

P-033: Secondary metabolites in seed development of *Musella lasiocarpa*Hui Lyu¹, Shu Xu², Yu Chen², Christian Paetz¹¹Max-Planck-Institute for Chemical Ecology, Jena, Germany²Institute of Botany, Jiangsu Province and Chinese Academy of Sciences, Nanjing, ChinaE-mail: hlyu@ice.mpg.de, chenyu@cnbj.net, shuxu@cnbj.net, cpaetz@ice.mpg.de

Musella lasiocarpa, a member of the Musaceae (Fig.1), is an endangered endemic banana species in Southwestern China [1]. The plant has no importance as food source but it is well-known as an ornamental plant. We were interested in the built-up of secondary metabolites in the seeds during their development to complement the knowledge on developmental biology of *Musa* species [2]. Seeds of different developmental stages were sampled and analyzed for their metabolic profiles by high performance liquid chromatography coupled with high-resolution electrospray ionization mass spectrometry (HPLC-HRESIMS) and fluorescence detection (FLD). The identity of metabolites was elucidated by means of nuclear magnetic resonance spectroscopy (NMR) which eventually enabled us to construct a timetable of emerging metabolites formed during seed development.

Figure 1: *Musella lasiocarpa* (Musaceae)**References**

- [1] JIE, T., 2008: Studies on the Reproductive Biology of *Musella lasiocarpa*.
- [2] GRAVEN, P., et al., 1996: Structure and Macromolecular Composition of the Seed Coat of the Musaceae. *Ann. Bot-London*, **77**, 105-122.