers are very unique on this plant and it stood out immediately as a member of the Crystallophomis section. The yellow of the flowers was also very striking along with their structure.

Again there were only a very small handful of plants at this location, possibly as low as just 5 plants.

### *Primula boreiocalliantha*



We have tried several times to grow *P. boreiocalliantha* at the nursery but never to any avail. David has tried to describe to me how this plant grows and the environment in which it grows but it's not until you actually see it, that you can begin to understand the unique environment in which it grows.

It grows in very mossy areas under trees and tends to be very fussy about where it seeds itself and grows, limiting itself to very small areas.

We also saw this at Hong Shan but in very limited numbers. David and Stella had commented before how they had looked through trees and seen masses of the plants in flower but they were now down to small groups of maybe twenty plants.

It was very striking in its appearance with its downward facing flowers and also it was one of the taller Primulas that we saw. It was thriving in the very damp, mossy, shady parts of the forest.

## Meconopsis

Again on this trip, it was overwhelming how many species we saw and the environments in which they grew. No matter how much I try and convey it, nothing will really get across the complete awe of seeing a *Meconopsis punicea* meadow for the first time. In total we saw nineteen different species and varieties of Meconopsis which still amazes me weeks after the trip.

Although there is an itinerary at the end of this report, rather than just go into a little detail on every Meconopsis we saw, I have decided to talk about the 5 that had the biggest impact on me.

### *Meconopsis punicea*



We saw *Meconopsis punicea* at several spots along the trip but the most impressive was when we saw it at Balang Shan. We saw a few scattered along the roadside to begin with and we were immediately struck by its beautiful handkerchief like flowers blowing in the wind. We then drove a little further and saw a whole group of them. It was a drizzly day and the drops of water looked beautiful on the flowers in the mist.

The plants we saw at Balang Shan were also very vigorous and we questioned whether these may actually be short lived perennials as they appeared to have side shoots at the base of the flower that weren't part of the flowering stems. This seemed very different to the ones that we have in cultivation we don't appear to have any side shoots forming from the flowering stem.



We were also incredibly lucky to see the white form of *M. punicea*, *Meconopsis punicea f. albiflora* at the same time. There was just one flower beginning to open and it was great timing to have seen this as just a few days later the flower would have been over. This felt like a very privileged experience and one that I don't think many people would have ever seen before. I don't suppose many people have seen *M. punicea* in the wild let alone a white form of this amazing plant.

It will definitely add a new layer of detail to the story when I explain this plant to people at shows and talks!

**Meconopsis balangensis var. balangensis**



The setting for this Meconopsis added an extra dimension to seeing it in the wild. It was another drizzly day but that seemed to fit its whole persona very well. The spines and the blue against the sky and the rocks couldn't have been more setting.

The fact that we saw this plant after being incredibly hungry and then sitting next to it and eating some amazing warm, spiced potatoes may have added to its feel as well!

However, what really set this Meconopsis apart was its beautiful double ring of yellow inside the flower. This was very striking and a characteristic that you don't forget.

It also seemed like it was growing in very little soil, almost just in rocks at some points. This really made me think that we over molly coddle some of our plants and the soil that we grow them in.

Maybe in some cases we would be better off just trying to grow them in gravel on the paths around the nursery!

**Meconopsis quintuplinervia**



As we ventured back down from Balang one of the drivers noticed *M. quintuplinervia* growing on a rock high up on a cliff face. None of our group had spotted it and we were very grateful for the driver for noticing it and stopping!

This was a very robust plant, much more robust than ones that I have seen in cultivation and with much larger flowers as well.

It was seen growing with *M. punicea* and we searched for a long time to find the naturally occurring hybrid, *M. cookeii* but to no avail. It would have been lovely to find the two parents and its hybrid but maybe that will be an objective for another expedition. There were about twenty plants at this location and not all of them were flowering but we didn't see this species anywhere else on the trip. It just shows you again how fragile the populations are of some of these plants.

