



02

## LEGUMES

Vetches

Forage peas

Field beans

Bitter vetch

Chickpeas

Lupins

Yellow lupins



## Common vetch *Vicia sativa*

**COMMON VETCH** is an annual legume sowed in autumn or spring. It is mainly used for high quality forage production due to its high protein content.

Its climbing ability and nitrogen fixation make it perfect to mix it with a cereal such as triticale or oats. They adapt to all types of soils and semi-arid areas, humid and even irrigated. Slow initial growth, but in spring, when temperatures are adequate, it grows very fast.

Common vetch is recommended instead of hairy vetch in dryer and warmer areas.

It can be sown in late summer, after cereal, to obtain forage to before winter.

**THOUSAND KERNEL WEIGHT (TKW)**

65-85 grams

**SOWING SEASON**

September to November

**SOWING RATE**

80-120 Kg/ha

### Maxivesa



- Mid-Cycle
- High forage & grain production
- TKW medium

### Prontivesa



- Extra Early Cycle
- High grain & forage production
- Medium-high TKW

### Gravesa 81



- Mid-Cycle
- High forage & grain production
- Medium-low TKW

### Urgelba



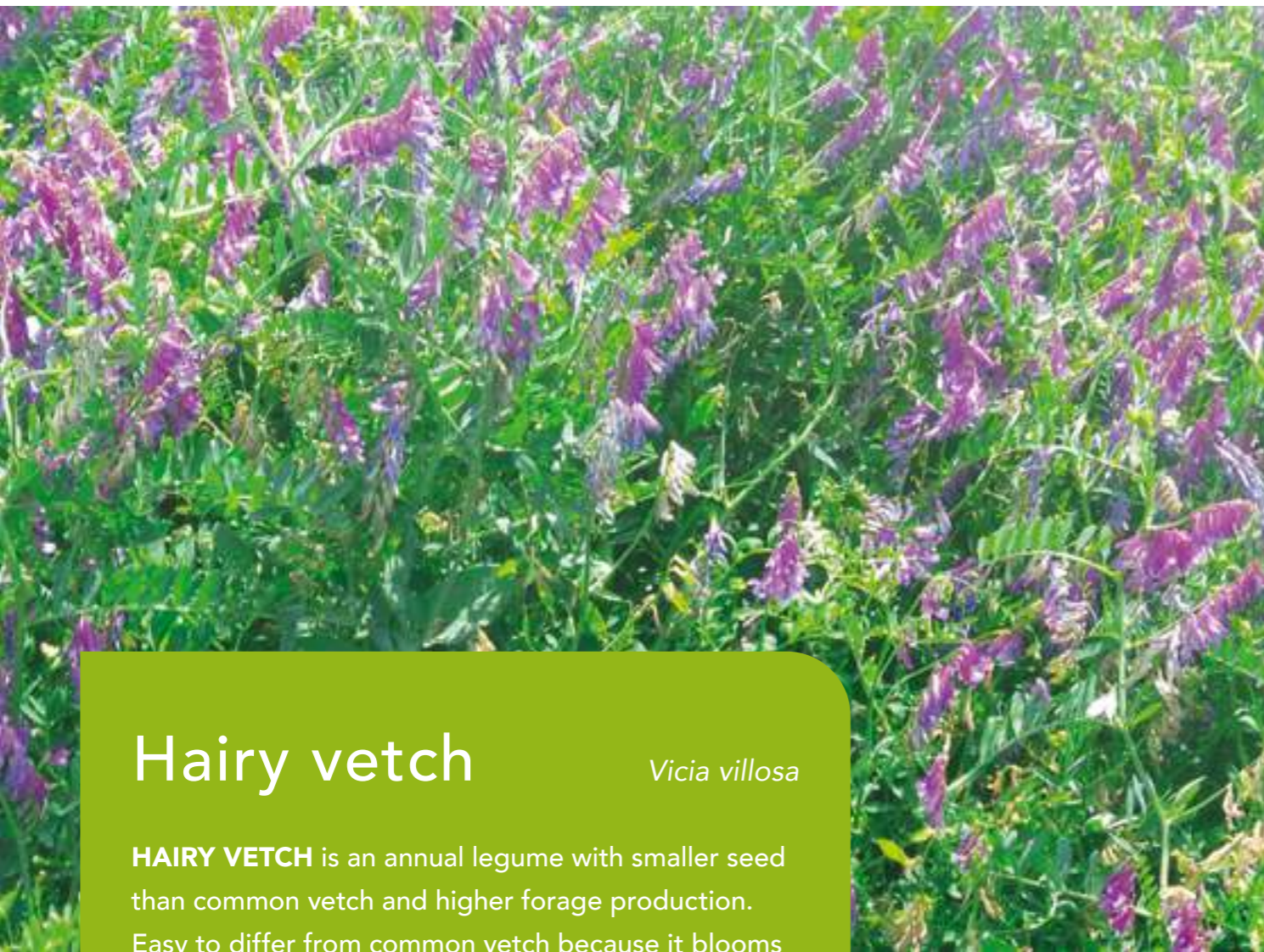
- Early Cycle
- High grain & forage production
- Medium TKW

