CROP FACT SHEET

Industrial hemp

for long fibre production

Interreg North-West Europe
Co-funded by the European Union
Hemp4Circularity

Industrial hemp *(Cannabis sativa L.)* is a **versatile crop** that can be cultivated for a range of end products. **Depending on the technical itinerary adopted**, including cultivar choice, crop management, harvest timing and processing methods, different co-products can be obtained. These include **seeds** for food and oil applications, **short fibres** for paper and insulation materials, **cottonised fibres** for textile and nonwovens processing, and long fibres for high-value technical and textile applications.

This long fibre hemp for textile represents **a promising market opportunity**, creating added value through the production of high-quality natural fibres suitable for yarns, fabrics and other sustainable textile products.



Seeds
Food or feed

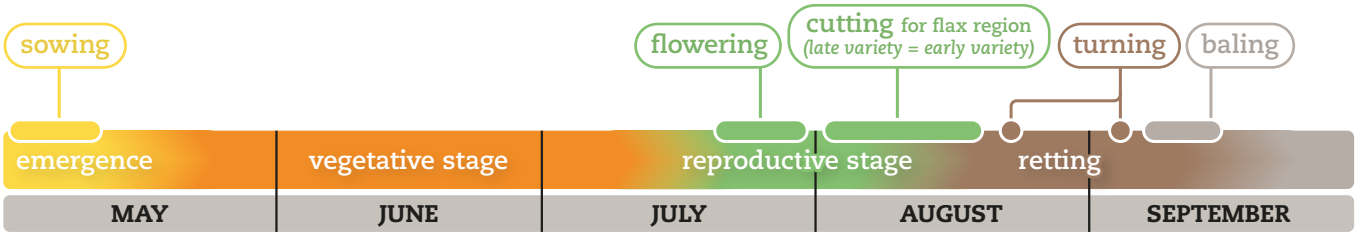


Technical fibre
Short fibres



Textile
Long fibres

From seeding to baling:




Sowing and emergence


Vegetative stage

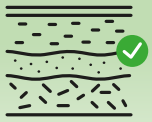

Flowering and harvesting


Harvesting and retting


Baling

LONG FIBRE TEXTILE HEMP: CROP ITINERARY

1 SOIL



All soil types.
Avoid compressed, saturated and stony soils.



pH: 5-7



Fine-textured and even seedbed

2 SOWING & FERTILISATION



1-20 May.
Soil temperature > 12 °C.
Avoid frost.



500 seeds/m² or ± 80 kg/ha at 2 cm depth (soil type, humidity). Do not roll.
Use bird scaring measures



Based on soil analysis, add:
- 70 kg N/ha
- 70 kg P_2O_5/ha
- 200 kg K_2O/ha

➔ Take national or regional laws into account before sowing.
➔ Secure an agreement with a buyer for your straw before sowing.

3 HARVESTING STEPS



Cut with dedicated hemp equipment for mowing and swathing like flax.
Be aware of wildlife.

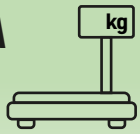


5-6 weeks retting.
1-2 times turning (depending on the weather conditions).



Quality of baling has direct impact on the long fibre content.
Max. humidity < 15 % (!)

4 ECONOMICAL DATA & MARKET

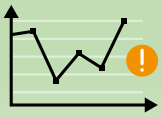


Mean straw yield 6-8 tonnes/ha (10-20% long fibre, 25-15% short fibre)



Average net profit: 2.202 EUR/ha*
Main costs: scutching (46%), harvest (17%), seeds (13%)*

* based on 30 farmers, 4 countries and over 2023-2025 and showing high variability.



High variability, high cultivation risk
➔ Need for increased sector-wide expertise and coordination

➔ Plant density and height play a crucial role in yield determination.

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