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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Technical regulation for in situ conservation and habitat
rehabilitation of wild plants with extremely small populations**

极小种群野生植物保护技术 第1部分：就地保护及生境修复技术规程

(English Translation)

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is proposed by the Chinese Academy of Forestry.

This standard is under the jurisdiction of the State Forestry and Grassland Administration.

This standard was drafted. Institute of Forest Ecology, Environment and Protection,
Chinese Academy of Forestry, Beijing Forestry University.

1 Scope

This standard specifies in situ conservation techniques and management of very small populations of wild plants for in-situ conservation and degraded habitats.

This standard applies to all kinds of extremely small populations of wild plants in China, and other rare and endangered plants can be referenced for in-situ conservation and habitat restoration.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article. For undated references, the latest version (including all amendments) applies to this document.

GB/T 15776--2016 afforestation technical regulations GB/T 15163 Technical Regulations for Closing Hills (Sands) GB/T 15781 Forest care regulations LY/T 2651--2016 Technical regulations for restoration and reconstruction of degraded forest ecosystems LY/T 2244.1--2014 Technical guidelines for evaluating the effectiveness of conservation of nature reserves Part 1. Wild plant protection LY/T 1819--2009 Rare and Endangered Wild Plant Protection Community Technical Regulations LY/T 1952--2011 Long-term positioning observation method for forest ecosystem

3 Terms and definitions

The following terms and definitions apply to this standard.

3.1 Wild plants with extremely small populations

The distribution area is narrow or intermittent, or it has been affected by external factors for a long time, which shows that the population is degraded and the number continues to decrease.

The number of groups and individuals is very small, it is already below the minimum stable survival limit of the population, and may be endangered at any time. Including the following three types. (1) the population of the wild is extremely small, extremely endangered, and at risk of extinction at any time; (2) the habitat requirements are unique and the ecological width is narrow;

(3) The potential genetic value is unclear, its extinction will cause gene loss, reduced biodiversity, huge loss of socioeconomic value and population size Relatively small.

3.2 in situ conservation in the wild, they take various measures to protect and maintain existing natural populations and related communities.

3.3 GAP analysis

A spatial analysis method to identify areas where rare and endangered species are not covered by existing nature reserves or protected communities.

3.4 Habitat rehabilitation

For human habitats that have been degraded, are being degraded or are likely to be degraded, artificial measures are taken Conducive to the development of population maintenance and reproduction.

3.5 Protection buffer zone

Centering on the protection target (population or individual), based on the established protected area or community, a certain spatial range is set as A buffer zone for man-made or natural interference activities.

4 In situ conservation of very small populations of wild plants

4.1 Objects protected in situ

All individuals of extremely small populations of wild plants and the biotic and abiotic environments associated with their survival and reproduction.

4.2.1 Individual protection

In situ conservation measures must be taken for each individual of a very small wild plant population.

4.2.2 Population protection

In situ conservation measures are required for every wild population of wild plants (all individuals in each distribution location).

4.2.3 Ecosystem protection

Animals and habitats related to pollination or seed dispersal related to the life history of very small populations of wild plants Symbiotic mycorrhizal fungi, nodule bacteria, and other microorganisms and their soil habitats should be protected to maintain the native habitat of very small populations of wild plants Nature, stability and integrity of the system.

4.2.4 Set protection buffer

As long as it is a very small population of wild plants, depending on the individual or population distribution, a certain range of protection buffers should be set up to ensure its extinction risk is minimized.

4.3 In-situ conservation approaches

4.3.1 Establish nature reserves and protected communities

Based on the vacancy analysis, establish a nature reserve with the smallest population of wild plants as the core protection object if possible.

If it is enough to establish a nature reserve, consider setting up a protected area, and the method for determining the protected area shall be implemented in accordance with LY/T 1819--2009. For each pole Individuals of small populations of wild plants and their habitats are protected as strictly as possible.

4.3.2 Set up local protection points

Under the condition that it is not enough to establish a protected area or a protected area, a protected point shall be established with the protected population or individual as the core.

4.3.3 Including ecological protection projects the principles of giving priority to ecological protection exist in ecological construction projects such as natural forest protection, returning farmland to forests and grasses, and construction of protective forest systems.

The implementation area of the project shall give priority to the distribution of wild plants with very small populations.

Very small populations of wild plant individuals and their habitats are strictly protected.

4.3.4 Reliance on other nature reserves

Relying on facilities and conditions such as national parks, natural or cultural heritage reserves, environmental protection and ecological education bases, etc.

Very small populations of wild plants in or near them are protected and managed in situ.

4.4 Local protection measures

According to the distribution of extremely small populations of wild plant populations and individuals, construct facilities such as protective fences, isolation walls, and fire barriers.

Each individual is strictly banned.

According to the biological and ecological characteristics and habitat characteristics of different species, carry out light thinning, shading, surface grooming, fertilization, watering, and exclusion Tending measures such as competing species promote rapid recovery of very small populations of wild plant populations.