Saskatchewan flax Grower

Gordon Cresswell
Chair, Saskatchewan Flax Development Commission

Our Mission
"To lead, promote, and enhance the production, value-added processing and utilization of Saskatchewan flax."

Linda Braun
Executive Director, Saskatchewan Flax Development Commission

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SaskFlax

Chair's Report

Since our last newsletter (March 05) I'm sure all of you have been busy with the business of farming and if Stats Canada is correct many of you will have flax as an important part of this year's crop rotation!

Flax Canada 2015 (an initiative of the governments of Alberta, Saskatchewan, Manitoba and Canada, the Flax Council and SaskFlax) has been very active in developing a strategy to see flax as a five million acre crop providing farmgate/bio product value of $1.5 billion by 2015. They have been working (within the pillars (priority areas) of Human Health, Animal Health and Performance, Fiber, Industrial Uses and Breeding/Agronomy) with key stakeholders across Canada identifying immediate needs as well as medium and long term actions to achieve their goals. From SaskFlax' perspective we have been very involved at Steering Committee level and leading the fiber working group. Our role there included organization of a U.S. fibre trek to examine and understand natural fiber in textile/nonwoven markets and processes of product characterization and grading (refer to Chris Hale's report for more detail). The working group has concluded a fiber prefeasibility study for flax fiber and is currently developing a fall bast fiber workshop. This is all in addition to our continuing work/support of Crop Fibers Canada (our pilot plant).

As mentioned in my last report, we continue to take an active role in developing operational guidelines for variety registration and monitoring the Canadian On Farm Food Safety Program.

Communication within the flax industry is vital to sustainability and growth. We continue to develop with our sister agencies the Flax Council of Canada and Ameriflax (our U.S. counterparts) on issues such as flax/feed; human health and consumer promotion and flax/biotechnology.

As your board of Directors, we work cooperatively and collectively to grow the flax industry!

Gordon B. Cresswell

Gordon Cresswell

A Word About Checkoff

Since our inception in 1996, Saskatchewan flax growers have been investing in research and development.

Here is a summary of benefits derived from your investment:

Research and Development

- On going varietal development program at Crop Development Center with Dr. G. Rowland and the AAFC with Dr. Scott Duguid.
- Agronomic research related to imputs (nitrogen/phosphorus) and practices
- Feed research related to beef products & aquaculture
- Human Health issues and flax's role (diabetes, cancer, cardiovascular, liver)
- Product characterization/fractionization (oil quality, lignans, mucilage)
- Straw management and fiber industry development

All of these research efforts used check off dollars to lever other funds from sources (ADF, MII, CARDS, NSERC)

Communications

- Annual Flax days and industry updates
- Annual reports, grower newsletters, flax diagnostic guides
- Website www.saskflax.com
- Consumer resource materials (nutrition/product information, recipes)
- Liaison with Flax Council of Canada and Ameri flax Industry/Market Development
- Flax Canada 2015 national initiative to develop flax as 'the crop' of the 21st Century partnering with governments of Alberta, Saskatchewan, Manitoba, Canada and Flax Council.
- Crop Fibers Canada (flax fiber pilot plant and learning center) for managed oilseed straw
- Participation on Canada Grains Council on Farm Safety to represent farmer interest
- Cooperative efforts with sister agencies to increase food markets for flax and flax products.

Again many of these efforts use check off dollars to lever other funds from industry sponsor and funding agencies (CAFI, CARDS etc)

Kochia Seedling

Clark Brenzil, PAg, Weed Control Specialist, Saskatchewan Agriculture and Food

Kochia an Increasing Weed for Flax Growers

Flax crops by their very nature are low on the relative scale of competitiveness with weeds and as such rely more heavily on herbicides to maintain yields and quality. But because of the tendency of flax to be easy to injure and tough to kill, the range of herbicide options is not that great. A weed that could pose an increasing concern for producers of flax now and in the future is kochia.

Group 2 resistant kochia is suspected to be widespread in the Canadian prairie landscape and Group 4 resistance is already reported in Montana. Any kochia samples submitted to the SAF Crop Protection Lab were either found to be Group 2 resistant or not viable. With the recent addition of durum to the Attain and Trophy (active ingredient fluroxypyr) labels it will only be a matter of time before we see fluroxypyr resistant kochia as they have in Montana.

