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

LY/T 3175-2020

**Technical regulations of seedling cultivation for *Sambucus
williamsii* Hance.**

接骨木培育技术规程

(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 was proposed by the State Forestry and Grassland Administration.

This standard is under the jurisdiction of the National Forest Seed Standardization Technical Committee (SAC/TC115).

Drafting organizations of this standard. Henan Academy of Forestry, Shandong Academy of Forestry, Jiyuan Forestry Research Institute, Henan Karlov Gardening Co., Ltd., Henan Grand Municipal Garden Technology Co., Ltd.

1 Scope

This standard specifies suitable areas for elderberry (*Sambucus williamsii* Hance.), sowing seedlings, cutting seedlings, grafting seedlings, Cultivation of large seedlings, nursery and grading of seedlings, file management, directional cultivation, and pest control.

This standard applies to the cultivation of elderberry in suitable areas.

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 5084 Farmland Irrigation Water Quality Standard GB/T 6001 Technical Regulations for Nursery GB/T 8321 (all parts) Guidelines for the rational use of pesticides GB/T 15776 Technical Regulations for Afforestation NY/T 1276 General Rules for the Safe Use of Pesticides LY/T 2289 Forest Tree Seedling Production and Management File LY/T 2290 Forest Tree Seedling Label LY/T 2452 Elderberry Cultivation Technical Regulations

3 Suitable area

Northeast, North China, Central China, East China, Northwest to Gansu, Southwest to Yunnan, below 1600 meters above sea level, annual rainfall of 500 mm~1500 mm, the area where the annual average temperature is 0°C~17°C, and the minimum temperature $\geq -40^{\circ}\text{C}$.

4.1 Fruit harvest

It is advisable to choose a good single plant or mother forest with strong growth, vigorous tree vigor, and no pests and diseases, and harvest when the fruits are fully mature from June to July.

4.2 Real treatment

Remove the sundries from the picked fruits, rub the pulp off, rinse the seeds repeatedly with clean water, take out the seeds, soak the seeds with 0.5% alkaline water for 30 minutes, and then use clean water.

Wash the seeds repeatedly with water. Seeds are selected from the water, and they are spread out in a ventilated place to dry, and are numbered and stored for later use.

4.3 Seed sand deposit

Spring sowing seeds need to be stored in sand. Before the soil is frozen (from late October to mid-November), the seeds should be soaked and disinfected with 2 per mille potassium permanganate solution for 0.5 h, remove and wash, soak the seeds in 40 °C warm water for 24 h, mix them with 3 times the seed's fine wet river sand and put them into the sand storage pit. Sand Pit Selection Choose a dry place with a leeward wind and sunny, with a depth of 50 cm~60 cm and a width of 1 m. The length depends on the number of seeds. The bottom layer is wet sand with a thickness of 15 cm.

~20 cm, the middle layer of seeds and wet sand are evenly mixed and then spread flat, the thickness is 15 cm~20 cm, the upper layer is covered with wet sand, the thickness is 20 cm, every 100 cm Set up a little straw or plastic pipe to ventilate. The wet sand used is kept moist and then held into a ball, which will disperse when touched. The sand will be hidden until early March of the following year.

It can also be stored in cold storage.

4.4 Selection of nursery

It is advisable to choose a plot with a sunny leeward, flat terrain, and good drainage and irrigation conditions, preferably loamy soil or sandy loam with a pH of 5.6 to 8.5.

4.5 Ground preparation for bed

The soil should be prepared before seedling cultivation, including plowing, harrowing, leveling, plowing depth of more than 25 cm, deep plowing and fine trimming, removing grass roots and stones, and leveling the ground. Combine tillage and apply 2000 kg~2500 kg of decomposed organic fertilizer and 30 kg~50 kg of compound fertilizer per 667 m², and carry out soil disinfection at the same time for treatment, 30 kg of ferrous sulfate is applied per 667 m², and the bed is flattened.

In rainy areas in the south, a high bed with a height of 20 cm ~ 30 cm should be used, and a flat bed or a low bed in the north, with a bed width of 1 m ~ 1.2 m, with sole water.

Prepare for sowing. Other measures shall be implemented with reference to GB/T 6001.

4.6.1 Germination

When sowing in spring, take out the seeds in the sand before sowing, and place them in a greenhouse at about 20 °C to germinate, and sow when about 1/3 of the seeds are white.

4.6.2 Sowing time

Sowing in autumn, from early September to mid-November; sowing in spring, from mid-to-late March to mid-April.

4.6.4 Sowing method

7 d to 10 d before sowing, the nursery is flooded with water. It is suitable for planting, the row spacing is 15 cm~20 cm, and the seeding depth is 1 cm~2 cm.

4.7 Post-cast management

After sowing, cover the grass curtain and spray water in time to keep the bed soil moist. When the emergence rate is about 50%, remove the grass curtain in time.

4.8.1 Thinning and setting seedlings

Thinning is carried out when the seedling height is 10 cm~15 cm, the dense seedlings and the diseased and weak seedlings are removed, and the plant spacing is 10 cm~15 cm.

4.8.2 Irrigation

Seedlings should be watered in time depending on the soil moisture during the growth period. Sprinkler irrigation should be used before the height of the seedlings is 10cm. Pay attention to drainage and flood prevention during the rainy season. Irrigation water According to GB 5084.