### Rueda



- Mid-Cycle
- High forage & grain production
- Medium TKW
- New Batlle genetics





# Hairy vetch

*Vicia villosa*

**HAIRY VETCH** is an annual legume with smaller seed than common vetch and higher forage production. Easy to differ from common vetch because it blooms in clusters, hairy vetch is the most winter-hardy of the commercial vetches, although it prefers wetter conditions.

Produces a good quality forage. Very adapted to wet drylands and temperate areas with long springs.

In cold winter areas where springs are longer and wetter.

For higher forage production and lower grain production.

**THOUSAND KERNEL WEIGHT (TKW)**

30-45 grams

**SOWING SEASON**

September to November

**SOWING RATE**

50-60 Kg/ha

## Villana



- Mid-Cycle
- Outstanding forage production
- Mid-low TKW
- Very high cold tolerance

## Villota



- Early Cycle
- Outstanding forage production
- Mid-low TKW
- High cold tolerance

## Villegas



- Mid-late Cycle
- Unbeatable forage production
- Mid-low TKW
- High rusticity and frost resistance
- New Batlle genetics





# Forage peas

*Pisum sativum*

**FORAGE PEAS** are the most widespread protein seed legume in Europe. Protein crops are very important in the European Union due to our shortage of vegetable protein, and this is demonstrated by the EU agricultural policy.

Our R&D programs, sometimes in collaboration with other organizations such as ITACYL, have allowed us to offer you protein peas that are fully adapted to our growing conditions, both in cycle and in drought tolerance.

It is better to wait for late sowings to avoid competition with weeds and sanitary problems.

They must be sown in well-drained, light soils.

**THOUSAND KERNEL WEIGHT (TKW)**

160-250 grams

**SOWING SEASON**

From October to February according to variety

**SOWING RATE**

150-225 Kg/ha

## Forrimax



- Mid-Cycle, Purple flower
- Outstanding forage yield
- Mid-low TKW (150-180g)
- Very high height

## Guifilo



- Early Cycle, White flower
- Very high grain yield
- High TKW (210-250g)
- Mid-low height