Kochia has several factors that make it an ideal candidate for resistance development and spread, and it was one of the first weeds to develop resistance to Group 2 herbicides worldwide. Kochia is an annual plant that produces ample seed, is genetically diverse and can spread easily across environments. The odds of having a resistance gene in a group of individuals are rare. Annual plants, like kochia, with high densities make beating the odds more likely. Kochia produces about 40,000 seeds per plant. A single kochia plant cannot produce seed itself because of self-incompatibility, therefore continual out-crossing results in the highest level of genetic diversity.

With its bushy growth habit and a tap root that rots off when mature, kochia is a "tumbleweed" that scatters seed as it rolls across the landscape in the fall. This natural mobility allows the resistant biotype to spread rapidly from field to field, in addition to the multitude of other ways that humans spread weeds from place to place.

Kochia's Achilles heel is its limited seed dormancy and longevity. Seed shed in any one year must produce a plant within three years or perish. Most seed (70 to 80%), will germinate the year after it is produced, with only ~5% emerging in the second year and less than 0.1% in the third year. Therefore the key to eliminating kochia is to completely prevent seed production for two or three years.

Herbicides often seem like the most obvious way to prevent seed production, but as we have already seen, kochia is prone to resistance and could develop resistance to the limited herbicide options that currently remain. As a result we need to be careful about overusing our limited options.

Herbicides for kochia management in flax are mostly restricted to a single active ingredient being bromoxynil. The combination of bromoxynil and MCPA improves the activity of either product for kochia control but no options will be able to control emerging populations. Bromoxynil is a strictly contact product, so maintaining adequate water volumes is a must, particularly with the dense hair on the kochia leaf. In addition, if the kochia gets too large, it will not be controlled, so early application is essential.

Both sulfentrazone (Authority or Spartan in the USA) and carfentrazone (Aim in the USA) are registered in the USA on a wide variety of crops including flax and are applied as a either pre-emergent surface or early post emergent treatments to control a broad spectrum of weeds. These products are Group 14 herbicides, which are uncommon on the prairies. Sulfentrazone is currently on the national priority list for minor use research for broadleaf weed control in flax and research is ongoing. No research is yet underway on carfentrazone. A big problem with sulfentrazone and carfentrazone development in Canada is that the manufacturer, FMC Corporation, does not have a Canadian business unit. PMRA requires that there be a Canadian "product steward" before accepting a product not registered in Canada for minor use registration.

Because of the limited control options, flax producers should concentrate management efforts in the crops preceeding flax, so as to take advantage of kochia's weakness; short seed viability in the soil. The challenge is a small number of escapes can result in enough seed to cause a problem the following year.

There are several herbicide options for cereals that can be found in the SAF publication Guide to Crop Protection that control kochia using non-Group 2 chemistry and do not leave a residue to affect the crop that follows.

While pre-harvest glyphosate is helpful to kill green plants prior to harvest, it will not reduce the viability of seeds that have already filled and reached physical maturity. As a result preharvest glyphosate is not a reliable way to eliminate seed production in kochia.

While summer fallow tillage is a means to manage kochia populations, it has no return in the end and can open the land up to erosion. Forage hay, where top-growth of kochia is removed with the hay cut is another option to prevent seed production. Kochia has feed value similar to alfalfa, but should only be fed to a maximum of 30% of the ration because of high oxalate content. Annual forage will grow rapidly and compete with the kochia as it develops, but provides only one year of competition. A short-term perennial forage may be more difficult to establish, but will be more competitive over the long term against kochia.

Since kochia is saline tolerant, it is important to take care of kochia patches growing on the edge and outside of the field as well as inside the field to ensure that its spread is contained. Saline areas are just as well seeded down to a salt tolerant perennial forage, and preserved during low water years to continue blocking out kochia and other salt tolerant weeds like foxtail barley.

Because of its short seed life in the soil, kochia does not have to be a lifelong problem like many other weeds and can be managed even if it is resistant. A little planning prior to the flax crop can minimize the amount of seed carryover into the flax year and Bromoxynil + MCPA based products (Badge, Buctril M, Mextrol) applied early and with full water volumes will be able to provide enough control to keep populations in check.

