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Technical regulations of cultivation for *Prunus mume*

梅花培育技术规程

(English Translation)

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Foreword

This standard is formulated in accordance with GB/T 1.1-2009 "Guidelines for Standardization Part 1: Standard Structure and Compilation".

This standard was proposed and managed by the National Flower Standardization Technical Committee (SAC/TC282).

The main drafting organization of this standard. Beijing Forestry University.

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1 Scope

This standard specifies the selection and planning of the nursery for the cultivation of plum (*Prunus mume*), the selection of varieties, the arrangement of the nursery, and the propagation of seedlings.

Technical requirements for breeding, seedling planting, soil, fertilizer and water management, plastic pruning, pest control, and seedling out of the nursery.

This standard applies to the open field cultivation of plum blossoms.

2 Normative references

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

GB 3095 Ambient Air Quality Standard GB/T 4285 Standards for safe use of pesticides
GB/T 5804 Water Quality Standard for Farmland Irrigation GB/T 6001 Technical
Regulations for Nursery GB/T 8321 Guidelines for the rational use of pesticides GB 15618
Soil Environmental Quality Standard GJ/T 34-1991 Plant materials for urban
landscaping--woody seedlings NY/T 496-2002 General Rules for the Reasonable Use of
Fertilizers SZDBZ 225-2017 Technical Specification for Soil Improvement of Urban Green
Space

3.1.1 Basic conditions

The location of the nursery should choose a place with convenient transportation, irrigated water source, stable power, communication and other infrastructure. plum the environmental air quality of the park should meet the requirements of GB 3095.

3.1.2 Topography

For nursery construction in plain areas, the topography should be flat, the natural slope should not be greater than 3 degrees, and the place with good drainage; mountain and hilly land the area should choose a gentle slope at the foot of the mountain, and the slope should not be greater than 5 degrees. In areas prone to freezing damage in winter and spring, the southern slope or the southeast slope should be selected;

In warm areas, where there is no cold north wind in winter and a large lake on the north side, the north slope should be selected; in high mountain areas, the middle part of the hillside should be used to build a nursery.

It is not suitable to build a nursery at the bottom of the basin.

3.1.3 Soil type

The soil of the nursery should be selected with agglomerated structure, fertile sandy loam or light-grained loam, the thickness of the soil layer should be greater than 90 cm, pH 5~8.

The soil quality should meet the requirements of GB 15618.

3.1.4 Source water quality

The nursery should choose a place with sufficient water source, the salt content in the water should not exceed 0.15%, and the groundwater level of sandy soil should be below 1 m.

Sandy loam soil should be less than 2.5 m, and cohesive loam soil should be less than 4 m. The water quality should meet the requirements of GB/T 5804. Annual rainfall 500 mm~1600 mm is the most suitable place to build a nursery. The drainage system should be paid attention to in areas where the annual rainfall is higher than 1600 mm or when the rainfall is concentrated.

Design; areas where the annual rainfall is less than 500 mm or dry seasons should pay attention to irrigation system design.

3.1.5 Light

The nursery should be built in a place with sufficient sunlight. The relative illuminance should not be lower than 70%~80% of the daily average natural light.

3.2 Nursery planning

The planning of the nursery should be done according to the purpose of building the nursery and the characteristics of the site. Nurseries should be divided into production areas (including breeding areas, small seedling areas, large Seedling area, mother tree area, introduction and domestication area), management area, road system, irrigation and drainage system, etc. See GB/T 6001 for specific planning;

The light-type nursery should add tourist service areas, service facilities, and tour sign explanation systems.

4.1 Principles of Variety Selection

Appropriate plum varieties should be selected according to regional climate characteristics, soil types, cultivation purposes, and market needs.

Areas with an average annual temperature of 15 °C~18 °C are suitable for the growth of most plum varieties, and areas with an average annual temperature of 22 °C or higher should choose a low for varieties with low temperature and cold demand, cold-resistant

plum varieties should be selected in areas where the annual average temperature is lower than 5 °C ~ 12 °C, and the areas where the average annual temperature is lower than 5 °C the district should not establish an open plum garden.

4.2 Suitable varieties for the main cultivation areas of plum

Refer to the informative appendix A for suitable and excellent plum varieties in various regions.

5.1 Site preparation before nursery

The land should be prepared before seedling cultivation. The contents of land preparation include plowing, raking, leveling, and suppression, so as to achieve deep ploughing and fine-tuning. The slope should follow the contour line Land preparation; the drainage slope of flat ground should not be less than 0.3%. The poor soil should be combined with soil preparation for fertilization and soil improvement.

The rules and fertilization amount should comply with the regulations of NY/T 496-2002. For specific methods of soil improvement, see SZDBZ 225-2017. Should be Carry out the necessary soil disinfection treatment according to the soil properties of the site conditions, and see the informative Appendix B for commonly used soil disinfectants.

5.2 Seedbed preparation

See GB/T 6001 for specific requirements of seedbed.

6.1 Sowing and breeding

Mainly used for the breeding of new plum varieties and rootstock propagation. After the fruit is mature, the seeds are collected, the seeds are washed out, dried and then sown in the bag in autumn;

Or use stratification treatment 90 days before planting in early spring. When seeding in plug trays, one seed per hole; when sowing seedlings in field ridges, every 10 cm Sow a grain.

6.2 Post-broadcast management

Cover with mulch film after sowing in dry areas, and tear off the mulch film when the seeds germinate; when there is no mulch film, strengthen water management and weed control. Transplant after 1 year with a transplanting density of 1.5 m x 1.5 m, and transplant again after 3 years with a transplanting density of 3 m x 3 m. With refer to GB/T 6001 for physical management.