## Guinda



- Early cycle
- High grain yield
- High TKW (200-220g)
- Average height

## Guinorme



- Mid-Early Cycle
- High grain yield
- Mid-low TKW (160-170g)
- High height



## Guimas

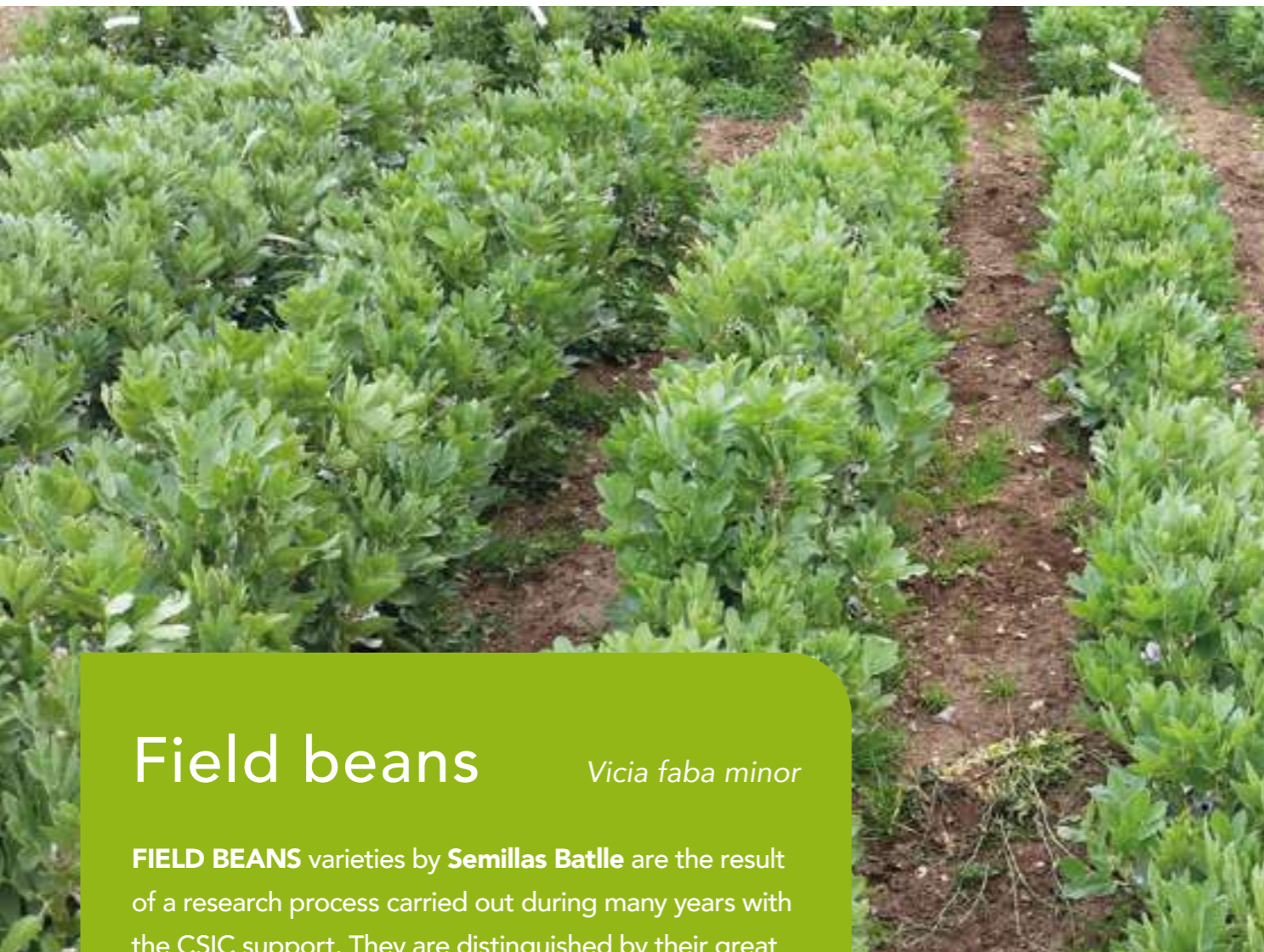


- Mid Cycle
- Autumn-Winter sowing
- High grain yield
- Mid TKW (180-200g)

## Chicarron



- Mid-Early Cycle, white flower
- High grain & forage yield
- Mid-low TKW (160-180g)
- Medium-high height



# Field beans

*Vicia faba minor*

**FIELD BEANS** varieties by **Semillas Batlle** are the result of a research process carried out during many years with the CSIC support. They are distinguished by their great productivity, matching the profitability of wheats in many cases, along with a high protein content.

High cold resistant and perfectly adapted to mechanization, field beans grow very well especially on loamy soils and clay loam, where most of protein crops fail to develop. It can be used for grain production for animal fodder and are frequently used as green manure. It is an ideal alternative in nitrogen rotations leaving in the soil between 60 and 120 units.

It can be sown in heavy soils, where other legumes do not develop.

High protein content per hectare.

THOUSAND KERNEL WEIGHT (TKW)	SOWING SEASON	SOWING RATE
450-700 grams	End of October to early January	150-200 Kg/ha according to variety

## Tavira



- Early Cycle
- High grain yield
- Mid TKW
- Broomrape resistance

## Prothabon 101



- Mid-Early Cycle
- High grain yield
- Low TKW
- Excellent health

## Prothabat 69



- Mid-Early Cycle
- High grain yield
- Low TKW
- Excellent health

## Vitabón



- Mid-Cycle
- Very high grain yield
- Low TKW
- High protein content



## Borjana



- Mid-Early Cycle
- Very high grain yield
- Medium-high TKW
- Broomrape resistance

## Vinicius



- Mid Cycle
- High rusticity
- Mid-low TKW
- High productive potential



## Bitter vetch

*Vicia ervilia*

**BITTER VETCH** is one of the legumes traditionally grown in the Mediterranean basin for its high hardiness and its good adaptation to our agroclimatic conditions.