The Industry Needs Information

Recently, the flax industry hosted a series of agronomic updates aimed at agronomists and producers. We had a conservative estimate of 30 participants at each meeting. We more than doubled that estimate. Based on participants' enthusiasm and the level of questions, I can only conclude that the flax industry needs more and better agronomic information. The sessions covered an array of topics including rotations, stand establishment, fertility, pest control and straw management.

The day began with an in depth discussion of where flax fits into a crop rotation, considering nutrient and water use efficiency as well as pest control. The take home message was that we need to stay the course in our crop rotations, while maintaining enough flexibility to react to market signals. I recognize this is not easy to do for one commodity, never mind managing several crops on your farm. Often crop rotation planning requires consultation.

With an understanding of crop rotations, we then discussed stand establishment with emphasis on air seeder fan speeds, seeding dates and seeding rates. Based on preliminary data from Agricore United, we learned that air seeder fan speeds approaching 3800 rpm start to cause seed deterioration. The safest way to reduce the risk is to follow manufacturer's recommendations and be aware that the impact generated in air seeders can cause serious damage. Seeding date and rate are two other factors that can affect stand establishment. In short, the presenters told us that in most of western Canada, flax has a wide seeding date window with little yield reduction between May 1 and May 21 planting dates.

In addition, we should be aiming for about 300 plants/m^2 which we can usually achieve with a seeding rate of 40 to 50 lbs/ac. I have given a range here because you need to consider the effects of seed placed fertilizer and per cent germination. I prefer to err on the high side as research has shown two things; one is that higher seeding rates within this range will not decrease yield and secondly, that only between 50 and 60 per cent of seeds result in viable plants.

In terms of fertility, we learned a general rule of thumb. Flax requires about 70 lbs/ac of nitrogen, about 15 lbs/ac of phosphorous and that it seldom responds to potassium or sulphur. Remember, a soil sample is always a good recommendation.

We discussed many aspects of pest control considering insects, weeds and diseases. The discussion here focussed on pest identification, but lacked in the solution department. The flax industry is facing an ugly reality in that we are a minor crop with few pest control options and little research into new chemistries. I think we need a concerted effort to make the crop protection industry realize flax's potential and to take pest control needs seriously.

In the final session, we discussed straw management with the aim to collect for value added processing. Here we dealt with the realities of making this industry viable. Namely, we need to approach straw management very differently. Analysis of processing costs make it evident that if producers are not willing to change what they do and if processors are not willing to compensate them for those changes, this industry will never get beyond where it is today.

All in all the meetings were successful, but highlighted an important issue; the industry needs access to pertinent and timely information. I have compiled a list of where to access flax related information and contacts for specific production issues.

Websites

Saskatchewan Flax Development Commission
www.saskflax.com
Saskatchewan Agriculture and Food
www.agr.gov.sk.ca
Flax Council of Canada
www.flaxcouncil.ca

Publications

The Crop Production Newsletter from Saskatchewan Agriculture and Food is a bi-monthly newsletter published during the growing season. It is dedicated to all crop production related issues and is not exclusive to flax.

The publication is available only by email in PDF format, if you are interested email the editor Penny Pearse at ppearse@agr.gov.sk.ca

Consultations

Saskatchewan Agriculture and Food's Agriculture Knowledge Centre (AKC) has eight specialists on staff with backgrounds in soil nutrition management, integrated crop management, production economics and crop development. You can reach the AKC at 1.866.457.2377.

Bill Greuel,
Oilseeds and Transgenic Crops, Saskatchewan Agriculture and Food

The Fiberfile

Alvin Ulrich
Fiber Specialist

One of the reasons we do not have much investment in new flax straw processing plants is that farmers do not know how and/or do not have the right financial incentives to produce flax straw with improved characteristics. Without improved straw characteristics, higher end straw and fiber processors will not set up processing plants in Western Canada. If processors don't sell into higher end markets, they will not be able to pay farmers more than a token amount for their straw. If farmers only get token amounts for their straw, we will not break out of the status quo of having a "straw problem" with few buyers of flax straw and much burning of straw. Significant expansion of flax area will not happen; significant increases in the number of processors using flax straw will not take place; and significant potential profits from producing and processing flax straw will not be realized.

