



# Scandinavian Biluoexeshan and Baima Shan Expedition 2010, Yunnan, China

Bent Ernebjerg in Heaven, eastside of Cika pass. Photo by B. Ernebjerg.



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Ole Jonny Larsen with a harvest of *R. stewartianum* flowers, westside of Selalaka pass. Photo by B. Ernebjerg.



*R. forrestii* and *R. saluenense* ssp. *chameunum*,  
Selalaka pass. Photo by B. Ernebjerg.



*R. mekongense*, westside of Balagong pass. Photo  
by B. Ernebjerg.



*R. sanguineum* ssp. *sanguineum* var. *haemaleum*,  
westside of Balagong pass. Photo by B. Ernebjerg.

After a couple of rhododendron trips to Sichuan and Yunnan, my interest turned to the area around the Mekong-Salween River divide which is very rich in rhododendrons. For lack of a specifically botanical tour, I joined a commercial trek doing the Chora of Kawa Karpo in 2007. It was a magnificent two-week trip with many high passes, the most well-known being the Dokar La and the Sho La. There were many species of rhododendrons, and the scenery was fantastic. The following year, I arranged a rhododendron expedition to the Gaoligongshan Mountains (Irrawaddy-Salween divide), following in the footsteps of Hootman and Cox (Hootman 2007). This expedition was quite successful, although we were not able to go into the Dulong valley because of snow.

During this trip, I started talking with my Chinese tour operator about a possible new expedition in 2010 to Biluoxueshan, the Mekong-Salween River divide south of the Kawa Karpo Mountains. The goal of the new expedition was to explore the Biluoxueshan mountains from both the Mekong and Salween sides, and both the southern and the northern part of the range. To cover a large area in a short time, we decided to trek across the mountain range twice: once in the southern part and once in the north. On the southern passage, we would use a rarely used path from Zhongpai on the Mekong via Paidi Pass to Fugong on the Salween. On the northern passage, we would use the well-known route from Dimaluo to Cizhong over the Balagong Pass to the Sewalongba Valley and via the Selalaka Pass to the Mekong—a route once used by Kingdon Ward and Handel Mazetti, and now popular with trekkers.

Transportation to Zhongpai would be by plane to Baoshan and from there, by car up the Mekong River valley to Zhongpai. We would return by car from Cizhong to Deqen, and on the highway to Zhongdian, stop on Baima Shan to explore the *Rhododendron proteoides* areas there. From Zhongdian, we would finally set course

for home by plane. These were the plans, and through contacts and announcements in the Nordic rhododendrons societies, I managed to find five participants wanting to join me on the trip: two Norwegians, one Swede, and two Danes.

The recent economical crisis and the enormous Chinese investments in infrastructure forced us to change plans several times. First, the road from Baoshan to Zhongpai was closed, then the highway from Deqen to Zhongdian was shut, and finally the road from Cizhong to Weixi was blocked—all because of road works! Fortunately, it was possible to go by car from Lijiang to Zhongpai by a minor road, reaching the Mekong Valley just north of the city, but we would not be able to get back from Cizhong. To solve this problem, our Chinese tour operator came up with a magnificent solution: trek over Baima Shan by the little known Cika Pass to the Zhubalong Valley (Zhubalong River is a tributary to the Yangtze) and from there by car to Lijiang. To my knowledge, there have previously not been any rhododendron explorations of this pass by foreigners.

All expedition participants met in Copenhagen Airport on May 28, 2010, and flew via Bangkok to Kunming and then on to Lijiang. We arrived in the evening on the following day and met with our Chinese crew. The next morning, we set out on the long drive to Zhongpai. There were plenty of road works on the route but we made it through without problems. On arrival, we learned that the road from Mekong to a village up the side of the valley which we wanted to use was closed because of landslides, meaning that the next day we would have to walk all the way from Mekong to Laowo, the last village on the Mekong side.