Like the rest of legumes, its main characteristic is the nitrogen contribution to the soil, favoring later crops, generally in cereal rotations. In Spain, it is a species grown mainly in the south of Aragon and in Castilla la Mancha. Like forage peas, horse beans and vetches, their surface have been increased due to the EU plant protein needs and the consequent incentive for its cultivation.

Well adapted species to poor and arid soils.

High cold tolerance, it is suitable to grow in areas where forage peas have problems.

**THOUSAND KERNEL WEIGHT (TKW)**

30-40 grams

**SOWING SEASON**

October to early December

**SOWING RATE**

100-150 Kg/ha

## Moro Da 5

- Medium Cycle
- Yellowish grain color
- White flower
- High rusticity and good productive potential

## Hully

- Medium cycle
- Yellowish grain colour
- White flower
- Excellent grain yield potential in rain feed areas





# Chickpeas

*Cicer arietinum*

**CHICKPEA** or **GARBANZO BEAN** is a legume very well adapted to Mediterranean basin, traditionally grown in poor soils, with a great alternative sowing date. Usually used for human consumption, very linked to the Mediterranean diet, recently it has experienced a high market demand due to its properties and.

Rustic plant.

Well adapted to light soils and well drained soils.

**THOUSAND KERNEL WEIGHT (TKW)**

250-500 grams

**SOWING SEASON**

From November to January in warm areas and from January to February in cooler areas

**SOWING RATE**

100 Kg/ha

## Garpedro



- Mid-Early Cycle
- Extraordinary productive potential, adapted to culinary use
- Excellent health, Ascochyta blight resistance
- Brown seed, average-small size
- Caliber 8 mm, TKW of 345 g

## Garbelo



- Mid-Early Cycle
- Extraordinary productive potential, with high quality
- Excellent health, Ascochyta blight resistance
- Brown seed, average-small size
- Caliber 8,5 mm, TKW of 360 g

## Garsuco



- Early Cycle
- Extraordinary productive potential, with high quality
- Excellent health, Ascochyta blight resistance
- Brown seed, average-large size
- Caliber 10 mm, TKW pf 470 g

## Badil

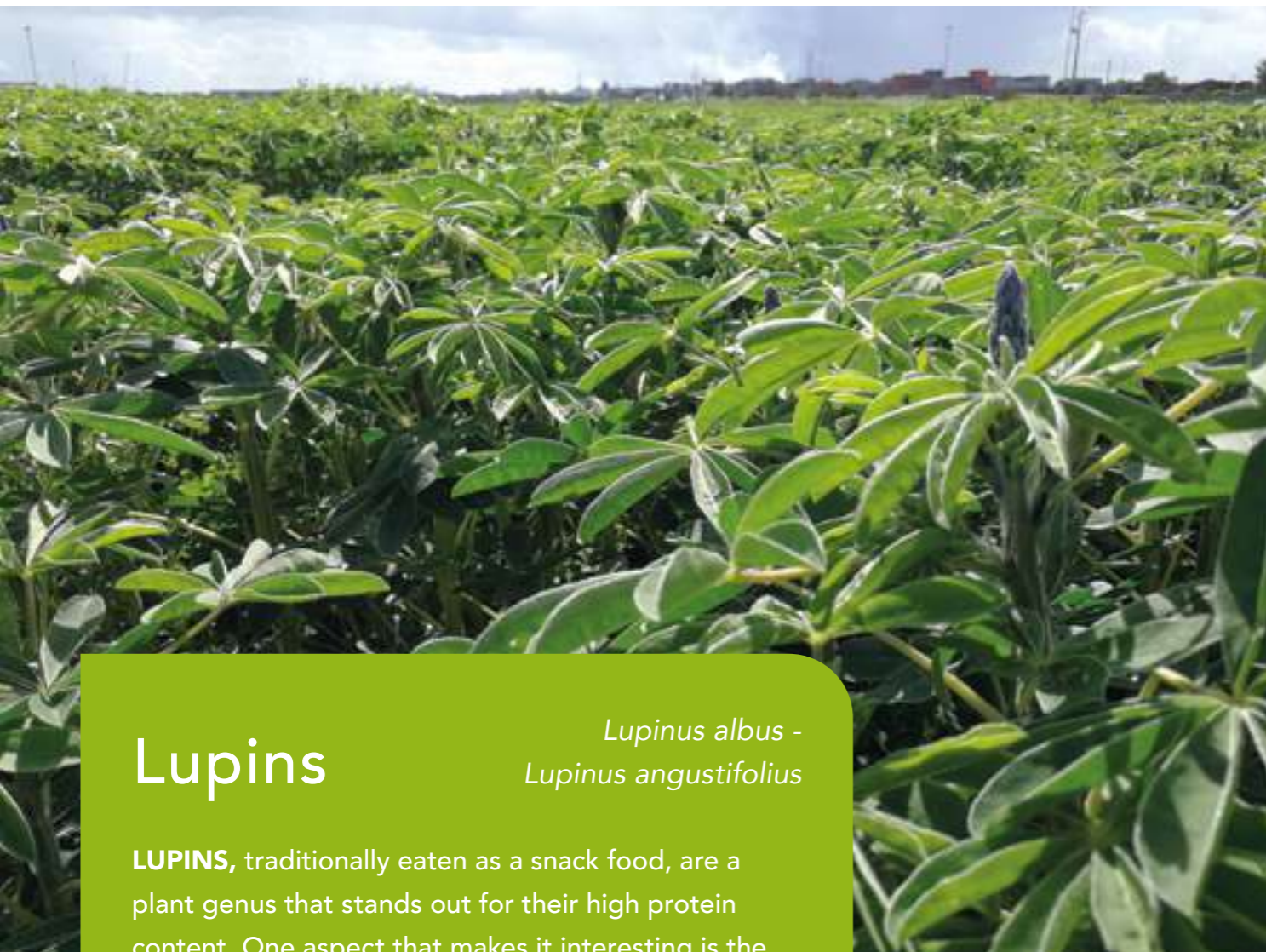
- Mid-Early Cycle
- High productive, thin skin
- Excellent health, Ascochyta blight resistance
- Brown seed, average-small size
- Caliber 8 mm, TKW of 350 g

