

# CUBG Quarterly Briefing

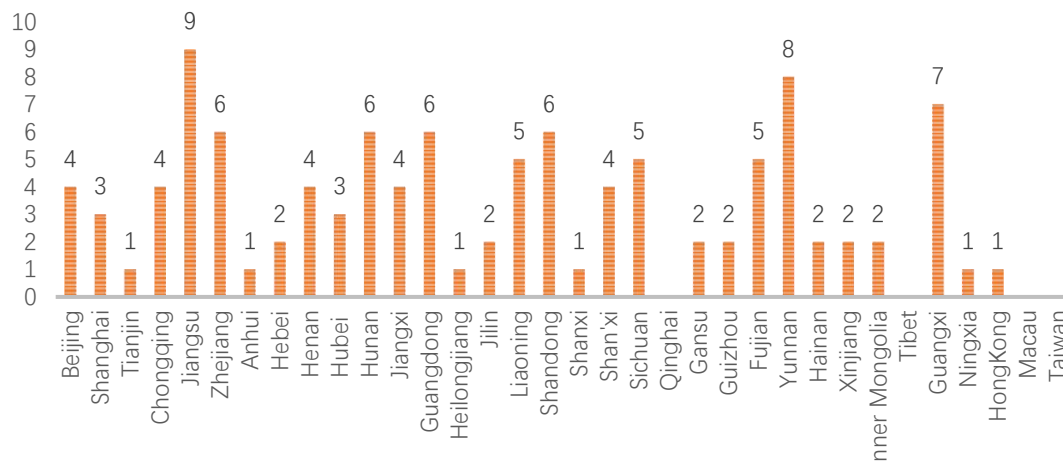


Chinese Union of Botanical Gardens

Spring 2018

Up to March 2018, CUBG members have increased to 109, which have covered China's 30 provinces and municipalities.

## PROVINCIAL DISTRIBUTION OF CUBG MEMBERS



### January - March, 2018

#### Full-Coverage Conservation Plan for Native Plants Continues Surveying in the Field

After a string of field survey, 14 pilot botanical gardens, jointing with experienced experts of local nature reserves, universities and other botanical gardens, have pushed the progress forward.

- ❖ **Lushan Botanical Garden Surveys the Southernmost of Jiangxi Province**

At the end of 2017, team members of Jiangxi “Full-Coverage” project set forth for Xunwu County, the southernmost of Jiangxi province, to investigate those regions rich in biodiversity, like Fairies Village, Danxi Village etc. Among over 500 plant species observed, they collected 305 numbers of specimens and introduced 40 kinds of species including seeds and spores. They also found new distribution of four species in Jiangxi Province. The dynamic list of Jiangxi native plant threaten status has adjusted in accordance with the result of this field investigation, especially the species of data deficient.



Team Members took a photo in the wild

#### ❖ XTBG’s Survey Range Expands to Pu’er Area

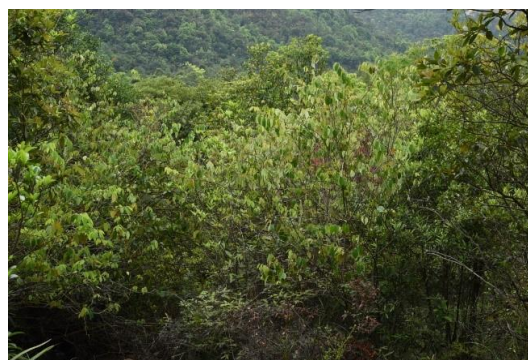
XTBG’s team has continuingly conducted five investigations throughout Xishuangbanna and parts of Pu’er area for total 29 days. They for the first time united Jidong Subtropical Botanical Garden staffs, who were more familiar with local environment, to explore Wuliang Mountains and Ailao Mountains in Pu’er area. Through this detailed expedition, the members have found 16 native plants including *Acer campbellii*, *Stuartia yunnanensis*, *Lithocarpus echinophorus* and *Tremacron jingdongense*, etc, which are in the threatened status list. They also surprisingly found the trace of *Elytranthe albida*, a kind of parasitic plants.



*Elaeagnus gonyanthes*

#### ❖ “Full-Coverage” Project Makes Progress in Guangdong

After the survey of Gudou Mountain Provincial Nature Reserve, located in Jiangmen, the team members of Guangdong “Full-Coverage” Project have made some progress in finding out. Thereinto, three populations of *Castanopsis concinna*, with few numbers of individuals, have been found; *Dunnia sinensis* is found with wider distribution ranges and more numbers of individuals than the existing

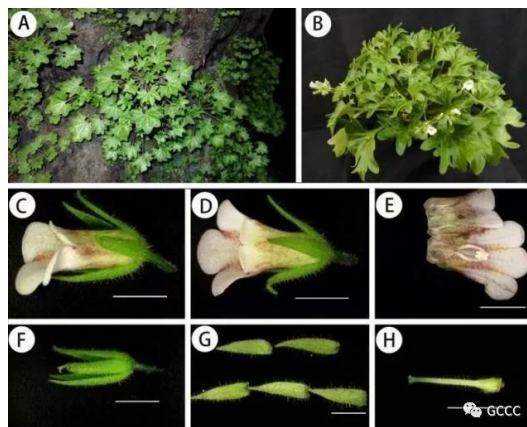


populations of *Loropetalum subcordatum*

records; two new populations with just a few individuals of *Loropetalum subcordatum* are recorded. Besides, the team members also found the population of *Cymbidium sinense*, but the individual number is rather scarce. During interviewing the villagers around, they also got the information about the distribution of cycad, one of the first-level national protective plants.