#### Over the Paidi Pass

*Day one:* We made an early start as we knew it was going to be a long day. It was warm and sunny and the landscape was dry as we walked along the north side of a valley. Fortunately, the temperature got

more pleasant as we gained altitude and after a couple of hours walk, we saw our first rhododendron—*R. decorum*, which we saw all the way at lower altitudes, mostly in flower. Other species we saw the first day were *R. arboreum* ssp. *delavayi* and *R. davidsonianum*. In the late afternoon, we arrived at Laowo (2500 m; 8200 feet), a small village inhabited by members of the ethnic Lisu minority, where we slept in the nice and clean schoolroom. A neighboring house had a beautiful display of rhododendron flowers in water bottles collected by a young local woman for decoration, and a nice red truss caught our attention. After close studies of its leaves and flower, especially the flat-topped truss and the short petioles, we identified it as *R. agapetum*, a former species now sunk into *R. kyawii*. We were told that the plant grew “just outside the village and was easy to find,” but that turned out to be a disputable truth. The only plant we saw the next day was below a steep cliff, out of reach for any of us (but maybe not for the young woman?).

*Day two:* We continued upwards and soon passed the last cultivated field. We were walking in mixed forest with more and more rhododendrons as we ascended. It started raining and this continued all day—we also passed beside a moor area which was quite wet. On the way up, more rhododendrons could be seen. Tender species like *R. sinogrande*, *R. edgeworthii* and *R. anthosphaerum* were the first, but when we reached higher altitudes, we found *R. arizelum*, *R. rubiginosum*, *R. glischrum* and *R. crinigerum*. A real puzzle which resulted in long discussions among our expedition members were *R. dichroanthum* with black(!) indumentum. All plants of this species had this feature, and we wondered if we had found a new variety of this species. A cell phone text message to Remi Nielsen in Norway took us down to earth again. The black indument is simply a kind of black fungi attacking the indument on some species.

In the mid-afternoon, we reached our campsite on the Lower Nianyoibi Lake.

So far, we had had mules to carry our equipment, but from this camp onwards, we started to use porters as the trail was too difficult for mules. On the river banks at the campsite, we found beautifully displayed *R. mekongense* and *R. calostrotum* ssp. *riparioides*, both in flower, almost as if they were planted by a very creative and skilled gardener.

*Day three:* The morning was dry, but it soon started to rain quite heavily. We arrived at our next campsite in a bamboo forest above the Upper Nianyobi Lake at lunch time. As we ascended, species like *R. selense*, *R. helioplepis* and *R. stewartianum* were found. We also saw lots of big leaved species, mostly *R. rothschildii*, but also some *rothschildii* affs. which we could not identify with certainty.

But then, just by luck, we made our expedition's most important discovery! Near the campsite, at a little distance, some red-flowering rhododendrons were observed by expedition member Jan Rune Hesjedal (JRH). They grew on top of a small rocky structure rising up from around a bamboo thicket. These plants were inspected, and they turned out to be unknown to all expedition members. The plants looked like either *Rhododendron roxieanum* ssp. *roxieanum* or ssp. *cucullatum*, and had deep pink flowers, a very thick rust-coloured indumentum and recurved leaf margins. The mature plants observed in the first stand were 1-1.5 m (3-5 feet) high, and some of the plants seemed to be very old. Some had trunks that were surprisingly thick at the base indicating that they must be very old. There was something like 20 plants in this stand. Later, a new smaller stand with four or five plants was found on top of a rock about 50 m (165 feet) from the first stand. The landscape was mostly covered with bamboo and quite difficult to penetrate, so we did not search for more plants in the nearby area. These plants had a much deeper pink flower colour than any *roxieanum* variety known till now, and all plants had the same colour. No ordinary white *roxieanum* were seen. (After the

expedition finished, there has been a long discussion about the status of these plants, and photos and descriptions have been sent to several authorities. Since we did not collect a good living specimen or make a herbarium sheet, the final judgement will have to wait. Until then, we have decided to call this plant *R. roxieanum* deep pink form JRH-SBBE. We all feel sure that this will be a much sought-after item among species collectors in the future.)

After lunch, the local guide took us down a steep hillside to the lake—there was no trail so he had to cut his way through the dense thicket. It was a beautiful lake surrounded by rhododendrons, included our deep pink flowering *R. roxieanum*. We had to keep quiet and could not stay long as the local guide feared we should disturb the evil spirits in the lake.

