

VI International Aroid Conference in Kunming

Thomas B. Croat
Missouri Botanical Garden
P.O. Box 299
St. Louis, MO 63166-0299
USA

Li Heng
Kunming Institute of Botany
Chinese Academy of Sciences
Kunming 650204
People's Republic of China

The VI International Aroid Conference was held at Kunming in Yunnan Province in southern China between June 26 and July 1, 1995. The conference was well attended with 80 Chinese participants and 30 participants from Hong Kong and 10 other countries. These were India, Singapore, Thailand, Japan, South Africa, Croatia, Switzerland, Germany, England, and the United States.

Guests were housed in the elegant Kunming Hotel, and oral presentations of the conference were held at the Kunming Institute of Botany in the suburbs of Kunming. Each conference participant was presented a Dai-type information bag featuring an embroidered aroid design. Meals were taken usually as a group either at the Kunming Hotel or one of several other restaurants in the city. Dinners were always festive occasions filled with spirited conversation and good food, some of which featured aroids themselves. During the conference period, participants practically lived in an aroid kingdom. The conference hall was gaily decorated with more than 200 potted aroid plants endemic to China. Outside the hall there was a small display of aroid products, such as aroid foods and aroid medicinal herbs.

The aroid meetings were organized by Prof. Li Heng of the Kunming Institute who had first made her offer of the Kunming meeting site as early as the IV International Aroid Conference in Moscow in 1992. The

meetings were supported in part by the Chinese Academy of Sciences (national and local organizations), the National Foundation for Natural Sciences of China, Yunnan Provincial Committee of Sciences and Technology, Yunnan Provincial Union of Women, and the Kunming Institute of Botany, Chinese Academy of Sciences.

The opening ceremonies on Monday morning, June 26, were chaired by Tom Croat and featured presentations by representatives of sponsoring organizations. These were Prof. Wu Zheng-Yi (C. Y. Wu), academician of the Chinese Academy of Sciences and Director Emeritus of the Kunming Institute of Botany, Petra Malesevich, Board Member of the International Aroid Society, Prof. Wang Yi-Ming, Chair of Yunnan Provincial Union of Women, Prof. Hao Xiao-Jiang, Standing Deputy Director of the Kunming Institute of Botany (representing Prof. Xu Zai-fu, Director of the Kunming Institute of Botany), Cai Zhong-Ming, Vice Chair of the Yunnan Provincial Association of Sciences and Technology, and Prof. Li Heng, Chairperson of the VI International Aroid Conference Organizing Committee.

In the Plenary Session which followed, chaired by Josef Bogner (morning) and Dr. Jin Murata (afternoon), there were five presentations: "The History of Research with Araceae, Its Focus and Future Needs" by Tom Croat; "Endemism of the Araceae in China" by Li Heng; "Molecular Phylogeny

of Araceae Using rbcL Gene Sequencing” by Jin Murata; “The Ecology of the Araceae” by Josef Bogner, and “Research and Utilization of *Amorphophallus* in China” by Liu Pei-Ying.

The remainder of the day was devoted to Symposia, these divided into three sections. The section on Morphology, Systematics, and Evolution, chaired by Wu Zheng-Yi and Tom Croat had the following presentations: “Current Advances of the Taxonomy of *Pothos*” by Peter C. Boyce; “The Flora Malesiana Project” by A. Hay, P. C. Boyce, W. Hettterscheid, N. Jacobsen, J. Murata, and J. Bogner (authored by A. Hay but read by Boyce); “Taxonomic Status of *Amorphophallus* in China” by Long Chun-Lin (presenter) and Li Heng; and “Southern African Aroids” by Yashica Singh (presenter), A. E. Van Wyk, and Himansu Baijnath.

The Section on Cultivation, Horticulture, Introduction, and Domestication, chaired by Guo Hui-Jun and J. Bogner presented the following: “Studies on Micropropagation of Four *Zantedeschia* Cultivars” by Xiao Tiao-Jing (presenter), Li Heng, and Xia Li-Fang; “Studies on Ecological Prerequisites for Growth of *Pinellia ternata*” by Zhang Guo-Tai (presenter), Guo Qiao-Sheng, Wang Kang-Cai, and Ye Wen-Cai; and “The Artificial Adjustment of the Flower Season and Cross-Breeding on ‘Konjak’ (*Amorphophallus konjac* Koch) by Zhang Sheng-Lin (presenter), Lie Pei-Yeng, and Sun Yuan-Ming.

