



# Species

ISSUE 63

## 2022 Report of the IUCN Species Survival Commission and Secretariat



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## The IUCN Species Survival Commission (SSC)

The IUCN Species Survival Commission (SSC) is a science-based network of thousands of volunteer experts from almost every country of the world, all working together toward achieving the vision of “a just world that values and conserves nature through positive action to both prevent the loss and aid recovery of the diversity of life on earth.”

Members of SSC belong to one or more of near 200 Specialist Groups, Red List Authorities, Action Partnerships, Task Forces, and Conservation Committees that make up the Network, each focusing on a taxonomic group (plants, fungi, mammals, birds, reptiles, amphibians, fishes, and invertebrates), national species, or a disciplinary issue, such as sustainable use and livelihoods, translocation of species, wildlife health, climate change, and conservation planning.

Framed by the Species Conservation Cycle, SSC’s major role is to provide information to IUCN on biodiversity conservation, the inherent value of species, their role in ecosystem health and functioning, the provision of ecosystem services, and their support to human livelihoods. This information is fed into the IUCN Red List of Threatened Species.

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### 2021-2025 Species Strategic Plan

The IUCN Species Strategic Plan encompasses the joint work of the IUCN Species Survival Commission and a number of partnerships to achieve more than 2,700 targets proposed by the Network during the 2021-2025 quadrennium.

To accomplish those targets, the Species Conservation Cycle was established, which is the conceptual framework for the Network activities. The Species Conservation Cycle’s main purpose is to guide efforts for valuing and conserving biodiversity through three essential components that are linked to each other:

**ASSESS:** Understand and inform the world about the status and trends of biodiversity.

**PLAN:** Develop collaborative, inclusive and science-based conservation strategies, plans and policies.

**ACT:** Convene and mobilise conservation actions to improve the status of biodiversity.



Their implementation requires two transversal components:

**NETWORK:** Enhance and support our immediate network and alliances to achieve our biodiversity targets.

**COMMUNICATE:** Drive strategic and targeted communications to enhance our conservation impact.

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### SSC Species Report

Annual progress in the implementation of the 2021-2025 Species Strategic Plan is documented in the SSC *Species Report*, which consists of a comprehensive description and analysis of the activities and results generated by the members of the SSC Network each year. Each SSC Group contributes to this document by providing a yearly summarised description of their achievements, which is presented in stand-alone reports.

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## Structure of the IUCN SSC Stand-alone Report

Stand-alone reports summarize the activities conducted and results generated by each group member of the SSC. Following, is the structure of the stand-alone report and the contents under each session.

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### Title of the SSC Group

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### Photograph(s) of the Chair / Co-Chairs

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### Group information

Includes names of Chair / Co-Chairs, Vice-Chairs, Deputy Chairs, Red List Authority Coordinators and Program Officers, their institutional affiliations, number of members and social networks currently active.

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### Logo of the SSC Group

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### Mission statement

Includes the mission of the group.

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### Projected impact for the 2021-2025 quadrennium

Includes the description of the impact on species conservation resulting from the implementation of the targets formulated by the group for the 2021-2025 quadrennium.

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### Targets for the 2021-2025 quadrennium

Includes the targets planned by the SSC Group for the 2021-2025 quadrennium ordered alphabetically by component of the Species Conservation Cycle. Each target is labeled with a numerical code (e.g., T-001, T-012) that identifies it in the SSC DATA database and its status for the reported year is indicated (Not initiated, On track or Achieved).

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### Activities and results

Includes the targets for which activities were conducted and results were generated during the reported year, ordered alphabetically, first by component of the Species Conservation Cycle, and second by Activity Category. Description of activities and results includes the indicator that best describes progress, its associated quantitative or qualitative result, and the narrative description of the activity conducted or result obtained. Each activity or result reported is linked to the Key Species Result to which it is mainly associated (e.g., KSR#1, KSR#5).

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### Acknowledgements

Includes the acknowledgements to funding agencies, partners, and persons who contributed to the progress of the targets of the group.

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### Summary of achievements

Summarises information of the group's strategic plan for the quadrennium and progress achieved implementing targets for all the components of the Species Conservation Cycle during the reported year.

