FLAX CANADA 2015



ENHANCING THE VALUE OF FLAX THROUGH INNOVATION AND COLLABORATION

Flax Canada 2015



VISION

 In 2015, Canada is recognized as the global leader in the development and commercialization of FLAX products for human and animal health, industrial feed stocks

GOAL

- The goal of FLAX CANADA 2015 is to develop flax into a *5.0 million* plus acre crop yielding a total crop farm gate value of *\$1.5 Billion* (current \$300 Million)
- FLAX CANADA 2015 will deliver a societal benefit to Canadians of at least a \$15.0 Billion through health, wellness and environmental sustainability

WHY FLAX? WHY NOW ?

- Flax is versatile many products for many industrial sectors
- Flax is Canadian highest quality flax in world comes from Canada
- Flax is adaptable can be grown across Canada can be segmented by product use
- Flax presents 'whole crop' product development opportunities
- Flax is a renewable resource crop
- Flax can contribute to national priorities
 - Health
 - Environment
 - Economic Development
 - Rural re-vitalization



Flax - Canada's Bio-Economy Crop Total Flax Crop Utilization



HUMAN HEALTH

- 1. Target = Reduce burden of disease.
- 2. Emphasis unique nutritional properties of whole flaxseed = significant potential.
- 3. Must be built on solid science.
- 4. Multi-national food companies access to health claims through GRAS (Generally Recognized as Safe).



ANIMAL HEALTH & PRODUCTIVITY

- 1. Establishing feed ingredient parameters as an integral part of the feed ration.
- 2. Market development and Commercial partnering.
 - Economic value from production through animal feed through to the end consumer (and the health care system)
- 3. Quality parameters for new healthy food products.



FIBER

- 1. Management of Flax Straw at the field level Whole crop development
- 2. Product and Market development for Flax Fiber and shives – value-added products:
- Pulp and Paper
- Panel Boards
- Biocomposites

- Insulation
- Textiles Non wovens
- 3. Pilot Plant processing flax straw into flax fiber



INDUSTRIAL



Capitalize on the unique features of Flax:

Two distinct fatty acid profiles - very high polyunsaturated fatty acid (PUFA): High n-6 linoleic (Solin and Linola) and very high alpha-linolenic n-3 acid (ALA) content.

- 1. Strategic development of flax oil feedstocks for novel, high value applications as fuel bio-additives, polymer resins and conjugated linoleic acid.
- 2. Assist in the development of a Canadian linoleum industry and an expansion of the current linoleum market.

BREEDING & PRODUCTION

- Develop higher yielding flax varieties:
 - Higher in oil and protein with levels of ALA approaching 70% and (high or low) mucilage, lower in antinutritional factors (Human Health, Animal Productivity and Industrial Uses)
 - Higher in oil content with higher levels of linoleic acid and (high or low) mucilage content (Industrial Uses)
 - Develop higher yielding flax varieties that are higher in straw yield with improved fiber quality (Fiber)
 - Develop crop management strategies to improve straw management and educate producers (Fiber)



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