

## Lentil (*Lens culinaris* and *Lens esculenta*)

The lentil (*Lens culinaris* or *Lens esculenta*) is an edible legume. It is an annual plant known for its lens-shaped seeds. It is about 40 cm (16 in) tall, and the seeds grow in pods, usually with two seeds in each.

### Nutritional value

- Low concentration of fat, calories, Na and absence of cholesterol
- Rich source of dietary fibers, folic acid and Mo
- Very good source of Cu, Fe, Mn and P

### Environmental impact

- Resilient to extreme conditions
- Water-energy efficient
- Resistant to diseases
- N- fixation from the soil
- Suitable for organic farming system

### Uses

Lentils are an essential ingredient in Mediterranean cuisine. In some areas, lentils are grounded and added to cereal flour to make bread, or porridge intended for baby food.

### Current status – Future perspectives

As a food crop, most of the world production comes from Canada, India, Turkey, Australia, United States, Kazakhstan, Nepal and Spain. It could be expanded in Northern Europe and Euro-Med countries.



Picture 1: Lentil plants



Picture 2: Lentil seeds

## Lentil (*Lens culinaris* and *Lens esculenta*)

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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.

**Norway (NIBIO)** represents a region where vegetables have to be grown under cover in controlled conditions due to the harsh climate.

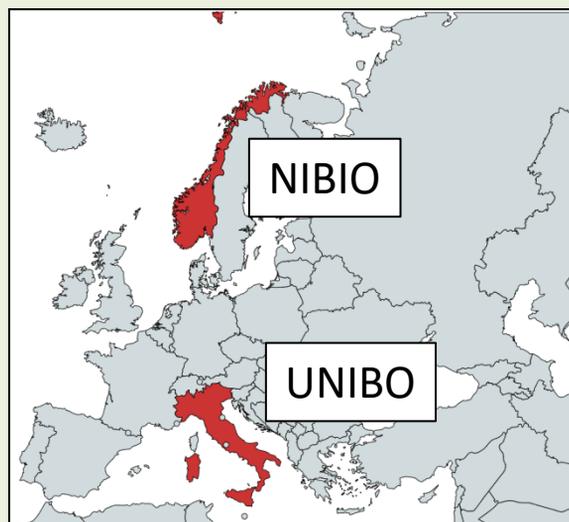
**Italy (UNIBO)** is a typical Mediterranean country where environmental conditions are mild. This location is ideal to test the crop's adaptation to southern European – Mediterranean conditions.

### Project progress

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



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**Picture 3:** Pilot cases' locations