If farmers want someone to buy their straw, the characteristics of the straw must be tailored more closely to the intended end use. The higher the price of straw, the more demanding potential buyers will be. For example, animal shelters, bird-nesting islands, ditch linings, animal bedding and bales for burning can be made from flax straw. Convenience and low cost are the primary criteria for purchase. The presence of weed seeds and/or weed stalks, and far distant field locations, are usually the only negative characteristics that are considered. However, farmers will receive, at best, only a token payment for straw with these intended end uses.

Processors of flax straw destined for specialty paper (e.g., cigarette paper) and lower end plastic composites (e.g., extrusion molded deck boards) use severe mechanical and/or chemical treatments to turn the flax straw into products they can use. These treatments are drastic but allow processors to buy most flax straw that: is free of plastic litter, is relatively free of weeds, is within 50 miles of the processing facility, has reasonable fiber content and has reasonable height. These criteria are often easy for farmers to meet, without any extra effort, and hence farmers are often willing to sell their flax straw for token amounts ($5 to $10/tonne).

Medium value uses of flax fiber include geotextiles, insulation products, absorbency products, filtration products, middle quality plastic composites, and low-end textiles. For these uses, processors need to produce flax fiber that: is almost totally free of shives (i.e., shives are the non-fiber part of the stems), has relatively consistent fineness (i.e., fiber diameters), has relatively consistent length, and is reasonably strong. These requirements, in turn, mean that the straw that is collected and processed must have fairly consistent length, stem diameters, reasonable fiber content (i.e., greater than 12% to 15%) and be partly or totally retted. Negative and/or unacceptable characteristics would include the presence of plastic litter, and abundance of weed seeds or stalks, short pieces of straw, the presence of seeds or seed holders, and far distant locations of fields. Payment for such straw, could, in theory be in the range of $30 to $100 per tonne depending on the actual level of the various desirable fiber properties.

High end uses of flax fiber include high-end plastic composites and many textile applications. For these uses, processors need to produce flax fiber that is totally free of shives, can be finely divided, has good strength and has a consistent length distribution. The requirements, in turn, mean that the straw that is processed must be consistent in length, stem diameter, fiber content and degree of retting. It also means that the straw must be quite well retted so that the fiber bundles can be finely divided. Negative and/or unacceptable characteristics would include unretted straw, the presence of plastic litter, and abundance of weed seeds or stalks, short pieces of straw, the presence of seeds or seed holders, and far distant locations of fields. Payment for such straw, could, in theory be in the range of $60 to $150 per tonne depending on the actual level of the various desirable fiber properties.

The production of higher quality straw for higher quality fiber also results in shives that can be sold into higher end markets. This, in turn, creates further opportunities for value adding industries and permits processors to pay even more for higher quality flax straw.

Research is still going on to find all the possible profitable ways to increase the quality

of oilseed flax straw without negatively impacting on the quantity and quality of flax seed that can be harvested. Some of the techniques that do work include using a stripper header or cutting the straw as high as possible with a straight cut header. This leaves the straw as long as possible and maximizes the amount of straw that can be collected. The straw can then be cut with a properly adjusted disk bine or drum mower to lay it flat on the ground in a thin layer that covers as much of the field as possible to maximize the chance for fast and consistent retting. Rolling the standing straw with a land roller in two directions on a dry day can often, but not always, substitute for disk bining. The straw is then left to ret as long as possible before raking and baling.

The quantity and quality of oilseed flax straw can also be improved by selecting oilseed varieties that have higher than average fiber content, by seeding at a consistent depth, by increasing the seeding rate, by spreading the seed in a ribbon-like pattern, by seeding latter in May, by using only moderate levels of nitrogen and by improving weed control.

We welcome any additional suggestions and research about how planting and harvesting methods could be altered to improve the quality and quantity of straw that is available to process. "If we keep doing what we are doing, we'll keep getting what we are getting" – which, at the present time, is little or nothing for our flax straw. Let's change the status quo!

Flax Canada 2015

Flax represents an opportunity to become Canada's 21st century bio-economy crop, address the health of Canadians and create new economic value and jobs in Canada versus exporting these same jobs offshore.

Flax Canada 2015 is a unique initiative to build links and accelerate innovation across the value chain with a focus on the research, innovation and commercialization of flax. The initiative will help to develop a "branding" strategy for flax. In addition, the development of higher-value flax based products and processes through total utilization of the whole plant for both traditional & non-traditional products and markets will help to advance flax.