The Medicinal Use Section, chaired by Guo Hui-Jun and Jin Murata, followed later in the day. It presented the following: “Recent Developments in Biological Investigation on *Pinellia ternata*, a Medical Aroid Plant in Japan—A Review” by Hajime Mizukami, Y. Shoyama, Pan Sheng-Li, and H. Ohashi; and “Preparation of Antiserum Specific to Plant Tissue: the Enzyme Immunoassay for Measurement of the Contents of *Pinellia* Tuber Component Contained in Chinese Traditional Medicines” by Tsunchiro Kitagawa.

On the following day, Tuesday, June 27, the section on Morphology, Systematics, and Evolution continued under the chairmanship of Wu Zeng-Yi and Jin Murata with the

following papers: “*Lagenandra ovata*—a Strange Inflorescence” by Matyus Buzgo; “Homology of the Aroid Inflorescence” by Alistair Hay (presented by Peter Boyce); “Some Species of *Colocasia* having cpDNA of *Alocasia macrorrhizos* var. *variegata*” by Hiromichi Yoshino; “Cytotaxonomic Studies in *Arisaema*” by Kumar S. Patil (presenter) and G. B. Dixit; “Adaptive Significance of Phenology and Spadix Architecture in Araceae of Western Ghats of India” by Shrirang R. Yadav; and “The History of International Aroid Conferences” by Tom Croat.

The Section on Medicinal Use continued in the afternoon with the following presentations: “Non-Starch Polysaccharides in Aroid tubers” by Lawrence Ramsden (presenter) and Koo Yut Yu; and “Purification and Immunological Properties of Trypsin Inhibitor for *Alocasia macrorrhizos*” by Wang Dong (presenter), Ji Ben-Ren, Zeng Ying, and Yu Bing.

A Section on Utilization and Development, chaired by Li Heng and Long Chun-Lin, completed the afternoon’s program. Presented were the following: “Study on the Cultivated *Colocasia* in Hunan, China” by Jian Dao-Song (presenter) and Zhang Jian; and “The Spread, Utilization, and Toxicity of Three Aroids in Africa” by H. Baijnath (presenter) and P. M. Maundu.

Also on Tuesday some of the participants traveled to the karst limestone formations called the “Stone Forest,” a famous scenic spot in Lunan County. For those who remained in Kunming, part of the afternoon was spent visiting the research greenhouses and the grounds of the Kunming Institute of Botany.

Wednesday morning, June 28, held the final period for oral presentations. The Morphology, Systematics, and Evolution section aired the following presentations: “*Anthurium* and *Aglaonema* Production in Dade County, Florida (USA) Nurseries” by DeArmand Hull; “Some Natural Hybrids in the Genus *Arum*” by Marija Bedalov; “The Genera of the Araceae Project” by Simon J. Mayo, Josef Bogner, and Peter C. Boyce (presenter); and “Distribution of *Philodendron* in Central America” by Tom Croat.



Front Row: 1. Zeng Xiao-lian; 2. Wang Shou-zheng; 3. Hiromu Ohashi; 4. Tsunehiro Kitagawa; 5. Hao Xiao-jiang; 6. Sun Han-dong; 7. Tom Croat; 8. Wu Zheng-yi (C.Y.Wu); 9. Petra Malesevich; 10. Li Heng; 11. Wang Yi-ming; 12. Cai Zhong-ming; 13. Liu Pei-ying; 14. Josef Bogner; 15. Liu Xian-zheng. 2nd Row: 16. unknown; 17. Xu Ting-zhi; 18. Shue Long-ran; 19. Zhang Sheng-lin; 20. Yang Yong-kang; 21. Hiromichi Yoshino; 22. Peter C. Boyce; 23. Yashica Singh; 24. Himansu Baijnath; 25. Marija Bedalov; 26. Kumar S. Patil; 27. U. K. Sharma; 28. Shrirang R. Yadav; 29. Guo Qizo-sheng; 30. Sun Liu; 31. Luo Hai-yan; 32. Wang Ping-li; 33. Xie Xiu-qiong; 34. Yang Shi-xiong. 3rd Row: 35. Tatsuya Shibata; 36. Chen Shu-kun; 37. Yi Jian-wen; 38. Wang Jia; 39. Rosalin Lowenhaupt; 40. Victor Soukup; 41. Andrea Kee Heng Choon; 42. Duangchai Sookchaloem; 43. Tay Eng Pin; 44. Xi Bao-quan; 45. Zhou Ping-an; 46. Ron Weeks; 47. Matyas Buzgo; 48. Wang Dong; 49. Wang Peng; 50. Pan Sheng-li; 52. Wang Jun. 4th Row: 53. Miharu Salo; 54. Zhu Zheng-ying; 55. Liu Xue-jiao; 56. Feng yu-xing; 57. Gao Ying-xin; 58. Masaaki Kurose; 59. Jiang Dao-song; 60. Lu Shu-gang; 61. Shunsaku Suzuki; 62. Zhang Guo-tai; 63. David Hertzberg; 64. DeArmand Hull; 65. James Symon; 66. Hou Kun-yu (staff); 67. Zhang Xing-guo; 68. Mao Chao-liang (staff).