*Day four:* The morning was dry which was lucky as we had to cross the Paidi pass. From the camp there was a steep climb, after which we started walking along the mountainside and soon reached the first snow. On the way up we found our first *R. taliense*. Near by grew *R. aperantum* aff. with unusual yellow flowers. Higher up *R. cephalanthum* were seen and some unidentified *Lapponica* species which had just come out of the melting snow.

We crossed a minor pass and walked on the other side to the Paidi Pass (4200 m, 13,800 feet). Except for a narrow strip on the pass itself, the entire route was covered by snow. There was also a good deal of snow on the Salween side, but being on the west side there were spots where rhododendrons, mostly *R. taliense*, were free. Unfortunately, we had a long way to go so there was not much time for exploring. After an hour, we had left the snow behind and had a steep and slippery descent to a big moor area. As we came below the snow line, more and more rhododendrons turned up. The most curious plant, which was seen in large numbers, was one that looked like *R. campylocarpum* ssp. *campylocarpum* with yellow flowers and narrowly elliptic leaves. The problem is that this variety

does not grow in Yunnan at all! The only *R. campylocarpum* present there according to the literature is *R. campylocarpum* ssp. *caloxanthum*. Most plants that we found had yellow flowers, but a few were orange and some were yellowish pink. This may indicate some hybridization between, for example, *R. selense* and *R. campylocarpum* ssp. *caloxanthum*. On the other hand, we saw no pure *R. campylocarpum* ssp. *caloxanthum* in the area. Other collectors have faced this problem before. Some think they are all hybrids (i.e., *R. × erythroclayx*), while others like Jens Nielsen name them *R. campylocarpum* Bilouxueshan type because these plants are both quite distinct and quite widely distributed. No matter what the right answer is, they will make fine garden plants with a good yellow flower colour. We were supposed to camp in the moor area, but it was too wet, forcing us to move on to next possible camp site. As we passed the moor, it started raining, leaving a very wet and muddy trail that we followed past Guadidi Lake and descended to our next camp at 3300 m (10,800 feet), arriving late and very tired.

*Day five:* The plan for this day had been to go back and explore the west side of the pass. This would have been possible from the moor area, but it was far too long to walk from our lower camp. Instead, we decided to go back to Guadidi Lake and explore the mountainside east of it. Beside the *campylocarpum* mentioned above, we found lots of fine *R. beesianum*. This species was a companion through most of our three treks in Yunnan. It seemed very widely distributed and was also quite variable. We saw all kinds of flowers from white to deep pink, some plants with dark petioles, some just green, and most unexpected—with and without sticky flower and growth buds, which is traditionally known as a good diagnostic feature. Some of the best forms were really gorgeous. So also was one single flowering plant of *R. rupicola* var. *rupicola*. It was in full flower and was better than any form seen before by expedition members.



*R. beesianum* in snow, westside of Balogong pass. Photo by O.J. Larsen.



Laowo valley. Photo by O.J. Larsen.



*R. proteoides*, Selalaka pass. Photo by J. Brodersen.



*R. roxieanum* deep pink form JRH-SBBE, eastside of Paidi pass. Photo by B. Ernebjerg.



Unidentified yellow flowering rhododendron by Guadidi Lake (see article for discussion). Photo by J. Brodersen.



*R. aganniphum*, westside of Cika pass. Photo by J. Brodersen.



Yellow *R. aperantum* aff., westside of Paidi Pass. Photo by J. Brodersen.

*Day six:* We had a late departure as there were only five hours to walk down to our next camp. Soon, the valley grew narrower and the trees and other vegetation more abundant, leaving us walking in a sort of temperate rainforest which continued to our camp at 2000 m (6560 feet). As we descended to a lower altitude, new *Rhododendron* species turned up along the path. Just after leaving the camp, still above 3000 m (9840 feet), we found a very good *R. glisbrum* with large pink trusses. Near by grew a beautiful pink flowering *Schisandra chinensis* in full flower, but unfortunately without last year's seeds present. *R. megacalyx* was seen at a little distance from the path, but the flowers were easily spotted through a binocular, a device which every plant hunter should carry! As we descended we found more tender species not familiar to us, so we could not identify all of them. One plant in *Parishia* subsection must have been *R. kyawii* due to very long leaves, just small remains of an indumentum and still not in flower in mid June. *R. agapetum*, a form of *R. kyawii* which we found in the beginning of the trip, was in flower, and different flowering time is one factor that distinguishes the two forms. At the camp we found some large specimens of *Magnolia* with huge leaves, most likely *Magnolia rostrata*.