The goals of Flax Canada 2015 are:

1. To secure the long-term support of the Government of Canada and the Prairie Provinces for a ten-year program to address health, research and development of new commercial products.
2. To assess the opportunity for a $1.5 billion farm gate value for flax.
3. With the appropriate research, government and industry partners, develop a strategic plan to commercialize these opportunities in four key areas of human health, animal health and nutrition, fiber and industrial uses.

The provinces of Alberta, Saskatchewan and Manitoba along with the Saskatchewan Flax Development Commission, Flax Council of Canada and Agriculture and Agri-Food Canada have provided funding for the initiative.

The Flax Canada Steering Committee is developing and implementing the FLAX CANADA 2015 long-range strategy. Representatives from the Flax Council of Canada, Saskatchewan Flax Development Commission, Agriculture and Agri-Food Canada, the provinces of Alberta, Saskatchewan and Manitoba along with a consultant from Maple Leaf form the steering committee. Kelley Fitzpatrick has been contracted as project coordinator.

Kelley Fitzpatrick
Coordinator
Flax Canada 2015

Where Flax is at:

In the health and nutrition industry, flax is considered a "specialty supplement" in the subcategory of the Essential Fatty Acid category. In 2002 to 2003, plant oils (supplements) grew at 32%. The United States Flaxseed mass market for 2003 of $13.5M experienced a 51% growth over 2002 (Information Resources, 2003)

New delivery systems have allowed flax oil to be added to a greater range of products in both new and existing markets such as the microencapsulated powders market that are dispersible in cold water and are exceptionally stable with a neutral taste. Other examples are fortified beverages, omega-3 enriched eggs, weight loss products and designer pet supplements.

The predicted growth of Aquaculture 2000-2010 (Tacon, 1997) indicates that total aquaculture production will increase by 250%, aquaculture feed production will increase by 300%, fish meal use will increase by 30% and fish oil use will increase by 40%. There is a vast potential market for flax in aquafeeds. Current world usage of fish oil in aquafeeds is 660 thousand tonnes/year. Replacing 1/3 of this would require approximately 550 thousand tonnes of flax. Total Canadian flax production was 679 thousand tonnes in 2002/03. The natural and organic pet food market, was up 18% in 2003.

The industrial and personal health care products market including linoleum, bio-diesel products, biopolymers, sealants and coatings, exterior house paints, alkyd enamels, stains and urethanes, caulking compounds, soaps, hair gels, and shampoos are just some of the many uses for flax.

The following companies are registered to collect the Flax Checkoff and have agreed to have their company names listed in the newsletter.

ADM Agri Industries
Box 1070
Carberry, Manitoba
R0K 0H0
Telephone: (204) 834-2980
Fax: (204) 834-3680

ADM Agri Industries
Box 820
Watson, Saskatchewan
S0K 4V0
Telephone: (306) 287-3100
Fax: (306) 287-3521

Agricore United
Box 6600
201 Portage Avenue
Winnipeg, Manitoba
R3C 3A7
Telephone: (204) 944-5411
Fax: (204) 944-5454

Bioriginal Food & Science Corporation
102 Melville Street
Saskatoon, Saskatchewan
S7J 0R1
Telephone: (306) 975-1166
Fax: (306) 242-3829

Bunge Canada
Box 750
Altona, Manitoba R0G 0B0
Telephone: (204) 324-2209
Fax: (204) 324-5995

CanMar Grain Products Ltd.
301 – 2184 – 12th Avenue
Regina, Saskatchewan
S4P 0M5
Telephone: (306) 721-1375
Fax: (306) 721-1378

Delmar Commodities Ltd.
Box 1055
Winkler, Manitoba
R6W 4B1
Telephone: (204) 331-3696
Fax: (204) 331-3704

Farmer Direct Co-operative Ltd.
1450 Park Street
Regina, Saskatchewan
S4N 2G2
Telephone: (306) 352-2444
Fax: (306) 352-2443

Fill-More Seeds Inc.
P.O. Box 70
Fillmore, Saskatchewan
S0G 1N0
Telephone: (306) 722-3353
Fax: (306) 722-3328

G.H. Schweitzer Enterprises Ltd.
Box 222
Eston, Saskatchewan
S0L 1A0
Telephone: (306) 962-4751
Fax: (306) 962-3251

