

Report
on the

NW Yunnan, SE Tibet and SW Sichuan Expedition 2009

22 July to 24 August 2009

Dr Michael Moeller

Royal Botanic Garden Edinburgh

Acknowledgements:

This expedition would not have been possible without the financial support of several institutions, in particular the Davis Expedition Fund of the Edinburgh University, the Percy Sladen Memorial Fund, the Royal Horticultural Society (RHS), and the Royal Botanic Garden Edinburgh (RBGE).

The help and support of many individuals at RBGE, and our collaborating institutes in China is warmly acknowledged, in particular Prof Li DeZhu (Director Kunming Institute of Botany, Chinese Academy of Sciences) and Prof Chen Jin (Director Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences) for their warm welcome in Yunnan, and Dr Gao Lianming at the Kunming Institute of Botany for help and support in organising essential logistics.

Also, Dr Shui and Dr Li are thanked for enabling me to spend a great time in many fabulous places in very diverse and plant rich areas in China.

Overview:

An expedition from 22 July to 24 August 2009 was undertaken to collect materials of Gesneriaceae species in NW Yunnan, SW Sichuan and SE Tibet for molecular, morphological and cytological studies. For the latter two aspects, living material is essential. Herbarium vouchers, dried leaf material for DNA studies, alcohol-preserved material, seeds and living plants has been collected in the mentioned geographic triangle. Collaborators from China, Dr. Jie LI and Dr YuMin SHUI working with Dr Michael MOELLER were instrumental during the organisation and execution of the fieldwork.

Itinerary and areas covered:

The expedition covered three provinces in China, Yunnan, Tibet and Sichuan. In total 31 days were spent in the field, 11 days in Yunnan, 8 days in Tibet, and 12 days in Sichuan. During the fieldwork, a total distance of 6975km was travelled (see Map 1 at end).

Achievements (plants found or observed):

The expedition was very demanding on time when population samples of *Corallodiscus* were collected. Nevertheless, very rare species of other Gesneriaceae genera were also collected, such as the subalpine *Tremacron urceolatum*, *Isometrum primulifolium* and *I. lancifolium*, *Oreocharis henryi* and *Deinocheilos jiangxiensis*, and many samples of plant families of interest to colleagues at RBGE, such as Begoniaceae and Zingiberaceae.

In total 219 field collections were made, and apart from herbarium specimens (2 duplicate sets), 1447 DNA samples, 231 living plants and 88 seed samples and 11 spirit preserved samples were gathered. One set of herbarium specimens was deposited at the Xishuangbanna Tropical Botanical Garden, XTBG, Kunming, Yunnan. According to the specifications of the permits, living material was deposited at XTBG.

Details of any problem encountered:

The route, particularly through Tibet, was very picturesque, though the roads there were rather serpentine in design, and this increased the travel distances, sometimes by a factor of 10. The road conditions, particularly in Tibet were also challenging. Due to the requirement to collect the plants in flower, which fell in the rainy season, the heavy rain often causes poor road conditions and mud slides, making progress often very slow.

It was planned to visit the far Southwest of Tibet where many subtropical Gesneriaceae species occur. However, even though the permits allowed us to enter Tibet, some promising low altitude areas in Tibet, around Chayü and Mêdog, could not be visited, because of their close proximity to areas disputed between China with India and were off limit to all foreigners. Thus, more time was spent in Sichuan.

Final budget breakdown:

<i>Funds received:</i>	GBP (£)	
RBGE	£ 1000,-	
Percy Sladen Memorial Fund	£ 600,-	
Davis Expedition fund of		
Edinburgh University	£ 1150,-	
Royal Horticultural Society	£ 1000,-	
Self funded	£ 200,-	
Total sum	£ 3950,-	
 <i>Expenditures:</i>		Renminbi (¥)
UK: airline ticket UK-Shanghai	£ 503.10	
diverse items (e.g. visa)	£ 62.50	
travellers cheque charge	£ 32.00	
travellers cheques	£ 3100.00	¥ 34319.95
Sub sum UK	£ 3697.60	
 China: subsistence and accommodation		¥ 12096.90
transport in field		¥ 18210.00
(6975km, ¥ 2.5/km = ¥ 17437.50 plus ¥ 772.50 road tolls)		
airline ticket Shanghai-Kunming		¥ 1490.00
permits (Sichuan ¥2500, Tibet ¥2500)		¥ 5000.00
mobile phone charges		¥ 300.00
Sub sum China		¥ 37096.90
Overspent in China	£ 252.45	¥ 2776.95
Total Sum	£ 3950.05	
Balance	£ - 0.05	

