

Buckwheat (*Fagopyron esculentum*)

Buckwheat (*Fagopyrum esculentum*) is a plant cultivated for its grain-like seeds and as a cover crop. Buckwheat is raised for grain where a short season is available, because it is used as a second crop in the season. Buckwheat has a growing period of only 10-12 weeks.

Nutritional value

- Gluten-free
- High in crude protein with high biological value
- Rich in B3, Mg, Mn, Fe, Ze, Se and P
- Rich in polyphenols, fagopyrin and aromatic compounds

Environmental impact

- Drought and heat resilient
- Water-energy efficient
- Does well on low-fertility or acidic soils
- Could mitigate stress

Uses

Several culinary uses, gluten-free, high potential to enter in the food value chain, high potential to incorporate in the consumers shopping basket.

Current status – Future perspectives

It can be grown in high latitude or northern areas (Russia, China, Ukraine, France, Kazakhstan, Germany).



Picture 1: Buckwheat seeds ready for use



Picture 2: Various products in the market are based on buckwheat

Buckwheat (*Fagopyron esculentum*)

Vertical Leader: Bioland Beratung GmbH BIOLAND



Estonian University of Life Sciences
(EMU) - Estonia

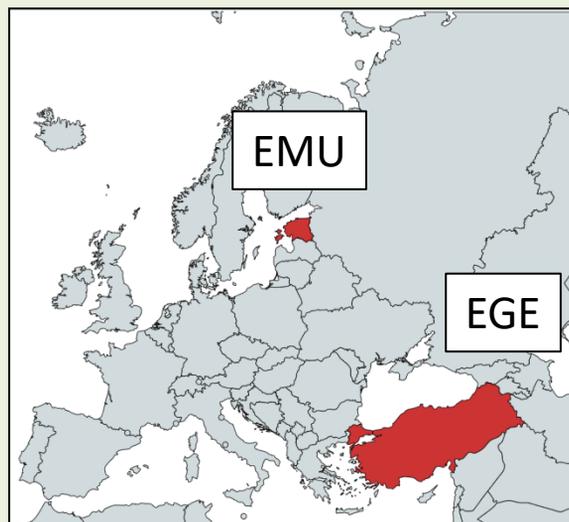


Ege University
(EGE) - Turkey

The two pilot cases' locations were selected for their high heterogeneity. The two locations can be compared with respect to different growing systems such as greenhouse versus field growth and conventional versus organic farming.

Estonia (EMU) is a northern European region within buckwheat's cultivation range. The crop is expected to grow without serious problems.

Turkey (EGE) is a typical Mediterranean country where environmental conditions are mild-warm, and buckwheat is expected to face difficulties during its cultivation.



Picture 3: Pilot cases' locations

Project progress

Plants from the two genotypes are cultivated to acquire seeds for the establishment of the pilot cases, according to **Task 7.1**.