

ICS 01.040.65
CCS B 60

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

LY/T 3180-2020

**Technical regulations for soil remediation of degraded
forestlands in the dry and dry-hot valley regions in China**

干旱干热河谷区退化林地土壤修复技术规程

(English Translation)

Issued on: March 30, 2020

Implemented on: October 1, 2020

Issued by: State Forestry and Grassland Administration

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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.

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Technical Regulations for Soil Remediation of Degraded Forest Land in Arid and Dry Hot Valley

1 Scope

This standard specifies the technical regulations for soil remediation of degraded forest land in arid and dry hot valleys, including remediation principles, tree species selection, site preparation, seedlings Technical requirements for wood and seed quality, seedling and direct seeding afforestation, tending and management, pest control and file management.

This standard is applicable to soil restoration of degraded forest lands in dry and hot regions of 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 Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB 6000 Seedling quality classification of main afforestation tree species GB 7908 Forest Seed Quality Classification GB/T 15776 Technical Regulations for Afforestation GB/T 15781 Forest Tending Regulations LY/T 1880 Woody Plant Seed Germination Technology

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Degraded forestland

The sparse forest land formed due to severe disturbances such as logging and geological disasters presents difficulties in vegetation restoration and regeneration, and the soil humus layer is barren and the soil There are phenomena such as compaction, desertification, and barrenness.

4.1 Repair principle

Follow the principle of ecological restoration, give full play to the role of nitrogen-fixing broad-leaved trees in soil improvement, soil restoration, water and soil conservation, etc., and promote the restoration of degraded woodland soil and the positive succession of communities in the dry and hot valley regions can achieve the purpose of restoring the degraded soil.

4.2 Tree species selection

Priority is given to good native drought-tolerant, nitrogen-fixing broad-leaved trees or shrubs. See Appendix A for their types and suitable habitats.

4.3.1 Site preparation time

One month before winter or afforestation.

4.3.2.1 Cave-like site preparation

Applicable to various tree species and site conditions. Select suitable areas for afforestation tree species, and arrange planting holes along the contours so that the hole faces are inclined inward and slope the surface is at an angle of 10°~20°, and the specifications of the planting holes vary with forest types, seedling specifications and site conditions.

4.3.2.2 Site preparation for fish scale pits

Suitable for river valleys and steep slope areas. The fish-scale pits are approximately half-moon-shaped pits, the size of which varies with forest species, seedling specifications and site conditions.

High and low, the long diameter expands along the contour, and the short diameter is slightly smaller than the long diameter.

4.3.2.3 Ditch land preparation

Suitable for land preparation for afforestation. Dig planting trenches in the planting row, dig pits for planting in the trenches at a certain pitch, and keep the trenches for a long time.

4.3.2.4 Catchment and land preparation

Suitable for flat afforestation land. Trench the ditch in a relatively flat afforestation land, turn the soil on both sides of the ditch, mound the sides of the ditch to form side slopes, and then drive in the ditch.

Horizontal ridge, a certain area of double-sided slope catchment area enclosed between two side slopes and two horizontal ridges.

4.4 Quality of seedlings and seeds

4.4.1

The quality requirements of afforestation tree species seedlings shall be implemented in accordance with GB 6000, and level I and II seedlings shall be selected. For attachments not covered in GB 6000 for the tree species in record A, choose seedlings that are robust, well-developed, free from pests and diseases, and without mechanical damage.

4.4.2

The quality requirements for direct seeding afforestation seeds shall be implemented in accordance with GB 7908, with I and II seeds selected. For attachments not covered in GB 7908 for the tree species listed in A, choose mature, full-grained, and vigorous seeds.

4.5.1 Seedling method

4.5.1.1

For bare-rooted seedlings, the seedlings should be kept upright when planting, the planting depth should be appropriate, the roots of the seedlings should be fully extended, and it is conducive to drainage and Store water to protect moisture.

4.5.1.2

For container seedlings, hole planting is adopted, and the planting hole should be slightly larger than the container size. When planting, the containers that are not easily degradable should be removed.

4.5.2 Planting density of seedlings

See Appendix A.

4.5.3 Afforestation time

Forestation in the rainy season. Container seedlings and seedlings with soil tufts can be planted in all seasons outside of the soil freezing period.

4.5.4 Mixed forest configuration

Mixed methods such as row, block, and random configuration can be adopted, and the number of individual tree species accounts for less than 50% of the total number of afforestation.

4.5.5 Requirements for replanting

Seedling planting refers to the regulations of GB/T 15776. When the survival rate is less than 85%, replanting should be carried out.

4.6.1 Germination method

The seed germination of afforestation tree species shall be implemented in accordance with LY/T 1880 and Appendix A.

4.6.2.1 Holecasting

A few (large seeds) to dozens (small seeds) are sown evenly into the planting hole, and then covered with soil to suppress. The thickness of the covering soil is straight for the seeds 2 to 3 times the diameter, the thick soil can be thinner, sandy soil can be thicker.

4.6.2.2 Drilling

Sow the seeds in single or double rows on the sowing belt, continuously or intermittently, and put the seeds in the soil or cover the soil to suppress them. The thickness of the covering soil should be the diameter of the seed 3 times to 5 times, clay soil can be appropriately thinner, sandy soil can be appropriately thicker.