**Meconopsis balangensis var. atrata**



Balang Shan was quite a remarkable place for Meconopsis and another variety that we saw there was *M. balangensis* var. *atrata*. This was seen just a couple of minutes walk from the summit. It was incredibly misty there, visibility in the cars was down to just a few metres. We actually got separated at one point and it was the other vehicle who located this Meconopsis. The flower was a lot more downward facing in its habit compared to *M. balangensis* var. *balangensis* and it is also considerably darker in its flower colour, almost black. We saw very few of these plants as they were the closest to the road but as the visibility was very poor we didn't want to venture to far up the rocky hillside. It also seemed a little taller than *M. balangensis* var. *balangensis* in its habit and seemed to grow at a slightly higher altitude.

**Meconopsis wilsonii var. wilsonii**



This was very different in its habit and environment from the other Meconopsis we saw. *M. wilsonii* var. *wilsonii* was seen at Yele and was by far the tallest of all the species of Meconopsis we saw. The tallest of these plants being nearly 2 metres high. When we arrived at Yele we split into 2 groups of 4 and each group found this Meconopsis in their separate valleys quite some distance apart. They were found at around the same altitude which shows a very interesting observation that it seems to depend on this altitude more than other environmental factors. It was also very promising to see lots of rosettes in the undergrowth of this plant. This is because it is monocarpic and it shows that there are more flowers to come and for other people to enjoy. One plant that we saw was very interesting from a botanical view as it had flowers at various stages of development and also a seed pod which helped to identify this variety. They seemed to thrive when growing relatively close to the damp streams that ran through this environment.

## Corydalis

As I spoke about earlier, my experience with Corydalis is quite limited but I feel that these are a genus of plants that have huge potential within the horticultural world. I also feel that a lot of the public don't know them that well and are often overwhelmed and very impressed when they see them for the first time.

We saw a huge range of these in China and I have been able to name a few of them but many of them will require specialist identification which I am going to be working on in the future.



My favourite on the whole trip was *C. pseudobarbispala* and its unique colour against the rocky mountainside at Balang Shan as we came over the ledge was something I will never forget. This is definitely a plant that I feel more people in the world should know about! The foliage was also incredible against the colour of the flower adding to a longer interest period aside from the flowering time.



We saw *Corydalis benecincta* on the ascent at Tian Bao Shan and it was remarkable how well it was camouflaged. The stems also seem to go on forever through the stones and it was unclear as to whether this plant germinated below and grew through them or whether it continued to get elongated due to continuous rock falls on top of it.



This Corydalis is as yet unidentified but was found at Ma'er Shan. We found 3 different groups of this Corydalis and each colour seemed to be slightly different among them. It would be very interesting to see if this is environmental based or whether it is genetic variation.



As we were ascending Jiajun by car we stopped multiple times by the roadside to see beautiful wild flower meadows and it was after one of these that we saw the beautiful blue heads of this much taller, unidentified Corydalis hanging over the wall. This was a much darker blue than the others that we had previously seen.



At Balang Shan, very close to *C. pseudobarbisepala*, on the other side of the road there was this beautiful sky blue, unidentified Corydalis. We were very lucky to see a few flowers of this as most of them were just at the leaf stage. It also had the most stunning and finely divided foliage that was hard to imagine would be a Corydalis at first.



Just to prove that not all Corydalis have to be blue, this is a yellow, unidentified one that was found at Tian Bao Shan growing in a more woodland type environment than *C. benecincta* that was also found nearby.

This was one of the taller of the species that we saw and reached a height of around 40 cm.

## Overview

I began this expedition both uncertain and apprehensive about how the trip would turn out. I had never been on anything like this before and I had no idea what to expect. I can safely say that I was completely overwhelmed by the experience and the impact that the whole expedition has had on me will stay with me for the rest of my life.