Lakeside Pulse & Special Crops Ltd.
312 – 131 Provencher Boulevard
Winnipeg, Manitoba
R2H 0G2
Telephone: (204) 255-5550
Fax: (204) 255-5054

Larsen Seeds
Box 39
Aylsham, Saskatchewan
S0E 0C0
Telephone: (306) 862-7333
Fax: (306) 862-9552

Mid-Sask Terminal Ltd.
Box 1208
Watrous, Saskatchewan
S0K 4T0
Telephone: (306) 946-2225
Fax: (306) 946-3954

North East Terminal
Box 177
Wadena, Saskatchewan
S0A 4J0
Telephone: (306) 338-2999
Fax: (306) 338-2484

North West Terminal Ltd.
Box 1090
Unity, Saskatchewan
S0K 4L0
Telephone: (306) 228-3735
Fax: (306) 228-3877

Parent Seed Farms Ltd.
Box 36
St. Joseph, Manitoba
R0G 2C0
Telephone: (204) 737-2625
Fax: (204) 737-2248

Parrish & Heimbecker Ltd.
700 – 360 Main Street
Winnipeg, Manitoba
R3C 3Z3
Telephone: (204) 956-2030
Fax: (204) 943-8233

Paterson Grain
A division of Paterson GlobalFoods Inc.
22nd Floor
333 Main Street
Winnipeg, Manitoba
R3C 4E2
Telephone: (204) 956-2090
Fax: (204) 942-2389

Pioneer Grain Company Limited
2800 One Lombard Place
Winnipeg, Manitoba
R3B 0X8
Telephone: (204) 934-5961
Fax: (204) 957-5614

Pizzey's Milling
Box 132
Angusville, Manitoba
R0J 0A0
Telephone: (204) 773-2575
Fax: (204) 773-2317

Prairie Flax Products Inc.
Box 789
MacGregor, Manitoba
R0H 0R0
Telephone: (204) 252-2940
Fax: (204) 252-2983

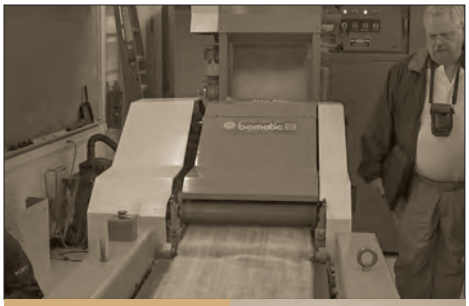
Saskatchewan Wheat Pool
2625 Victoria Avenue
Regina, Saskatchewan
S4T 7T9
Telephone: (306) 569-4200
Fax: (306) 569-5133

Terminal 22 (1998) Inc.
Box 430
Balcarres, Saskatchewan
S0G 0C0
Telephone: (306) 334-2222
Fax: (306) 334-2262

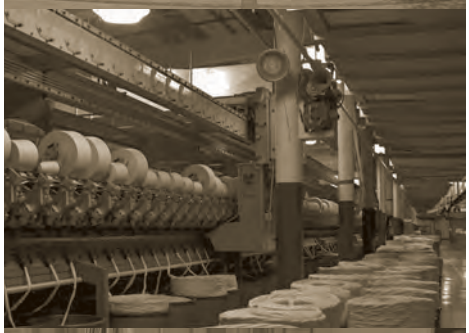
Van Burck Seeds Ltd.
Box 7
Star City, Saskatchewan
S0E 1P0
Telephone: (306) 863-4377
Fax: (306) 863-2252

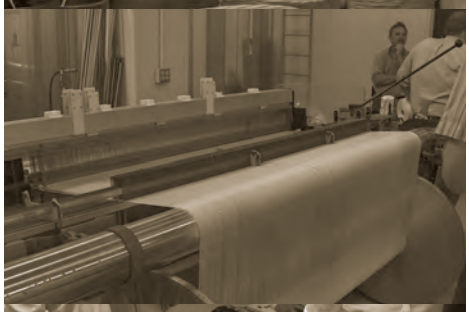
Western Commodities Trading
Box 69
Spalding, Saskatchewan
S0K 4C0
Telephone: (306) 872-2280
Fax: (306) 872-2283

Weyburn Inland Terminal
Box 698
Weyburn, Saskatchewan
S4H 2K8
Telephone: (306) 842-7436
Fax: (306) 842-5307



Chris Hale
Director,
Saskatchewan
Flax Development
Commission





A Producers Perspective

In mid April I had the good fortune of joining a Flax 2015 sponsored tour of cotton and flax fiber research facilities in Georgia, North and South Carolina. As well, commercial concerns that processed fiber into pulp for paper products using Canadian flax fiber and cotton fiber into yarn (thread) for fabrics such as cotton, denim etc were toured.

