

# CASE STUDY

PROJECT SIZE: MEDIUM (\$5,000 – \$15,000)

TIMEFRAME: 1 – 2 MONTHS



## Source New Fibre Feedstocks for Textile Production

**Client:** An agricultural fibre processor, operating outside of Canada, was interested in evaluating Canadian fibre biomass for their process.

**Problem:** Their high-throughput process required a large quantity of low shive/hurd content fibre and they were interested in seeing a variety of fibre sources. The processor had a tight timeframe (1 month) and required assistance sourcing material as they were not familiar with producers in Canada.

### Details:

- The low shive content requirements could have potentially been met by Canadian fibre producers if the demand and cost margins were sufficient, but they weren't able to do so within the specified timeframe.
- The client required no less than 1kg of fibre from each sample to complete their lab-scale testing.

### Recommended Tests & Rationale:

FibreCITY sourced 5 kinds of flax and 2 kinds of hemp that were different in variety type, location, growth year, retting type and harvesting method. This was to provide a wide range of materials that the client might encounter in Canada.

- **Cleaning** – The material was processed on FibreCITY's decortication line until the shive content requirements were met.
- **Analyzing** – Information including the pre-processed sample weight, weight of processed fibre, fibre % of total sample and number of passes through decorticator was recorded and provided to the client.
- **Shipping** – The material was packaged and sent to the client for evaluation.



### Outcome

Based on the investigation, one of the Canadian grown flax varieties was recommended to be selected for industrial-scale production since it can function as a dual crop to yield both seed for food production and fibres with high tensile strength for industrial applications.

