



Lundbygaard FP 1000

GEOGRAPHY

The seed orchard consists of 17 carefully selected clones, all increasing the quality of the offspring with more first quality trees and better health. The genetic basis of the seed orchard originates from Silkeborg Nordskov FP 259, which is grafted from the old Tversted seed stand planted in 1904. The original genetic material is perceived to be from the Borjomi area in Georgia. The seed orchard is located on Lundbygaard Estate in Southern Zealand. The altitude is 30 m. The stand is 4,5 acres grafted in 2007 and consists of 574 grafted trees.

TYPE, SHAPE AND GROWTH

The Tversted F526 and F527 seed stands, from which the clones originate, are characterized by a very attractive shape with beautiful branches, excellent needle position as well as large, soft needles. Tversted breaks buds quite late and is thus associated with low risk of late spring frost damage. The seed orchard consisted originally of grafts of 20 clones but 3 of the 20 clones was genetically thinned and the 17 remaining clones have been intensively tested for needle loss and Neonectria fungus leaving the orchard with a good prospects of producing very healthy seedlings.

RESEARCH AND EXPERIENCE

The clones from the seed orchard have all been tested

Form/natural shape Speed of growth **Branch angle** Winter hardiness Needle cover Time of flushing

at Copenhagen University and their breeding values are known. The progeny of the offspring can therefore be expected to have the following characteristics compared to Tversted F526 and F527. It is expected that the grower will obtain 14% more first quality trees compared to Tversted, the growth rate is somewhat slower and will require less work on regulation and shearing. On average, the offspring will be about 4 inches shorter (10 cm) than the Tversted F526 and F527 after a tree crop rotation. The width of the trees is correspondingly also smaller, resulting in narrower trees. The offspring of Lundbyggard FP1000 flushes later than Tversted and Ambrolauri, but only marginally. Likewise, the after-harvest quality is improved and tested, reducing the risk of needle loss.

SECURITY OF SUPPLY

The seed orchard has produced seeds at commercialscale since 2015. It is professionally managed for optimal seed quality and yield. This includes intensive pest management programs and optimal fertilization combined with frequent inspections. This means that the technical quality of the seed is very high with high germination rates and impressive vitality. The seed will provide an optimal basis for plants from the nursery to the Christmas tree grower.