We saw the potential for use of flax fiber to be of commercial importance because flax fiber when cottonized is similar enough to cotton fiber to use similar spinning technologies.

The fiber value of flax straw could be worth as much as the seed value per acre if the straw is handled in the field properly. This includes techniques such as stripping seed bolls from the flax plant for harvesting, properly retting the remaining straw (many different ways), baling the straw at certain moisture content, and then mechanically processing the straw.

This is a new and challenging way of thinking about growing flax. For those up to this type of challenge there is good commercial potential. We spent some time with different researchers that showed us things such as how cotton fibers are graded and identity preserved by cotton bale. This is extremely important to American cottontrading just like our Canadian Grain Commission is to prairie grain trading.

Cotton Inc. was toured. Cotton Inc. is a large producer levy funded and controlled organization that is a big player in the cotton business from cotton grading to identity preserving to research to cotton production, to research of consumer trends and providing service to spinners, weavers and the fashion industry. Cotton Inc. is similar to SaskFlax in how it functions but on a 50 times larger scale.

The use of nonwoven technology using fibers was also showcased. This is used for making dish clothes, 'Q Tips', furnace and other air filters, etc. These are huge markets. Lower quality flax fiber could be incorporated into these products.

Work is being done at Georgia State on enzyme retting of flax. This would be very significant to Saskatchewan flax producers if the work is successful and results in an economic way to field ret our straw. This would greatly aid flax straw processing.

The Americans are very receptive to working together and sharing ideas. For example, Alvin Ulrich of Biolin in Saskatoon sits on ASTM-flax and linen committee with American counterparts for standardization of grading of flax fiber.

From a Saskatchewan flax producer's viewpoint of trying to increase farm gate returns from growing flax this tour was very worthwhile. We have a long way to go yet to do this. However, we are past the first few steps and are on our way with this potentially profitable venture.

Saskatchewan Flax Development Commission Position on Transgenics

Following is the position taken by Saskatchewan Flax Development Commission on recombinant DNA technology and subsequent genetically modified organisms (GMO's).

The Saskatchewan Flax Development Commission recognizes that the future of biotechnology in agriculture is dependent upon consumer acceptance and that recombinant DNA technology (the transfer of DNA from one species to another) may well be accepted when benefits to consumers, producers, the environment and health are demonstrated. The Saskatchewan Flax Development Commission also recognizes that consumers are not united in the understanding and acceptance of products containing genetically modified organisms (GMOs) produced via recombinant DNA technology. As well the Saskatchewan Flax Development Commission acknowledges that there are no commercial GMO flax varieties in the Canadian marketplace. Therefore the Saskatchewan Flax Development Commission supports a regulatory environment based on sound science that openly communicates clear and meaningful information to stakeholders.

It is for these reasons that the Saskatchewan Flax Development Commission will support commercialization of a transgenic flax variety in Canada when:

- The variety meets Canada's current regulatory approvals for food, feed and environmental safety.
- Regulatory approval for the transgenic event is obtained in the following export markets; the United States, the European Union, Japan, and Mexico.
- An identity preservation system is in place and a rapid, cost effective test for identification of the specific GMO trait is available.
- Saskatchewan flax producers must realize positive benefits and financial returns from the production of the variety.

Directors Wanted

The need to increase flax productivity and profitability continues to be of utmost concern to producers. Saskatchewan Flax Development Commission continues to provide direction and support to flax producers in addressing these concerns.

Directors of Saskatchewan Flax Development Commission define the vision and direction for the industry; establish policy and budget and work with the Executive Director and allied industry organizations to advance the industry through concentrated research and development initiatives.

The Commission operates with six directors elected from flax growers (registered producers) Two director positions are available annually. Each director serves a three year term and may be re-elected for a further three years.

