

Conservation News

Ecology of the National Key Protected Wild Plants in the Xinjiang Region, China



In April 2024, a survey of the national key protected wild plants in Xinjiang, China, was successfully completed. The project was initiated by the Xinjiang Uyghur Autonomous Region Forestry and Grassland Bureau to document the distribution and habitat of key national protected wild plants in Xinjiang for conservation management.

Researchers from the Xinjiang Institute of Ecology and Geography of the Chinese Academy of Sciences led this survey, with participation from other universities, research institutions and wildlife protection organizations in the Xinjiang region. The survey was conducted in 2022 and 2023, covering the entire territory of Xinjiang, with 52 project personnel. More than 300 specimens were collected and 2,000 photographs taken. The survey documented the ecology, distribution and conservation status of 82 species of plants, including 50 key national protected species and 32 species with narrow distributions. Of these, 73 species were previously included in the 2020 edition of the China Biodiversity Red List, with one species categorized as Critically Endangered, eight as Endangered, 20 as Vulnerable, 17 as Near Threatened and 27 as Least Concern.

Example findings of the project are as follows: Populations of *Saussurea involucrata*, endemic to the

high-altitude areas of the Tian Shan Mountains, have high genetic diversity, and the Bayinbuluk area is a centre of differentiation for the species. There is only one known population of *Atraphaxis irtyschensis*, endemic to Xinjiang, of c. 4,000 mature plants, but it is not currently included in the national or Xinjiang regional lists of protected plants.

The project also established an evaluation system to assess reserves and the utilization value of wild plant resources, and proposed protection measures, including habitat protection, species restoration and control of illegal collection and trade. We expect that similar projects will be supported in the future, to document the distribution and quantity of wild plant resources and promote the planning of conservation measures.

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