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### Example for the recommended citation:

Qin, HN. 2023. 2022 Report of the China Plant Specialist Group. In: Nassar, JM, García, L, Mendoza, L, Andrade, ND, Bezeng, S, Birkhoff, J, Bohm, M, Canteiro, C, Geschke, J, Henriques, S, Ivande, S, Mileham, K, Ramos, M, Rodríguez, A, Rodríguez, JP, Street, B, and Yerena, E (Eds.). 2022 Report of the IUCN Species Survival Commission and Secretariat. International Union for Conservation of Nature. 6 pp.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

## 2022 Report

# IUCN SSC China Plant Specialist Group



#### CHAIR

Hai-Ning QIN

Institute of Botany,  
Chinese Academy of  
Sciences, Beijing,  
China; College of Life  
Sciences, University  
of Chinese Academy  
of Sciences, Beijing,  
China

#### RED LIST AUTHORITY COORDINATOR

Li-Na ZHAO

Institute of Botany,  
Chinese Academy of  
Sciences, Beijing,  
China; College of Life  
Sciences, University  
of Chinese Academy  
of Sciences, Beijing,  
China

#### NUMBER OF MEMBERS

98

### Mission statement

The mission of the China Plant Specialist Group (CPSG) is to contribute to increasing current knowledge on the identification and conservation of threatened species of China's flora.

### Projected impact 2021–2025

Approximately 4,000 threatened species, 11% of China's flora, assessed first in 2013 and updated in 2020, will be fully documented by publications and widely applied to guide flora conservation at national and provincial levels by organising a training course, workshops, and other actions.

### Targets 2021–2025

#### ASSESS

**T-008** Publish a book on seed plants of China: checklist, uses and conservation status.

Status: Achieved

**T-009** Complete global Red List assessment of 999 tree species.

Status: On track

**T-011** Investigation and evaluation of newly added national key protected wild plant resources in Guizhou.

Status: On track

**T-012** Publication of the provincial Red List of higher plants in Guangdong.

Status: Achieved

**T-016** Publication of Red Data Book of China Medicinal Plants.

Status: Achieved

**T-019** To evaluate the threatened status and the Endangered category for national key protected and wild plants in Jiangsu.

Status: On track

#### ACT

**T-007** Conduct an Orchid Diversity Survey in China.

Status: Achieved

**T-010** Complete the identification manual of national key-protected wild plants.

Status: On track

**T-013** Investigation and monitoring of *Cycas szechuanensis* subsp. *fairylakea* in Guangdong, China.

Status: On track

**T-014** Propose suggestions on the standardization system construction of conservation technology for rare and endangered plant.

Status: Not initiated

**T-015** Complete the expedition report to Guangxi's NR of Golden Camellia (*Camellia nitidissima*).

Status: Achieved

**T-018** Propose suggestions on the standardization system construction of conservation technology for rare and Endangered plants.

Status: Not initiated

**T-020** Regression experiment of Golden Camellia.

Status: Achieved

#### NETWORK

**T-005** Reorganise China Plant Specialist Group (CPSG) membership in the quadrennium 2021–2025.

Status: Achieved

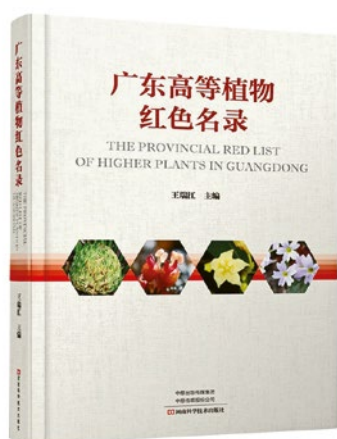
#### COMMUNICATE

**T-006** Organise two symposiums on Endangered plants online.

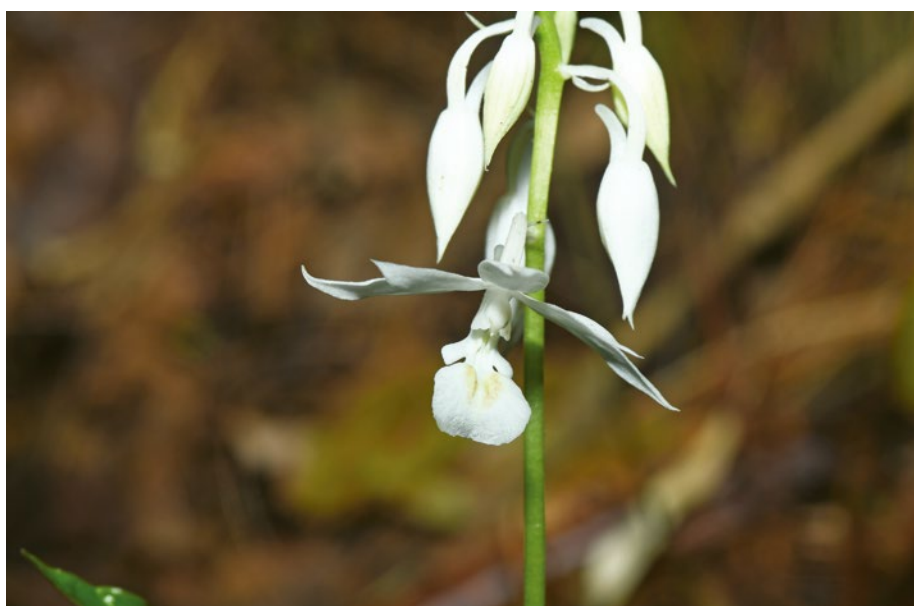
Status: Achieved



Red Data Book of China Medicinal Plants  
Photo: Qinshaining



The Provincial Red List  
of Higher Plants in Guangdong  
Photo: Wang Ruijiang



*Calanthe nankunensis* Z. H. Tsi  
Photo: Jinxiaohua

**T-017** Popular science education and training on rare and endangered conservation in Qunan White-headed Langur community reserve, Guangxi.  
Status: Achieved

