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

LY/T 1840-2020

Replacing LY/T 1840-2009

Technology regulations of vegetation restoration in karst zone

喀斯特地区植被恢复技术规程

(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 replaces LY/T 1840-2009 "Technical Regulations for Vegetation Restoration in Karst Rocky Desertification Areas". Main techniques except for editorial changes the changes are as follows.

- Modified the scope of application of the standard (see 1.2);
- Modified normative reference documents (see 2);
- Modified the definition of Karst (see 3.1);
- Revised the principles of vegetation restoration (see 5);
- Modify the principles of seed use (see 7.3.1);
- Revised the principles for the use of seedlings (see 7.3.2);
- Modified afforestation density (see 7.6);
- Deleted the related content of facility forestry and intensive economic forest (see 2009 version 7.9.4);
- Added Appendix C species and listed the corresponding Latin in Appendix D (see Appendix C, D).

This standard was proposed by the State Forestry and Grassland Administration.

This standard is under the jurisdiction of the National Standardization Technical Committee for Desert Control (SAC/TC 365).

The units responsible for drafting this standard. Research Institute of Subtropical Forestry, Chinese Academy of Forestry, South China Agricultural University, Guizhou Forestry Research Institute Research Institute, Puding County Forestry Technology Extension Station, Guangzhou Greening Company.

1 Scope

1.1

This standard specifies the definition, classification and classification of land rocky desertification related to vegetation restoration in karst areas in my country, as well as the principles of vegetation restoration.

Rules, vegetation restoration methods, artificial afforestation, closure of mountains for afforestation, inspection and acceptance, and technical file establishment, etc. and related requirements.

1.2

This standard is applicable to the vegetation restoration of rocky desertified land in tropical and subtropical karst areas 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 article. For undated references, the latest version (including all amendments) applies to this document.

GB 2772 Forest Seed Inspection Regulations GB 6000 Seedling quality classification of main afforestation tree species GB 7908 Forest Seed Quality Classification GB/T 15163 Technical Regulations for Closing Hills (sand) for Forestation GB/T 15776 Technical Regulations for Afforestation GB/T 18337 Ecological public welfare forest construction (all parts) LY/T 2829 Technical Regulations for Afforestation of Rocky Desertification Mountain Economic Forest

3 Terms and definitions

The following terms and definitions apply to this standard.

Karst

Karst is also called karst. The dissolution of rocks caused by the combined action of water and CO₂ on soluble rocks such as carbonate rocks is called karst operations.

This effect and the resulting landforms are collectively called karst.

Rocky desertification Under the natural background of karst development in tropical and subtropical humid and semi-humid areas in my country, due to the interference of natural and human activities, land surface vegetation is destroyed, causing serious soil erosion, large areas of bedrock are exposed, gravel accumulation, land productivity decline or even loss, the surface is the phenomenon of land degradation and even disappearance of desertified landscape.

Rock desertification rate the rocky desertification rate refers to the proportion of the surface rock area that is not covered by vegetation in a unit area.

Seasonal karst rock desertification the rate of rocky desertification in rocky desertification shows seasonal fluctuations.

4.1 China's rocky desertification regionalization

According to the characteristics of karst distribution, zonal climate, geomorphology and karst geomorphology in my country, the tropical and subtropical karst the rocky desertification area in the special area is divided into 4 first-level division units and 13 second-level division units, see Appendix Table A.1.

4.2 Land Classification

The land in the karst area is divided into two categories. rocky desertification land and non-rocky desertification land.

4.2.1 Rocky desertification land

Rocky desertification land is defined as the rocky bareness $\geq 30\%$ and meets one of the following conditions.

- a) Woodland and shrubland where the comprehensive vegetation coverage is less than 50%;
- b) Grassland with comprehensive vegetation coverage $< 70\%$;
- c) Unforested afforestation land, sparse forest land, non-standing forest land, suitable forest land, unused land;
- d) Non-terraced dry land.

4.2.2 Land without rocky desertification

Non-rocky desertification land is divided into potential rocky desertification land and non-rocky desertification land.

4.2.2.1 Potential rocky desertification land

The rock exposure degree is $\geq 30\%$ and meets one of the following conditions as potential rocky desertification land.

- a) Woodland and shrubland with comprehensive vegetation coverage $\geq 50\%$;
- b) Pastures with comprehensive vegetation coverage $\geq 70\%$;
- c) Terraced dry land.

4.2.2.2 Non-rocky desertification land

Those that meet one of the following conditions are non-rocky desertification land.

- a) Forest land, shrub forest land, sparse forest land, unforested land, non-standing forest land, and suitable forest land with rock exposure less than 30%; dry land;

Grassland; unused land;

- b) Forest land such as nursery land and forest auxiliary production land; paddy field; construction land; water area.