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

LY/T 3185-2020

**Technical regulation for reintroduction of wild plants with
extremely small populations**

极小种群野生植物野外回归技术规范

(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 was proposed and managed by the State Forestry and Grassland Administration.

The organizations responsible for drafting this standard. Beijing Forestry University, Institute of Forest Ecology and Forest Protection, Chinese Academy of Forestry, Chinese Science Institute of South China Botanical Garden, Sichuan Academy of Forestry, Yantai Municipal Group.

1 Scope

This regulation stipulates the background investigation of very small populations of wild plants, the location and method of field return, and the method of field return materials.

Preparation, field return and field return management, etc.

This regulation applies to the return of all wild plants of very small populations in my country.

2 Normative references

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

GB/T 6001 Technical Regulations for Nursery LY/T 2589 Guide to Return of Rare and Endangered Plants LY/T 2938 Principles and methods for the protection of very small populations of wild plants LY/T 2590 Technical Regulations for Seed Collection of Rare and Endangered Wild Plants GB/T 15576 Technical Regulations for Afforestation

3 Terms and definitions

"Terms and Definitions" in the "GB/T 6001, LY/T 2589, LY/T 2938, LY/T 2590 and GB/T 15576" boundary the following terms and definitions apply to this standard.

3.1 Reintroduction

For the purpose of biodiversity conservation, re-introduction of the species' reproductive materials into the in situ the long-lived self-sustaining population can eventually participate in the ecological process of the wild biological community and become the local biological community Part of the state system.

3.2 Reintroduction source

Contribute to the provenance of return materials for the field return. Including contribution of seeds, seedlings and other propagules or organs for return Provenance of other materials.

3.3 Wild destination area for reintroduction

Return to the field or place where the material will finally be colonized.

3.4 Enhanced regression reinforcement

Increase the number of provenance populations used for return and the number of introduced individuals among different populations in the existing distribution areas of returning species, Thereby increasing the genetic diversity of returning populations in the wild, improving the viability of returning populations, and achieving protection of very small populations of wild plants purpose.

3.5 Re-establishment

The distribution of this species has existed in history, but the populations that have disappeared in reality, through direct seeding or transplantation of new species propagated in the nursery. Introduce organisms that have returned to the wild to rebuild the disappeared populations.

3.6 Conservation reintroduction

From the perspective of biodiversity conservation, in suitable areas outside the existing and historical. According to the global climate change law, the species is introduced, and a new population of returning species that can be self-sustained and renewed in the wild is created.

4 Principles and objects of field regression

4.1

The principle of field regression (1) Do not damage or disturb the native population and its habitat;

(2) When conditions are met, choose different return locations in the wild to establish multiple wild populations, and the genetic background of different populations is clear.

Indeed

(3) Local provenance should be adopted for each return site in the wild. If the local provenance has completely disappeared, the adjacent provenance shall be adopted;

(4) Try to create conditions to carry out various types of field returns;

(5) Give full play to the role of artificial tending in return to the wild.

4.2 Field return objects

Return objects are all plants in the list of very small population wild plants. For details, please refer to the "National Very Small Species Schedule 1 List of Protected Plants in Very Small Populations of the Implementation Plan for Rescue and Protection of Wild Plants.

5.1 Background survey of returned species in the wild

Comprehensively collect field data of regressed species, and carry out background surveys of regressed species' wild resources, including habitat and community characteristics for other indicators, refer to LY/T 2938 for the background survey area. Refer to Appendix A for the specific content of the background questionnaire.

5.2 Survey of requirements for field return

Collect all aspects of information related to survival in the wild, including seed dispersal mechanism, seed germination conditions and habitat Conditions, natural renewal capacity, symbiosis, pests and diseases, etc.

5.3 Selection of regression type

According to the biological characteristics and distribution patterns of wild plants of different very small populations, wild plants of very small populations return to the field.

For enhanced regression, reconstruction regression and conservation regression.

5.3.1 Conditions for selecting enhanced regression

- (1) There are factors of population reduction in the natural distribution area of the returning species (the number of populations is too small, the ratio of male to female Imbalance, unreasonable age structure) controllable population;
- (2) The current distribution area of the population has the conditions to carry out the return. After the implementation of the return project, the population will no longer face continuous the threat of continued decline.

5.3.2 Implementation conditions of reconstruction regression

- (1) The main factors leading to population extinction in the existing distribution area are uncontrollable, and suitable habitats exist in the historical distribution area;
- (2) The site has the basic conditions for carrying out the return, and after the return project is implemented, the species no longer faces population numbers the threat of continuing to decline.

5.3.3 Implementation conditions for conservation regression

- (1) There is a field return site that meets or is more suitable for its growth and development outside its current and historical distribution range, and at the same time the site also has the conditions to control the factors that lead to population reduction and provide effective management solutions;
- (2) Outside the existing and historical distribution area of the returning species, a new one can be self-sustained and renewed, and at the same time A population with a certain ecological function in the homecoming community.