## Activities and results 2022

### ASSESS

#### Red List

**T-009** Complete 999 tree species global Red List assessment. (KSR 6)

Number of global Red List reassessments completed: 300

Result description: Already completed Red List assessments for 300 species.

**T-016** Publication of *The Red Data Book of China Medicinal Plants*. (KSR 5)

Number of China's medicinal plant species assessed: 460

Result description: *The Red Data Book of China Medicinal Plants* is China's second publication of the Red Book of Endangered and Protected Plants after the publication of the Red Book of Chinese Plants (Volume I) in 1991. It is also the first attempt to provide information about the endangered status

and protection strategies of endangered medicinal plants in the form of a red book. Its compilation and publication have important reference value and guiding significance for the protection and sustainable use of endangered medicinal plants and will play an important role in the protection of plant diversity in China.

### Synergy

**T-012** Publication of *The Provincial Red List of higher plants in Guangdong*. (KSR 6)

Number of higher plant species assessed: 6,658

Result description: The book *The Provincial Red List of Higher Plants in Guangdong* comprehensively analyses the threatened status of 6,658 species (including subspecies taxa) of wild higher plants distributed locally in Guangdong Province according to the evaluation criteria and grades of the IUCN Red List of Threatened Species. The assessment results show that there are 69 Critically Endangered (CR) plant species, 233 species Endangered (EN), 370 species Vulnerable (VU), 530 species Near Threatened (NT), and 4,904 species as Least Concern (LC) in Guangdong Province. In addition, the book also notes the reasons for the endangered plant species

in Guangdong Province and appends a list of 1,352 non-indigenous plants in Guangdong Province. The publication of the book will provide an important reference for the Guangdong Provincial Government to strengthen the construction of the biodiversity protection monitoring system in Guangdong Province, improve the level of biosafety management, and protect important strategic biological resources in the region. At the same time, it is also an important manifestation of the active implementation of the Convention on Biological Diversity and China's Plant Protection Strategy by local governments.

### ACT

#### Conservation actions

**T-010** Complete the identification manual of national key-protected wild plants. (KSR 10)

Number of technical documents provided to support conservation actions: 950

Result description: So far, photographs have been collected for 950 plant types, and there are still about 20 plant types without photographs, which are being painted.





Regression experiment of *Camellia nitidissima*  
Photos: Yangquanguang

## Technical advice

### T-020 Regression experiment of Golden Camellia. (KSR 10)

Number of technical consultations provided to support conservation actions: 4

Result description: Through the implementation of the project, the Reserve has built a Golden Camellia seedling base, repaired a seedling greenhouse with an area of more than 700 m<sup>2</sup>, and can cultivate more than 20,000 Golden Camellia seedlings every year, providing a source of seedlings for the return of Golden Camellia. The Reserve has signed project contracts with four administrative villages (Pingmu Village, Naxia Village, Nawan Village and Nadong Village) in two townships (Nasuo Town and Huashi Town) in Fangcheng District, Fangchenggang City; more than 30,000 camellia seedlings are propagated in the Reserve; four return planting sites of Golden Camellia were selected, with a total area of about 50 mu, and return more than 5,000 Golden Camellia seedlings; we carry out a technical training; issuing 200 copies of the work manual; six poverty-stricken households were encouraged to obtain employment. Through the implementation of the project, the Reserve has mastered the propagation technology and return planting technical specifications of Golden Camellia seedlings, returned the seedlings to the Reserve and surrounding areas, promoted the population proliferation and population rejuvenation of the Golden Camellia and ensured the effective protection of the species. At the same time, through training and promotion, the people in the neighbourhood will be encouraged to plant camellia under the forest to make a good demonstration effect.