## Garbiñe



- Mid-Early Cycle
- Very high productive potential, with high quality
- Excellent health, Ascochyta blight resistance
- Brown seed, medium-large size
- Caliber 9,5 mm, TKW of 420 g





# Lupins

*Lupinus albus -  
Lupinus angustifolius*

**LUPINS**, traditionally eaten as a snack food, are a plant genus that stands out for their high protein content. One aspect that makes it interesting is the great adaptation to acid soils which are very common in the west of the Iberian Peninsula.

Lupins includes various species, all of them cultivated around the world for human and animal food (i.e. some varieties have a high content of carotenes, very interesting for animal feed), although they are also used in various industrial processes.

Crop able to recover poor forest soils with a low level of organic matter where weeds and shrubs must be eliminated.

## Lupins

### KEY BENEFITS

- High capacity for atmospheric nitrogen fixation
- Erect growth reaching 90-120 cm



### FEATURES

- Well adapted to acidic to neutral soils.
- Well drained soils are required.
- Fertility forerunner with high hardiness.
- Rusticity.
- Fertility starter of poor organic matter soils.
- Requires low soil pH.



### OUR VARIETIES

**RUMBO BAER:** white flower (*albus*)  
**LILA BAER:** purple flower (*angustifolius*)  
**AZURO:** purple flower (*angustifolius*)

**DALBOR:** purple flower (*angustifolius*)  
**KARO:** purple flower (*angustifolius*)

**THOUSAND KERNEL WEIGHT (TKW)**

190-380 grams

**SOWING SEASON**

End of October to mid December

**SOWING RATE**

100-150 Kg/ha





## Yellow lupins *Lupinus luteus*

**YELLOW LUPINS** is a fertility forerunner which stands out for its hardiness and high protein content.

Another aspect that makes it interesting in the Mediterranean basin is its adaptation to acid soils with a low level of organic matter.

It is a traditional species of the Iberian pasture lands.

Crop used to recover forest soils with a low level of organic matter. Very suitable for removing weeds and shrubs.

### THOUSAND KERNEL WEIGHT (TKW)

70-200 grams

### SOWING SEASON

End of October to mid December

### SOWING RATE

70-120 Kg/ha

## Yellow lupins

### KEY BENEFITS

- High capacity for fixing atmospheric nitrogen
- Erect carriage with 90 to 120 cm



### FEATURES

- Well adapted to poor soils, with acidic to neutral pH.
- Well drained soils are required.
- Fertility forerunner with high hardiness.



### OUR VARIETIES

**MISTER:** early cycle  
**BARYT:** early cycle

**COMÚN:** mid-late cycle