Signature:



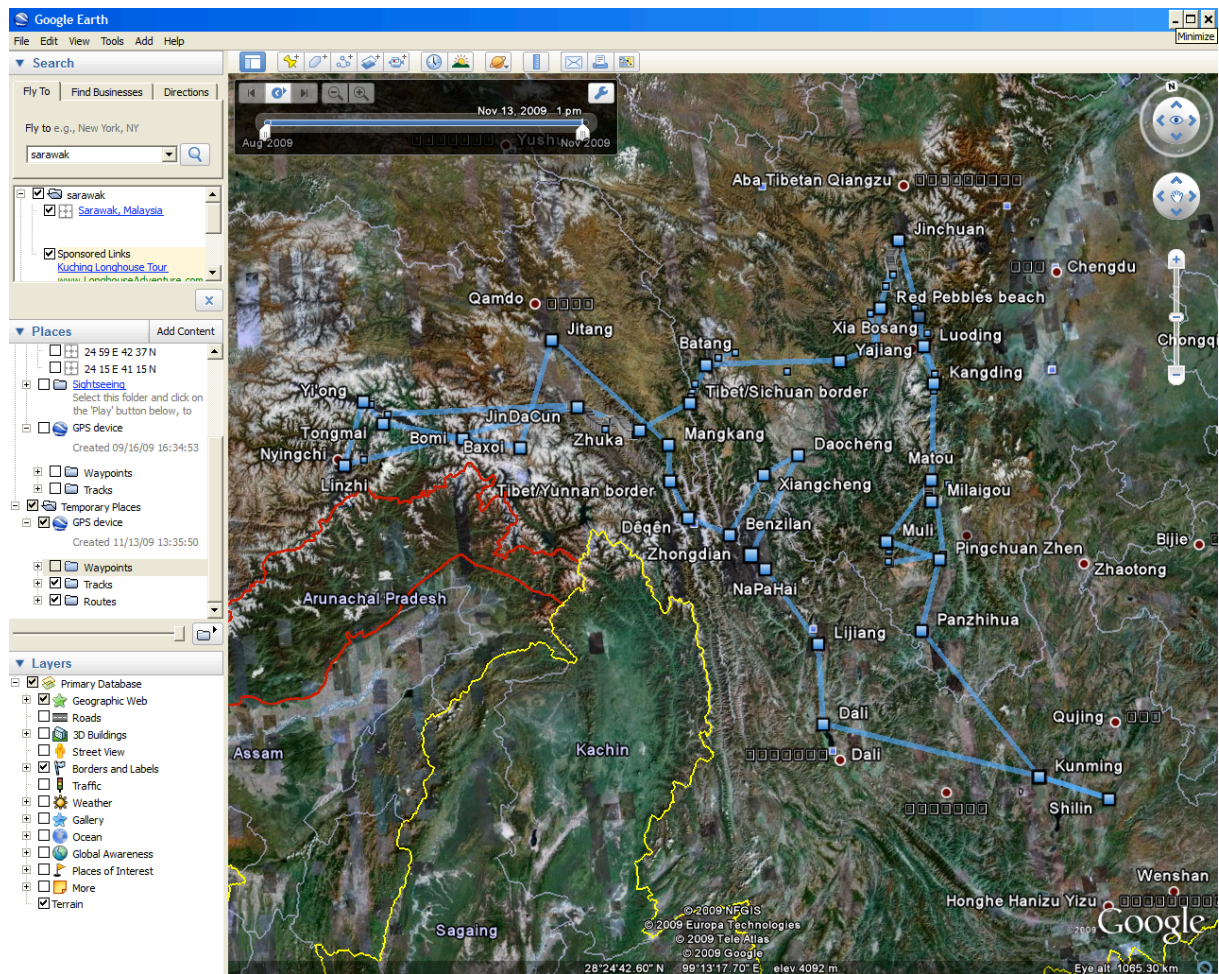
date: 27 November 2009

Receipts are deposited at RBGE.

Update on references acknowledging contributions of the Davis Expedition Fund:

Möller M, M Pfosser, CG Jang, V Mayer, A Clark, ML Hollingsworth, M Barfuß, YZ Wang, M Kiehn, A Weber (2009), "A preliminary phylogeny of the 'Didymocarpoideae' Gesneriaceae based on three molecular datasets: incongruence with available tribal classifications" *American Journal of Botany*. 96(5): 989-1010.

Appendices:



Map 1: Google map showing the travel route in Yunnan, Tibet and Sichuan between 22 July 2009 and 24 August 2009.