## COMMUNICATE

### Scientific meetings

#### T-006 Organise two symposiums on Endangered plants online. (KSR 12)

Number of presentations delivered in scientific events: 12

Result description: The CPSG 2020 Annual Meeting was organised, the program



including two sessions (morning and afternoon). The morning session included academic presentations, open to the public and chaired by Dr Jin Xiaohua and Prof. Zhang Guangfu. The topics covered during this session included: (1) 'Several Aspects of Endangered Plants Concerned by Nature Reserve Workers' by Prof. Cui Guofa, Beijing Forestry University; (2) 'Current Situation of Conservation on *Acer pentaphyllum*' by Dr Wang Kang and Mr Long Tinglun, Beijing Botanical Garden and Wildlife Conservation Station, Forestry and Grassland Administration of Sichuan Province; (3) 'Assessment on the Endangered Status of Medicinal Orchids in China' by Dr Jin Xiaohua, Institute of Botany, CAS; (4) 'Endangered Plant Conservation and the Nature Reserve System Construction of China' by Dr Xu Weihua, Research Center for Eco-Environmental Sciences, CAS; (5) 'Role of Conservation Genomics in Threatened Species Conservation' by Dr Hu Yibo, Institute of Zoology, CAS; (6) '2021-2024 IUCN/SSC Plant Conservation: Plans and Progress' by Dr Domitilla Raimondo, SANBI, South Africa. The afternoon session featured membership meetings chaired by Dr Wang Ruijiang from South China Botanical Garden and Dr Wu Jianyong. The members of CPSG actively participated and shared their ongoing and future research and collaborative efforts to protect endangered plant species. The topics discussed during this session included: (1) 'Annual Report on the Works of Specialists Group' by Dr Liu Huiyuan, Institute of Botany, CAS; (2) 'Assessment Methods and Procedures of Endemic Woody Plants of China' by Dr Wang Hongfeng, Northeast Forestry University; (3) 'Progress and Future Plans on Research of KBA and Conservation Priority Areas' by Dr Wu Jianyong, Nanjing Institute of Environmental Sciences, MEE; (4) 'Introduction to the Web Framework of Chinese Plant Specialists Group' by Prof. Zhang Guofu, Nanjing Normal University; (5) 'Initializing a Platform for Endangered Species Observation' by Dr Liu Bo, Minzu University of China; (6) 'Chinese Species

Specialists Group: its mission and plans' by Dr Xie Yan, Institute of Zoology, CAS. The meeting concluded with a sense of shared purpose and strengthened commitment among participants to protect and preserve our botanical heritage for the well-being of the planet and future generations.

#### **T-006 Organise two symposiums on Endangered plants online. (KSR 12)**

Number of participants: 155

Result description: On November 19<sup>th</sup>, the 2022 Annual Meeting of the Red List Committee of China, Wildlife Conservation Association, and the Species Survival Committee (SSC) of the World Conservation Union (IUCN) of China Plant Expert Group hosted by the Institute of Plants was held online. A total of 155 people from 77 institutions and colleges across the country registered to attend the conference. The meeting was divided into two parts: an academic report and a member meeting. In the academic report, experts from the Institute of Botany of the Chinese Academy of Sciences, the Ecological Environment Research Center, the Institute of Zoology, Beijing Forestry University, the National Botanical Garden (North Garden), Sichuan Forestry and Grassland Bureau and other units were invited to introduce the latest research results on biodiversity conservation, including suggestions on the adjustment of the national key protected species list, the *status quo* of the endangered species *Acer quinquefolius*, the construction of China's biodiversity bureau and natural reserve system Endangered status assessment of medicinal orchids and the role of conservation genomics in the protection of endangered species. The meeting also invited Dr Domitilla Raimondo, Vice Chairman of the IUCN Species Survival Committee and Chief Expert of Endangered Species of the National Institute of Biodiversity of South Africa, to introduce the IUCN/SSC Plant Protection Plan and its present and future progress from 2021 until 2024. In the member meeting, the members of the Executive Committee of the Expert Group reported

and summarized the work progress of 2021-2022 to the General Assembly, including the annual work report of the Expert Group, the assessment of the red list of Chinese endemic woody plants, the work progress of China's KBA and conservation priority areas, the framework of the IUCN Chinese plant expert website, the real-time data upload platform for endangered species, etc. The members of the participating expert group discussed the past work and the key contents of the work in 2023, including the protection of endangered species in China, the planning of protected areas, and the future development direction, and revised the work plan for the next two years.

#### **Communication**

##### **T-017 Popular science education and training on rare and endangered conservation in Qunan White-headed Langur community reserve, Guangxi. (KSR 13)**

Number of villagers and volunteers aware on the significance and means of plant protection: 21

Result description: Mainly 13 villagers and eight volunteers from the conservation area are provided with scientific education on plant protection and folk traditional knowledge, to improve the local people's awareness of plant protection, significance and means of protection, and improve the awareness of local traditional knowledge and the importance of protection.

#### **Summary of achievements**

**Total number of targets 2021-2025: 16**

**Geographic regions: 16 Asia**

**Actions during 2022:**

Assess: 3 (KSR 5, 6)

Act: 2 (KSR 10)

Communicate: 3 (KSR 12, 13)

**Overall achievement 2021-2025:**

