

ICS 65.020.20
CCS B 62

LY

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

LY/T 3174-2020

Technical regulations for cultivation of Hibiscus syriacus

木槿培育技术规程

(English Translation)

Issued on: March 30, 2020

Implemented on: October 1, 2020

Issued by: State Forestry and Grassland Administration

Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and definitions
4 Seedling cultivation
4.1 Garden selection
4.2 Cutting seedlings
4.3 Post-plug management
4.4 Large seedling cultivation
4.5 Nursery stock delivery and transportation
5 Pest control
5.1 Timely weeding
5.2 Main pests and diseases and control methods

Foreword

This standard is compiled in accordance with the rules given in GB/T 1.1-2009.

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

This standard is under the jurisdiction of the National Flower Standardization Technical Committee (SAC/TC 282).

Drafting organizations of this standard. Kaifeng Academy of Agriculture and Forestry Sciences, Paulownia Research and Development Center of State Forestry and Grassland Administration, Pingdingshan City Gardens Chemical Center, Nanyang City Baihe National Wetland Park Management Office, Xinxiang City People's Park, Kaifeng City Liuyuankou Provincial Wetland Nature Reserve Management Station, Xinzheng Forestry Bureau, Xinmi Forestry Bureau, Kaifeng Vegetable Research Institute, Kaifeng Xiangfu District Agriculture and Rural Bureau, Neixiang County Agricultural Technology Promotion Wide center.

1 Scope

This standard specifies hibiscus seedling cultivation and pest control technology.

This standard applies to the cultivation and management of hibiscus seedlings.

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/T 6001 Technical Regulations for Nursery GB/T 8321 Guidelines for the rational use of pesticides GB/T 15063 compound fertilizer (compound fertilizer) LY/T 2290 Forest Tree Seedling Label NY/T 496 General Rules for the Reasonable Use of Fertilizers

3 Terms and definitions

The following terms and definitions apply to this document.

Single trunk shape

The tree has a distinct central trunk.

Shrub shape

The tree has no obvious central main stem, and multiple main branches occur close to or directly on the ground.

4.1 Garden selection

It is advisable to choose loam or sandy land with deep soil layer and fertile soil, which requires flat terrain, sufficient sunlight, convenient irrigation and drainage, and convenient transportation.

4.2.1 Land preparation and bed making

Remove debris before soil preparation, spread basic fertilizer, and apply fully decomposed organic fertilizer 3 m³~5 m³ and 45% NPK ternary compound fertilizer 50 kg per 667 m².

Deep plowing and rake leveling. In the arid plain area, a low bed with a width of 150 cm to 200 cm, a ridge of 30 cm wide and unlimited border length, is suitable for convenient management.

The Huaihe River Basin and the area to the south where there is more rain can be made into a high bed with a width of 100 cm~120 cm, a height of about 20 cm, a walkway width of 30 cm, and a bed length no more than 20 m. Water after making the bed. The fertilizer used should comply with the regulations of GB/T 15063 and NY/T 496, and the bed should comply with the regulations of GB/T 6001.

set.

4.2.2 Cutting time

Before the buds of the hibiscus tree sprout in spring.

4.2.3 Cutting preparation

Before germination, select 1-year-old branches with a diameter of 0.5 cm to 1.5 cm on the mother tree, cut cuttings 10 cm to 15 cm in length, and leave 3 for each cutting.

One to five full buds, with a flat stubble on the top and an oblique stubble on the bottom. It should be picked and inserted.

4.2.4 Cutting density

Plant spacing is 8 cm~10 cm, row spacing is 15 cm~20 cm.

4.2.5 Cutting method

Cover the seedling bed with mulch and compact the surrounding area with soil. Use a wooden stick to insert a pre-hole according to the spacing of the plants, and then insert the cuttings straight into the hole, deep into the soil the degree is 2/3 of cuttings. Fill the cuttings with water immediately.

4.3.1 Fertilizer and water management

Promote integrated management of water and fertilizer. From March to May, before the new roots of the cuttings are released, keep the soil moist but not accumulate water, and then according to the soil moisture and Water and drain regularly. During the fast-growing period of seedlings from June to August, apply fertilizer once a month or so, and apply 5 kg of high-nitrogen water-soluble fertilizer every 667 m² in June and July.

10 kg, 5 kg~10 kg of NPK balanced water-soluble fertilizer per 667 m² in August. Spray 3 to 4 times of foliar fertilizer during the growing season, preferably dihydrogen phosphate Potassium 0.1%~0.2% solution.

4.3.2 Field loosening

After the rain and after the nursery is irrigated, the soil is plowed and loosened in time.

4.3.3 Wipe buds

When the buds are more than 10 cm long, start to wipe the buds and leave 2 to 3 at the first time; when the buds are about 20 cm long and the base is lignified, choose to leave a healthy bud.

Strong bud cultivation.

4.4.1 Transplanting

It is advisable to transplant the seedlings in autumn after falling leaves or before germination in spring. The row spacing is (1.2~1.5)m $\times$ (1.2~1.5) m.

4.4.2 Field management

Water back to green water and frozen water every early spring and early winter, and water in time according to soil moisture during the growing season. After heavy rain or continuous rainy days, and when removing stagnant water. Apply urea once in May and July each year, fertilize 5kg-15 kg per 667 m²; in August, apply 45% NPK ternary compound for every 667 m² Hefei 5 kg ~ 15 kg. Top dressing should be applied in furrow, and the depth of furrow is 20 cm~30 cm. The fertilizer used should meet the requirements of GB/T 15063.

4.4.3.1 Single stem shaping

Fixed stem. According to the cultivation goal, the fixed stem should be 0.8 m~1.2 m above the ground after transplanting. If the seedlings cannot reach the fixed height, they should be 10 cm away from the ground Flat stubble left and right to promote a strong backbone, and then decide when the backbone meets the requirements.

The first year. After setting the stem, more than 3 main branches with different growth directions are promoted at 20 cm~30 cm under the cut. The dormancy period is short for the main branch Cut off and leave 2 to 3 side branches on each main branch.

Second year and beyond. In summer, the upright branches in the crown and the sprouting tillers at the base are removed, and the flowering branches are retracted in time after flowering. Main branch and lateral branch back in winter Shrink and renew, thin out dense branches and dead branches with pests and diseases in the inner chamber, and release strong flowering branches slowly.

4.4.3.2 Multiple stem shaping

Flat stubble. Leave 5 cm~10 cm flat stubble after transplanting.

The first year. Keep more than 2 robust shoots and cultivate them into the main trunk. In the dormant period, each trunk is cut short, and each trunk is selected to leave 2~ 3 main branches.

The management of the second year and beyond is the same as 4.4.3.1.

4.5.1 Seedlings leaving the nursery

The seedlings should be released from the nursery in the autumn after the leaves are fallen or before the spring germination. Irrigate thoroughly 3 to 10 days before leaving the nursery.