

Lathyrus (*L. sativus*, *L. clymentum*, *L. orchus*)

Among different species, grasspea (*L. sativus*), chickling vetch (*L. cicera*), are largely cultivated and appreciated as both food and fodder. *L. orchus* and *L. clymentum* are two promising crops which could be used as forage feed and food allowing soil N-enrichment and reducing inputs and environmental effects.

Nutritional value

- High in crude protein
- Protein-rich
- Minimal calories
- Natural dietary fibres

Environmental impact

- Resilient to extreme temperatures
- Resilient on low-fertility soils
- Water-energy efficient
- N- fixation from the soil
- Cover crop

Uses

It should not be consumed in large quantities (because it contains a neurotoxin) and is mainly used as an ingredient in traditional foods.

Current status – Future perspectives

It is widely distributed, in restricted areas, in the Mediterranean Basin and in temperate as well as tropical countries. It could be expanded in arid areas in Europe.



Picture 1: Lathyrus plant



Picture 2: Lathyrus seeds, peeled (left) and unpeeled (right)

Lathyrus (*L. sativus*, *L. clymentum*, *L. orchus*)

Vertical Leader: Solintagro SL SOL



Bioland Beratung GmbH
(BIOLAND) - Germany



Solintagro SL
(SOL) - Spain

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.

Germany (BIOLAND) represents a region where Lathyrus have to be grown under cover in controlled conditions due to the relatively harsh climate.

Spain (SOL) is a typical Mediterranean country where environmental conditions are warm and even su-tropical. This location is ideal to test the crop's adaptation to southern European – Mediterranean conditions.



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**.