The section on Utilization and Development continued Wednesday morning as well, with the following papers presented: "Aroids in Traditional Folklore and Medicine in Northeastern India" by U. K. Sharma; "The Resources and Use of *Amorphoballus* in Hunan" by Liu Xue-Jiao, and "Ethnobotany of *Amorphoballus* of China" by Long Chun-Lin.

This concluded the oral presentations for the aroid conference. A total of 59 abstracts had been submitted, 25 of them by overseas participants. In all 31 papers were presented during the conference. It was agreed that the proceedings of the conference would be published in the form of a book. The editor of the series will be Peter Boyce.

On Wednesday afternoon, after two and

one half days of oral presentations, we flew to Jinghong near the Laotian border, then spent part of the afternoon in local parks while the organizers corralled a participant who was left behind in Kunming. Later we had dinner then traveled to the Xishuangbanna Tropical Botanical Garden of the Chinese Academy of Sciences for the remainder of the conference. In Xishuangbanna we visited the natural areas around the garden and indigenous villages of the Dai and Jiruo Nationality in the region. Excursions were made to the Botanical Garden, the trails through the adjacent forests in the reserve, the rare plant area of the Botanical Garden, and the Aroid Garden where 104 aroid species, 90% of which are endemic to China, have been plated in nat-

ural settings. Each evening was a festive affair with large spreads of Dai-type food (often with native dancing girls) and a lot of frivolity. Thursday evening after dinner was devoted to dancing and singing by local Dai girls and by the participants. An attempt was made to get participants of all countries to participate in the singing of their favorite folk songs. Participants for America, England, and South Africa joined together to sing "You Are My Sunshine"; we felt it was better to be embarrassed as a group rather than individually.

Friday morning was spent at a market of the Dai Nationality followed by surveys of ancient tea plantations of the Jiruo Nationality and villages of the Dai. In the afternoon we had viewings of the excellent aroid art exhibition assembled at Xishuangbanna by the participants and other local artists in which 202 photographs and 16 drawings were included. This was followed by the closing ceremonies in the mid-afternoon. The final day on Saturday, July 1, was spent with additional touring of local villages include Manme and Ganlanba, finally reaching Jinghong for lunch. Some of us participated in a rickshaw tour of the city before dinner. Despite a late plane departure for Kunming we arrived at the Kunming Hotel for what would be the last night for many participants. Many participants left the following day for home.

Other participants continued on with a post-conference bus tour of northwestern Yunnan Province which included the scenic region of Dali and Lijiang. The area is reasonably rich floristically, especially with species of *Arisaema* which occurred nearly everywhere. We toured the Er Hai Park, a large and beautiful botanical garden in Dali, and later another native village as well as Butterfly Spring Park and the old village of Dali. The following day we made a botanical survey of Diancangshan Mountain with some of the group walking up to as high

as 3,000 m elevation. The following day we drove to Lijiang where we visited the Jade Dragon Snow Mountain, one day taking a cable car up to near its top then going on horseback to a mountain prairie where natives danced and sang songs. Some of us walked back down for a better look at the vegetation. Several species of *Arisaema* inhabited the forest understory near the top. The following day we took a long drive northeast of Lijiang to the so-called Tiger's Leap Gorge, an area where the Yangtze River, one of the world's largest rivers, is squeezed tightly into a narrow tract between two mountains. The rocky slopes along this gorge were home to the endemics *Arisaema saxatile* and *Arisaema caridissima*.

After returning to Kunming we said our goodbyes and promised to meet again at the next International Aroid Conference, though we don't know when that will take place. On behalf of Alistair Hay, Peter Boyce officially offered to hold an aroid conference in Sydney, Australia in 1998 in conjunction with the next Monocot Conference. Tom Croat offered to hold an aroid conference at the Missouri Botanical Garden in 1999 in conjunction with the XVII International Botanical Congress to be held in St. Louis.

The VI International Aroid Conference was the longest and the most well attended conference ever. It was a pity that some overseas botanists who presented their abstracts could not attend the conference personally. These were: Simon J. Mayo (England), Alistair Hay (Australia), Nguyen Nghia Thin and Nguyen Van Dzu (Vietnam), M. Sivadasan (India), Valentina Tarasevich (Russia), Hajime Mizukami (Japan), Md. Murshidu Hogue (Bangladesh), Narayan P. Manandhar (Nepal), and Vasily V. Zaiivy (Ukraine). Dr. Mitsuru Hotta from Japan sent a beautiful painting made by Mr. Isson Tamura.