



Hemp for Long Fibers Research and Development by LCBio

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What is Lin et Chanvre Bio ?

3 main goals :

- To support and promote organic flax development,
- To build a hemp value chain for long fibers on the flax model,
- To federate and develop exchanges between the organisations and companies interested on hemp for long fibres and organic linen.





Normandy and Flax Culture : field retting



Hemp retting



Flax retting

Equiments for flax culture

Lifting machine



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Turning machine



Flax baler



Scutching





2016 - 2019 : small plots for hemp tests



2016 ↑

2022 →

We naturally target hemp long fibers value chain based on a flax model





Technical Itinerary for quality fibers

- **Early varieties** to have time for retting
- **High sowing density**: around 500 seeds/m², to obtain thin stems
- **Low nitrogen** : around 80 uN/ha
- Harvest at **flowering stage**
- **Returning stems** during the field retting
- **Scutching after 6 months storage**



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Hemp field retting during our first attempts



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- Handmade parallelization
- 1 meter cutting ⁷

2020 : 100% Hemp Jeans !



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Terre de Lin



emanuel lang
fondée en 1856



LIBECOTM
BELGIAN LINEN
— est. 1858 —

2019 : 1st hemp reaper from China



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Chinese reapers

- Ok for testing
- Do not range properly
- Do not cut in 1m long

➔ Experiment only





Our results from wet and dry spun tests



- Wet spun tests :
 - Nm 18 – no bleach
 - Nm 62
 - Nm 48
 - Nm 28 for knitting
- Dry spun tests

→ Go, see and touch at the showroom



2021-2022 : 2 harvest prototypes



Hyler Sativa 200, self-propelled



Cretes Union, tractile



Benefit from Hemp Fibers for farmers

Variety Uso 31 - 2021		€/ha
Straw Yield	6,5 t/ha	
13% - Long Fibers	845 kg/ha	3 380 €
4€/kg		
22% - Tows	1430 kg/ha	1 430 €
1€/kg		
54% - Shives	3510 kg/ha	702 €
0,20€/kg		
TOTAL PROFIT		5 512 €
Seeds - 80 kg/ha		500 €
Field Work		907 €
Scutching		2 000 €
TOTAL COST		3 407 €
TOTAL BENEFIT		2 105 €

Hemp retting and harvesting



WANTED : RAIN !



Hemp Scutching



Long Hemp stems



Good Hemp stem lenght

The LCBIO Chart

LCBio wrote a chart between farmers, scutchers, spinners, weavers, and brands to encourage business between the chart signatories.

The aim is to set up a strong hemp market in Europe before sending the hemp fibres to the Asian market.



Thank you for your attention

Have a look on our website and social media pages !

linetchanvrebio.org



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