It is hard to fully comprehend the amount of plants we saw there and even looking back for this report I am so thankful of all of the plants we saw and the incredible environments in which we saw them. Even just selecting a few of them for this report was hard enough and I'm sure some people would be amazed at the plants I have left out! You could have written whole essays on individual days of plant hunting from following an electric scooter in search of the true *Meconopsis betonicifolia* to having our plans change at the last minute due to a landslide and having to go off in another direction.

The environmental conditions in which some of the plants grew has also had a big impact on me and has let me see them in a new light and feel a new connection to them. Seeing how they thrive in conditions which at first glance look completely barren and devoid of any nutrients has led me to rethink how these plants are grown at the nursery and the soil and conditions in which we propagate and grow them. It is only after you have experiences like this you can begin to see how unique these plants are.

Seeing the incredible way in which the plants grew in the meadows will also have a huge influence on me and will go a long way to help in designing the layout for the flower shows next year. The natural combinations of flower colours, structures and shapes almost looked designed but had an amazing feel of delicateness about them. If only we could get enough of the incredible varieties of all of these plants to make a meadow from them at our shows!

It was also very interesting to see other cultures and to see how other people live, cook and eat. The food was amazing and the sharing around one large table made for lots of good memories. I have never been anywhere before where you are of such interest to local people in the small villages and it made you feel like they had probably seen very few westerners before.

The other thing that struck me most was how delicate and vulnerable the populations of some of these plants were. As I have previously mentioned it was amazing at how often we saw new plants and how rarely we saw a repeated species at another location. This led to an incredible diversity but made each population that bit more special. So many of these habitats were also in perilous locations, such as next to ever expanding quarries, next to main roads, at the edge of landfills, which made it even more sobering to think that some of these plants might not be there the next time I visit.

I also ended up meeting an incredible group of people which I feel is the start of a lifetime long friendship. As I said at the beginning, I had only met 3 of these people once before but there was enough of a connection to know that these people shared the same desire and love of horticulture as me. We are already planning future trips together and I can't think of a more perfect group of people to go with.

This was the first trip of this kind I had ever been on and I'm sure it won't be my last. I have already been introduced to a great range of initial contacts in China and I feel that it won't be long before my next expedition back there to try and find more than nineteen species of *Meconopsis* and to see all of the other delights that this amazing country has to offer.



## Appendix

### Itinerary

Tuesday and Wednesday June 7 <sup>th</sup> -8 <sup>th</sup>	Edinburgh to Kunming
Thursday June 9 <sup>th</sup>	Kunming Botanical Gardens
	Drive to Dali
Friday June 10 <sup>th</sup>	Cangshan
Saturday June 11 <sup>th</sup>	Nan He Jian gorge
	Drive to Eryuan
Sunday June 12 <sup>th</sup>	Ma'er Shan
	Drive to Lijang
Monday June 13 <sup>th</sup>	Lijang field station
Tuesday June 14 <sup>th</sup>	Gang He Ba
Wednesday June 15 <sup>th</sup>	Tian Bao Shan
	Drive to Shangri La
Thursday June 16 <sup>th</sup>	Hong Shan
Friday June 17 <sup>th</sup>	Drive to Tiger Leaping Gorge and Baishuitai
Saturday June 18 <sup>th</sup>	Drive to Lugu Lake
	Walk on old road to Lugu
Sunday June 19 <sup>th</sup>	Drive to Mianning
Monday June 20 <sup>th</sup>	Yele
Tuesday June 21 <sup>st</sup>	Car stops for plants on the drive to Luding
Wednesday June 22 <sup>nd</sup>	Drive to Kangding
	Zheduo Shan
Thursday June 23 <sup>rd</sup>	Er Lang Shan
	Drive to Baoxing
Friday June 24 <sup>th</sup>	Jiajun Shan
	Drive to Rilong
Saturday and Sunday June 25 <sup>th</sup> -26 <sup>th</sup>	Balang Shan
Monday June 27 <sup>th</sup>	Dengsheng Gu
	Drive to Dujiangyan
Tuesday June 28 <sup>th</sup>	Drive to Chengdu
	Leave for Edinburgh
Wednesday June 29 <sup>th</sup>	Return to Edinburgh