*Day seven:* This was the last day of the first part, with the final descent to the Salween. We walked down a wet slippery trail, followed by an easy walk along a levada (irrigation canal). Along the trail lots of nice but tender plants were seen, some of them looking more like house plants from the local florists at home. Through the mist we spotted a *Paulownia tomentosa* with its enormous leaves, and further down we saw giant bamboos for the first time. After a couple of hours walk, we reached the first village, and the remainder of the route was on very muddy trails through cultivated fields. The trail ended in Fugong, so we simply walked straight to our hotel where a well-deserved shower was waiting.

### **Fugong to Dimaluo**

The next two days were lazy days with just a couple of hours drive up the Salween valley to Gongshan the first day, and an afternoon drive by truck to Dimaluo the day after. The drive to Dimaluo turned out to be quite exciting. The rain had turned the road very muddy and there were road works which could only be passed with great difficulty, and forcing us to drive in the river just below Dimaluo (1850m. 1670 feet). It was so scaring that the driver of our second truck did not dare to do it, leaving some of us to walk from there to Dimaluo village where we were lodged in Aluo's guesthouse.

### **The Balagong and Selalaka Passes**

*Day one:* We started our ascent toward the Balagong Pass in the early morning. The weather was nice and the path was dry, so it was a pleasant hike up the mountain. At 2100 m (6900 feet) *R. virgatum* grew along the path, hopelessly tender to grow in Scandinavia, but when we found the same species at 2800 m (9200 feet), we were more optimistic, and some collected old seeds. We passed the village of Baihanluo, with its nice Tibetan style church. In the afternoon we arrived at some grassland mountain slopes, where our campsite (3700 m, 12,240 feet) was situated at the top of the grassy slope at the edge of a pine forest. The porters were some hours behind us, but that did not matter since we found a lot of rhododendrons there to explore. Among them, *R. sanguineum* subs. *sanguineum* var. *haemaleum* in full flower, admired by most collectors for the almost black flowers. The ordinary red *R. sanguineum* was also present and a few plants with flower colour in between the two. Lepidote species found were *R. rupicola* var. *chryseum* and var. *rupicola*, *R. saluense* ssp. *chameunum* and *R. mekongense* with both yellow and yellow-orange flowers. Larger leaved plants growing in the area were *R. coriaceum* and *R. arizelum*. Some large specimens of a Subsection *Irrorata* species were not identified, but it had had obviously red

flowers earlier in the season. We found the *Irrorata* species hard to distinguish since many look quite similar out of flower.

*Day two:* Today, we were going to cross the Balagong Pass. We started going up through the forest and found *R. haematodes* ssp. *chaetomallum*. Soon there were spots of snow and before the pass on a snow-clad hillside, we found a stand of plants which we thought to be the variable *R. alutaceum*. It was amazing to walk in a thick layer of snow and still have lots of flowering *R. beesianum* beside the path. The explanation to this phenomenon which we would be unlikely to see in a garden in northern Europe, must be that there is no frost in the ground under the snow cover, and that the air temperature is relatively high due to low latitude. It looks like a winter scene, but it is not. The Balagong Pass (4100 m. 13,450 feet) itself was covered in snow, but along the ridge there was a snow-free band on the western side. We found more *alutaceum* here and some *Lapponica* species. The snow on the eastern side of the pass reached down to our planned campsite, so we had to continue down to our next campsite in the Sewalongba Valley (3350m, 10,990 feet).

*Day three:* We spent the day exploring the Sewalongba Valley, a beautiful glacial valley where we had plenty of time to explore since we only moved our next camp a short distance to near the bottom of the valley, camping just below the Selalaka Pass. During the walk we entered one of the most beautiful and species rich places we saw during the whole expedition. A small spot in the middle of the valley was literally crowded with *Rhododendron*, many in full flower. Add the fact that the weather was lovely and that we had lots of time to explore since the day's walk was so short, and you have the *Rhododendron* collector's heaven. Large stands of *R. selense* and *R. stewartianum* started the show, then many even more beautiful *R. neriiflorum*, with scattered deep yellow *R. mekongense* in between. And just when we thought we had had our share for the day, the "grande finale" occurred—a really big thicket of

mixed big leaved species, *R. arizelum*, *rex* ssp. *fictolacteum*, *R. praestans*, and *R. coriaceum*. The young plants at about 1 m (3 feet) were most impressive due to their enormous leaves.