#### ❖ Guilin Team makes the discovery of a diverse cave flora in China

Researchers from Guilin Botanical Garden have investigated 61 caves in southwest China, and they recorded 418 vascular plant species. The modeling of species accumulation curves (SAC) indicated that there are likely 529–846 species in the region. The study also assessed the threaten status of investigated caves suggesting that over half are impacted by human activities mainly including tourism, agriculture and mining. Lastly, the researchers document plants growing in some of the lowest light levels for vascular plants suggesting a broad range of plants can photosynthesis at much lower light levels than originally thought. The study entitled “Discovery of a diverse cave flora in China” has been published in *PLOS ONE*.



*Primulina zhoui*. A: Habitat. B: Habit. C: Side view of corolla and calyx. D: Top view of corolla and calyx. E: Opened corolla showing stamens and staminodes. F: Pistil and calyx. G: Calyx. H: Pistil. Scale bar: 5 mm.

Group members have also found two new species of Gesneriaceae when they surveyed the limestone area. These two are *Primulina zhoui* and *P. huangii*.

January - March, 2018

#### CUBG Plant Information Management System Constantly to be Improved

Technical team of Plant Information Management System (PIMS) continues to optimize its mobile collecting application. Up to now, another four botanical gardens have joined to use this system by trial. Afterwards, CUBG will perfect the functions to boost the data extraction and analysis as well as promoting it among members.

March, 2018

#### Chinese Academy of Sciences Launches CASEarth, an “Earth Big Earth data Project”

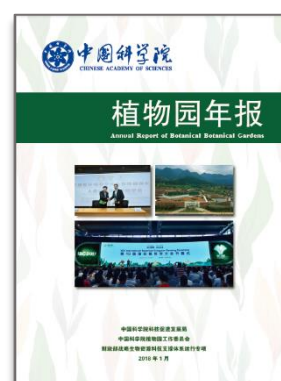
The project of cloud service platform aims to establish an open international center for big Earth data, and is committed to promoting and realizing earth's big data technology innovation, major scientific discovery, and "one-stop full-scale macro decision support". The five-year pilot project has set up several platform, e.g. for science and engineering, satellite imaging, big data cloud services, a digital belt and road map, panoramic China, and biodiversity and ecology.

CUBG will be possible to participant in the sub-project on establishing big data platform of ex-situ plants in China on top of our PIMS.

March, 2018

#### Annual Report of Botanical Gardens, CAS Officially Issued

Annual Report of Botanical Gardens, CAS officially issued. This Annual Report gave a detailed introduction of the work progress of 13 botanical gardens of CAS in 2017, including species conservation & resource utilization, scientific research, public education and cooperation, some important statistics of botanical gardens also referred in it.



The Annual Report, edited by Xishuangbanna Tropical Botanical Garden, CAS (XTBG), has released 7 issues since 2011. As the important collective carrier, the report delivers the information of botanical garden system of CAS to the publics.

The Annual Report is sponsored by Working Committee of Botanical Gardens, CAS, Bureau of Science & Technology for Development CAS and Ministry of Finance special project for scientific and technical support system of strategic biological resources.

If you want to know more about this report, please click and download here: <http://www.cubg.cn/Download/Report/2018-03-27/2153.html>

March, 2018

#### Not Just Gardening, Botanical Gardens Can Do More

Based on BGCI's request for case studies of botanic gardens' contribution to local society, CUBG initiates a creative plan to call for stories national wide about botanical garden's responsibility. Any staff working in botanical gardens could tell us their own experiences or the stories they hear of that botanical

gardens push forward with the local society financially or socially. CUBG will collect and let more people know about these stories through reporting on our social platform and website or submitting to BGCI.

## Training Courses in Next Quarter

**May 31 – June 14, 2018**

### Plant Classification & Identification

#### Course Characteristics:

- ☑ Leaving far away from the noisy city to join the 15 days field work at Tianmu Mountain Training Base with rich biodiversity
- ☑ Combining the operational requirements of daily work into the field practices
- ☑ Challenging both the body and the will in the process of high intensive wild survey



#### Training Place:

- ☑ Shanghai Chen Shan Botanical Garden

Find out more about training: <http://www.cubg.cn/tzgg/2018-03-19/2123.html>