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

LY/T 3109-2019

**Technical Regulations on Establishment of Seed Orchard for Oil
Tree Peony**

油用牡丹种子园建设技术规程
(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 and managed by the National Flower Standardization Technical Committee.

This standard was drafted. Forestry Research Institute, Chinese Academy of Forestry, Shandong Guanyu Peony Industry Development Co., Ltd., Zhongchuanmu, Gansu Dan Industry Co., Ltd., Shanxi Luanzhihua Agriculture and Forestry Technology Co., Ltd.

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Technical regulations for the construction of oil peony seed orchard

1 Scope

This standard specifies the selection of peony varieties for oil use, the planning of seed orchards, the construction of seed orchards, the management of seedlings, the management of seedlings, the control of diseases and insect pests, Technical content and requirements for actual harvesting and processing, file management, etc.

This standard applies to the construction and production management of oil peony seed orchards cultivated in the open field.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

LY/T 2958-2018 Technical regulations for peony cultivation in oil LY/T 2280-2018 Forest tree seedling production and operation file

3.1 Variety selection criteria

See LY/T 2958-2018 Chapter 4 of the Technical Regulations for Oil Peony Cultivation.

The specific requirements are. the plant height is more than 80 cm, the plant shape is open or semi-open, and the number of flowering per plant in the high yield period is more than 10, the number of fruit pods per aggregated capsule reaches more than 5 and the length of the fruit pod is more than 6 cm. The number of seeds in each fruit pod reaches more than 10 seeds.

Thousand kernels are larger than 280 g, and the oil content of seeds is greater than 20%.

3.2 Recommended varieties

Fengdan (*Paeonia ostii*) series, purple spotted peony (*P.rockii*) series of oil peony varieties, and other species with higher seed set rate or Variety.

4.1.1 Region selection

In the range of 26 ° North to 46 ° North Latitude, choose to build in the area of oil peony production area or the area with similar ecological environment as the oil peony production area.

Park; the area near 26 ° north latitude must be higher than 300 m. Convenient transportation, not easy to be infected by pests.

4.1.2 Site conditions

Choose woodland with high dry terrain, wide ventilation, sunny and side shade. Good drainage, deep, loose and fertile soil, and not planted Pass peony or paeonia, loam or sandy loam with pH value 6.5 ~ 8.0.

4.1.3 Isolation of exogenous pollen

Use natural fields, gullies or artificially set pollen isolation belts of 1000 m to 1500 m wide.

4.2 Scale requirements

According to the actual production of oil peony, the construction scale of the seed garden should be above 10 hm².

4.3.1 Seed production area

The entire seed production area is divided into several large areas, and several small areas are established under the large area. According to local conditions, it can be divided into positive Square or rectangular; plots can be divided according to aspect, position, and ridge. Roads or fire lanes should be set up between the districts with a minimum width of 5 m.

To facilitate transportation. A walkway or board lane with a width of about 2 m can be set in the small section to facilitate the passage of the seed garden constructors and vehicles.

4.3.2 Seed Processing Area

Including sundries, threshing and purification sites, drying towers, seed storage, etc. Not more than 2% of the total area of the park.

4.3.3 Office Management Area

The floor space of office buildings does not exceed 1% of the total area of the park.
Economical and practical, reasonable layout.

5.1 Configuration Design

Choose a completely random arrangement or random block arrangement to ensure cross pollination as much as possible.

5.2 Site preparation

The soil is turned 30 cm to 40 cm deep, the rake is thin and leveled, and the deep trench height is made according to the row. The stern surface is curved to facilitate drainage. Kasama Trail (concurrently (Drainage ditch) is about 50cm deep and wide, and the width is 2.0m ~ 3.0m. Apply 150 kg ~ 200 kg of perishable cake fertilizer per acre, compound 40 kg ~ 50 kg Manure is the bottom fertilizer, and depending on the soil condition, 1500 kg to 2000 kg of manure can be added. Apply both soil pesticides and fungicides.

5.3 Selection

See LY/T 2958-2018, Chapter 6.1 of the Technical Regulations for Oil Peony Cultivation.

5.4 Seed processing

Before sowing, soak seeds in warm water at 40 ° C to 50 ° C for 1 d to 2 d, or soak seeds in normal temperature water for 3 d to 4 d, and change water once a day. After soaking, place water Remove the noodles that are floating. Before sowing, you can use fungicides (carbendazim, methyltobutin, etc.) to dress seeds.

5.5 Sowing time, method and quantity

Carry out according to Chapter 6 of LY/T 2958-2018 Oil Peony Cultivation Technical Regulations.

5.6 Grafting

Collect the buds or annual branches of the year as scion, and use the real rootstocks of Fengdan peony varieties of 2 ~ 3 years, cut or split the method is carried out from late August to mid-October each year when the ground temperature is 5 to 10 cm underground at 20 to 15 °C.