*Day four:* The ascent to the pass was a single steep climb up the mountainside. There was a lot of snow at the beginning, but near the pass most of the snow had slid down or melted. We reached the pass itself (4200 m, 13,800 feet) at lunchtime and had a splendid view over the Mekong valley with the Baima Shan Mountains as backdrop. The eastern side was completely covered by snow that continued a long way down, partly because there had been big avalanches. On the south and north going ridge from the pass there was a small snow-free strip between the snow and an almost vertical drop on the western side. Here grew many *R. proteoides*, and looking down the steep western side, we could see them covering a large area, but unfortunately they were not in flower. Together with the *proteoides*, *R. forrestii* formed the most wonderful red carpet, with stems more or less creeping on or even under the surface. *R. saluenense* ssp. *chameunum* was also found at the ridge.

After a long descent in snow, snow-free spots with rhododendrons appeared. These spots were like flowering islands with *R. forrestii*, *R. sanguineum* and *R. cephalanthum* with both pink and white flowers, and *R. chamaethomsonii*. One interesting observation was that *R. chamaethomsonii* only occurred as scattered single plants, always with or close to large carpets of *R. forrestii*. This may confirm what several authorities suggest that *R. chamaethomsonii*, at least in some forms, are natural hybrids of *R. forrestii*.

Later we entered a snow-free valley except for some left-over snow from avalanches. A difficult mix of subsection *Neriiflora* species grew along the path and river in the bottom of the valley. After intense inspection, we identified a taxon to be *R. sanguineum* ssp. *sanguineum* var. *cloiophorum*, the distinguishing feature being the deflexed corolla. We

were quite proud with our result—until we looked at the nearest similar plant: No calyx at all! And when we inspected other plants we found that there were all kinds of calyxes: small–big, deflexed–non-deflexed, present–absent and so on. Our wise decision at the end of the day was to call most of them just *R. sanguineum*. Full stop! On the other hand, this was a good lesson about variation in nature. If you sit in your study chamber with a dried specimen, it is easy to identify it correctly. Not so when the whole “family” is present there and then. There is not much sense in giving different variety names to similar plants growing close together that obviously had shared genes for centuries. That night we camped near a whole little forest of *R. arizelum*. Not a bad sight to wake up to! Our campsite at (3550 m, 11,650 feet) was just below a huge tongue of snow from an avalanche.

*Day five:* The following day we descended to the Mekong River. Just below camp we found a single *R. roxieanum* among *R. saluenense* and further down a few *R. oreotrephes*. The Mekong valley itself was a lot dryer than the valley we had come from and the sun made it quite a hot day. A couple of hours after lunch, we arrived in Cizhong village, and said goodbye to our porters. We were supposed to drive from Cizhong to Nonglong Village—the starting point for our trek over the Baima Shan. Unfortunately, once again our route along the Mekong River was blocked by road works. We had no choice but to bypass it by walking high up the eastern side of the Mekong gorge, arriving late—after dark and very tired—in Nonglong village (2400 m, 7875 feet), where we were lodged in a private Tibetan house.

### Over the Cika Pass

*Day one:* We started with a steep ascent up the eastern side of the Mekong Gorge. After a couple of hours, we entered a forested area which has been the target of illegal logging, leaving the trail occasionally blocked by felled trees. Later, we passed

through a rather dry east-west valley and walked on an easier path on its north side. Finally, we hit a valley leading north to our camp (3800 m, 12,470 feet) after a long and very tiring day. New species for the expedition were *R. yunnanense* (mostly white flowered with both red and orange blotches) and later on *R. wardii* and fine forms of *R. aganniphum* with thick indumentum and red flowers. There was also a lot of *R. oreotrephes*.