## **Meconopsis Initial Sightings**

Gang He Ba	<i>delavayi</i>
	<i>rudis</i>
Tian Bao Shan	<i>sulphurea</i>
	<i>zhongdianensis</i>
	<i>pseudovenusta</i>
Hong Shan	<i>lijiangensis</i>
Yele	<i>wilsonii</i> var. <i>wilsonii</i>
	<i>sp.</i>
	<i>heterandra</i>
Zheduo Shan	<i>integrifolia</i> subsp. <i>integrifolia</i>
	<i>henrici</i>
Jiajun Shan	<i>punicea</i>
	<i>punicea</i> f. <i>albiflora</i>
	<i>balangensis</i> var. <i>atrata</i>
Balang Shan W side	<i>integrifolia</i> subsp. <i>souliei</i>
	<i>pulchella</i>
	<i>pulchella</i> var. <i>albiflora</i>
Balang Shan E side	<i>quintuplinervia</i>
	<i>balangensis</i> var. <i>balangensis</i>

## Primula Initial Sightings

Cangshan	<i>membranifolia</i> <i>spicata</i> <i>sonchifolia</i> subsp. <i>sonchifolia</i> <i>biserrata</i> <i>amethystina</i> var. <i>amethystina</i> <i>bella</i> <i>calliantha</i> subsp. <i>calliantha</i> <i>pseudodenticulata</i>
Nan He Jain	<i>bullata</i> var. <i>bracteata</i> <i>bullata</i> var. <i>bullata</i> <i>blattariformis</i>
Ma'er Shan	* <i>bullata</i> var. <i>nova</i> (robust form of <i>forrestii</i> ) <i>pulchella</i> <i>pulchella</i> white flowered <i>malvacea</i> <i>poissonii</i>
Field station	<i>yunnanensis</i> <i>beesiana</i> <i>beesiana</i> var. <i>leucantha</i> <i>vialii</i>
Gang He Ba Tian Bao Shan	<i>bullata</i> var. <i>forrestii</i> <i>sikkimensis</i> <i>secundiflora</i>
Hong Shan	<i>polyneura</i> <i>blinii</i> <i>szechuanica</i> <i>munroi</i> var. <i>yargonensis</i> <i>chionantha</i> subsp. <i>sinopurpurea</i> <i>boreiocalliantha</i> <i>nanobella</i> <i>amethystina</i> var. <i>brevifolia</i> * <i>brevicula</i> (or <i>diantha</i> )
Old Lugu pass	<i>coelata</i> * <i>polyneura</i> * <i>malvacea</i> <i>bulleyana</i> * <i>yunnanensis</i>
Yan Yuan to Xichang road Yele	<i>aurantiaca</i> * <i>hoffmaniana</i> (or <i>moupinensis</i> ) <i>epilosa</i> <i>watsonii</i> <i>gemmaifera</i>
Near Twowu Zheduo Shan	*cf. <i>poissonii</i> or <i>wilsonii</i> <i>cockburniana</i> <i>melanantha</i> <i>violacea</i>
Er Lang Shan Jiajun Shan	* <i>davidii</i> section * <i>muscaroides</i> section <i>kialensis</i> <i>palmata</i> * <i>sonchifolia</i> var. <i>sonchifolia</i> * <i>gemmaifera</i> ( <i>conspersa</i> )
Balang Shan W side	<i>fangii</i> <i>melanops</i> <i>dryadifolia</i> <i>amethystina</i> subsp. <i>argutidens</i>
Balang Shan E side	<i>soongii</i> <i>moupinensis</i> <i>hoi</i>

\* = still not confirmed