

Borjomi/Machartskali

GEOGRAPHY

The Borjomi/Machartskali Forest covers 2.500 ha. It is situated at 41.47.0 N and 43.36.04 E in the eastern part of the Borjomi-Bakuriani Forest District, recently formed by joining the 2 previously independent districts. The populations of *Abies nordmanniana* trees are quite concentrated, but not in pure stands. The stands are quite untouched and dense, wherefore seeds are abundant. The trees are located in an altitude from 1.300 to 1.500 m. Machartskali is situated about 11 km as the crow flies east of the central part of Borjomi/Nedzvi Forest, previously a collection area but now a nature park.

TYPE, SHAPE AND GROWTH

We have no secure data on full-grown Christmas trees originating from seeds from Borjomi/Machartskali. The first secure and documented harvest in the area was in 2007, conducted by Levinsen & Abies. This seed was purchased by a number of nurseries and first planting as Christmas tree stands was made in 2010/11.

Budding was in the nurseries quite similar to Borjomi/Nedzvi and Ambrolauri, and so the provenance is one of the later types. From the nurseries we have had no reports of deviating behavior in the transplants concerning appearance, size or growth. For now the material from Machartskali shows the same characteristics as we know from the other Borjomi provenances.

RESEARCH AND EXPERIENCE

We are unaware of any field trials that include material from Borjomi/Machartskali. However, since the area is situated in the same geographic area and not far away from Borjomi/Nedzvi, it is reasonable to expect, that the Machartskali material genetically is quite similar to the provenances Borjomi /Nedzvi and Borjomi /Akhdaba, which we do know a lot about from field trials. Data from the 210 transplants from 2009 confirm this assumption. However, whether at the end the Machartskali material can match the levels of Borjomi/Nedzvi and/or Borjomi/Tadzrici remains to be seen.

SECURITY OF ORIGIN AND DELIVERY

In September 2009 we managed to buy a 10 year license for the harvest of seeds in compartment 4 in the Machartskali Forest. By this, we have access to seed from both the northern and the southern part of the Borjomi-Bakuriani District as we also have a license for the harvest of seeds in compartment 28 in the Borjomi Tadzrici Forest, located in the southern part of the District.

Our collection of the seed in Machartskali Forest follows our usual procedure. For a long time we have set the standard for secure and traceable collections in well-defined collection areas and presence during the harvesting process. It ensures the further traceability through the cleaning process leaving no doubt about the security of origin for the end user.

WORTH KNOWING

The Borjomi provenance is well known and has been imported to Western Europe for a long time. The Danish orchards of *Abies nordmanniana* in Tversted, F 526 and F 527, are thought to originate from Borjomi. Next to Ambrolauri, Borjomi is the most celebrated of the Georgian provenances. Yet only about 10-15 % of commercialised Georgian *Abies nordmanniana* seed for use as Christmas trees come from Borjomi.



Cones on the trees in Marchartskali Forest, Compartment 4, October 2009.

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