*Day two:* We started another long day as we had to cross the Baima Shan Watershed. We had to cross a pass (4100 m, 13,450 feet) to the next valley, followed by three further passes (all above 4400 m, 14,440 feet), one of them being the “real” Cika pass (4450m, 14,600 feet), i.e., the watershed divide. This was true high alpine area, and since there were only patches of snow, the vegetation was available to explore. Again we found *R. proteoides*, *R. aganniphum* and *R. saluenense* ssp. *chameunum*, but no *R. forrestii*! At the Cika pass itself we found a totally creeping *R. nivale* ssp.? with *R. complexum*-like flowers, and there were several subsection *Pogonanthum* plants with different flower colour, among them some very good pinks. After the last pass, we descended steeply to our campsite at 4200 m (13,780 feet).

*Day three:* This was the last day of trekking and took us into the Zhubalong Valley. After having admired some flowering *R. nivale* ssp. *boreale* by the camp site, we started by walking across the valley bottom and up the mountainside which, to our joy, was covered with hundreds of plants of *R. roxieanum* with all kinds of leaves, from very narrow up to what is called var. *cucullatum* and all possible leaf widths in between. It is obvious that dividing this species into varieties is for garden convenience only. Most had not started to flower yet, but when we reached the ridge, the *roxieanum* were blooming. Another beautiful feature was that many plants had bluish leaves, due to what is called *bloom*, a kind of thin indumentum on the upper leaf surface. In a garden

situation this would be eye catching and surely cause discussion to those not familiar with it. It can in some cases look like a mildew attack! Mixed with the *roxieanum* were also some *R. proteoides*. In this enormous *roxieanum* stand, we also found some obvious hybrids with *R. aganniphum*. These had narrow leaves and spongy indumentum—just a little of each species. Some of the *R. roxieanum* were surprisingly big, up to 3 m (9.8 feet) with thick trunks, and we wondered how old the biggest was.

From the ridge, we started the long descent and we walked into a park-like area with *R. phaeochrysum* var. *levistratum* along the fine path. In some places the landscape looked as if it was designed by skilled gardeners. Later, we followed a narrow, damp valley with lush green vegetation and huge conifers, some up to approximately 30 m (98 feet). After a long walk along the riverside we had to cross the river and the only bridge—which we were forced to cross—consisted of a single log. The mules had to be unloaded and wade through the thundering river, which they did secured by two ropes without any sign of fear. After the crossing, there was a steep ascent to a pass into a neighboring valley. Finally, we had a very long but fairly level walk before descending into Zhubalong Valley (2600 m. 8530 feet). On the way down we passed several low altitude species, among them lots of *R. edgeworthii*, alas past flowering time, but with beautiful wrinkled leaves. A subsection *Parishia* species was also over flowering time. They were trees, up to 5-6 m (16-20 feet) with big elongated leaves. The problem with identifying these species, especially for Scandinavians not familiar with them at all, is that they can both *have* and *not have* indumentum, or they have indumentum at first and then lose it during the season. Reading the manual with a plant in your hand can thus be quite confusing. We ended up calling them *R. kyawii* *Agapetum* type? with a question mark.

Down in the valley, we walked some kilometers to the road and our waiting

bus. It was a long walk and a steep descent, and most of us were quite worn out in the end, but as a surprise a friend of our guide waited at the bus with the most delicious beer we have ever had! Here, we parted with our mule men and woman and drove down the valley to the Yangtze River. Unfortunately, it was late and the sun had set before we could observe the vegetation in the Zhubalong valley. We arrived at our hotel at 11 p.m. and had a well-deserved dinner before the long awaited hot shower. The final days of our expedition on the Baima Shan had been tough but rewarding. The following morning, we drove to Lijiang and had an afternoon in town and a good bye-dinner with our Chinese crew. For some of us, this had been China revisited, for others it was the virgin tour to China—home land for most *Rhododendron* in the world.

#### Afterword

We would call this expedition a reconnaissance expedition, as we did not have as much time to explore as planned, but instead covered a much bigger area. We found some very interesting locations that would surely merit another expedition focused on the most interesting areas and timed to arrive three weeks later when the snow has gone. Our expedition goal was not seed-collecting, but individual members collected some seed samples, which will all be referenced SBBE.

#### Reference

Hootman, S. 2007. The Gorge of the Dulong, Rhododendron Species Foundation and Botanical Garden Yearbook, Vol 2: 15-40 (photos: 55-56).