Elections are held each fall (when required) and new directors' responsibilities are initiated at the close of the annual general meeting in January.

Annual General Meeting

January 9, 2006
Plans are well underway for the 2006 Flax Day and AGM in Saskatoon, SK.
Mark your calendars for January 9, 2006.

SFDC
Flax Day 2006
"Growing Opportunities"

Monday, January 9, 2006
Canadian Room
Saskatoon Inn
Saskatoon, SK

8:00 a.m.	Registration/refreshments
8:30 a.m.	SFDC Annual Meeting
10:15 a.m.	Flax Canada 2015
10:30 a.m.	Flax Council of Canada Update
10:45 a.m.	Ameriflax Update
11:00 a.m.	Growing Opportunities: Formula for Success- Rob Park
11:30 a.m.	Growing Opportunities: Tools of the Trade- To be announced
Noon	Lunch
1:00 p.m.	Growing Opportunities: Harvesting for Seed and Straw- Mark Stromberg, AAFC
1:30 p.m.	Growing Opportunities: The Fiber File- Alvin Ulrich, Crop Fibers Canada
2:00 p.m.	Growing Opportunities: Flax: Going Global- To be announced
2:30 p.m.	Growing Opportunities: The Feed File- To be announced
3:00 p.m.	Refreshments
3:15 p.m.	Growing Opportunities: The Market- To be announced
4:00 p.m.	Growing Opportunities: Closing Remarks

NOMINATION FORM FOR DIRECTOR

SASKATCHEWAN FLAX DEVELOPMENT COMMISSION

In accordance with the Saskatchewan Flax Development Plan Regulations, I, the undersigned, hereby submit my name as a candidate for election to a seat on the Board of Directors of the Saskatchewan Flax Development Commission. I have sold flax within the past two years and have paid the check-off required pursuant to Sub Sections 15 (1) and (2) of the Saskatchewan Flax Development Commission Regulations.

First Name *Last Name*

Address

Town *Postal Code*

Telephone *Facsimile*

Signature

I nominate the above flax producer as a candidate for election as a Director of the Saskatchewan Flax Development Commission.

Registered Producer (signature)	*Please Print Name*	*Telephone/Fax*
Registered Producer (signature)	*Please Print Name*	*Telephone/Fax*
Registered Producer (signature)	*Please Print Name*	*Telephone/Fax*

Please return this form along with you biography on or before Noon October 26, 2005 to:
Saskatchewan Flax Development Commission
A5A – 116 – 103rd Street East
Saskatoon, Saskatchewan
S7N 1Y7
Fax: (306) 664-4404

In your biography please describe briefly what you would like to accomplish during your term as a director on the Flax Commission, and on what activities you would like to see the Commission concentrate its energies. Please also outline your reasons for wanting to be a director. Optional information about yourself might include your education, sports/hobbies, spouse's name and number of children and ages, what your farming operations include (crops grown, livestock) and other organizations you belong to.

Note: Only registered producers may vote, nominate or hold office. If your levy is collected under a company name contact us to designate your company representative.

Flax Checkoff Deadlines

Period 2 August 31, 2005
Period 1 February 28, 2006

Application forms are available by contacting SaskFlax at:
306. 664.1901
306. 664.4404 Fax
saskflax@saskflax.com
Saskatchewan Flax Development Commission
A5A – 116 – 103rd Street East
Saskatoon, Saskatchewan
S7N 1Y7

Our Logo Tells A Story

The bright and lively crown of the sheaf of flax represents the coming together of many members into a solid organization.

The stalks of the flax plant positioned in a woven manner represent fiber-based products as well as the close interaction between members of the organization.

SaskFlax

The boll of the plant, made up of three oil droplet shapes, represents oil-based products as well as the overlapping areas of production, research and marketing.

Saskatchewan Flax Grower is published bi-annually by the Saskatchewan Flax Development Commission, for registered flax producers, registered buyers and allied organizations.

Subscription rate for other individuals/ organizations is $50.00 per year. Contact office for more details 306.664.1901.

Help Us Be Accurate

Are you getting more than one copy? Address incomplete or name misspelled? Let us know. Call 306.664.1901, 306.664.4404 fax, or mail in the label for correction. Thank you.

2004 / 2005 Board of Directors

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