



News Release

Federal government funds project evaluating barley's potential as biofuel feedstock

May 25, 2007 (Olds, Alberta) – A project to evaluate barley's potential in Canada's rapidly evolving biofuels industry has received funding of \$262,000 from the Biofuels Opportunities for Producers Initiative (BOPI). The funding has been made available through the Agriculture and Food Council that administers Agriculture and Agri-Food Canada's Advancing Canadian Agriculture and Agri-Food Program.

The three-phase Barley and Bioproducts Opportunities Project (BBOP) is jointly funded and managed by the Western Barley Growers Association and the Alberta Barley Commission. BBOP is supported by industry partners Syngenta (\$45,000), Ceapro (\$10,000), Wilbur-Ellis Canada (\$2,000) and Parkland Agri Services (\$1,000). In all, BBOP will invest \$380,000 in examining barley's feasibility in a number of emerging applications; specifically, researchers will study the opportunities and challenges growers would face to establish regional, barley-based ethanol production facilities. The project will also look at removing valuable fractions from barley prior to ethanol production and using a byproduct of barley ethanol production – distilled grains – in commercial applications, including cattle feed.

"Barley is already one of Western Canada's most important crops due to its role in Canada's beef industry, domestic and international malting and brewing, and agronomic rotational management," said Doug McBain, past president of the WBGA. "Our goal is to determine if Western Canada's barley producers can capitalize on the crop in new, profitable and sustainable ways."

"This project will give our members and their customers a good base of regional technical and business information to assess their options for investing in barley," said Terry Young, chair of the Alberta Barley Commission.

The project's first task will be to determine the relative competitiveness of barley versus other major crops, by analysing ethanol yield and the amounts of starch and sugar that can and can't be extracted. The project will report in its initial findings in September 2007 and its final findings in March 2008.

The Western Barley Growers Association (www.wbga.org) and the Alberta Barley Commission (www.albertabarley.com) are not-for-profit, member-driven organizations that represent the interests and viability of barley growers in Western Canada and Alberta, respectively.

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For more information contact:
Doug McBain, Past President
Western Barley Growers Association
(403) 816-0645

Terry Young, Chair
Alberta Barley Commission
(403) 391-2408



Backgrounder: Barley and Bioproducts Opportunities Project

Overview

The Alberta Barley Commission and the Western Barley Growers Association represent the business interests of the vast majority of Canada's barley producers. With producer, consumer, industry and government interest in biofuels growing exponentially, the two producer organizations are working with industry partners to determine barley's viability in the production of renewable fuels and associated byproducts.

Their efforts are being supported by Agriculture and Agri-food Canada's Biofuels Opportunities for Producers Initiative (BOPI), which will provide \$262,500 in funding to help farmers and rural communities hire experts who can assist in creating, expanding and developing biofuels production.

BOPI is a part of the Canadian Agri-Food Council's Advancing Canadian Agriculture and Agri-Food Canada (ACAAF) program to position Canada's agriculture and agri-food sector at the leading edge of industry to capture new opportunities by developing better products, processes and technology.

Project concept

The Commission and the WBG/A will explore the potential of directing a portion of the barley acreage in Western Canada to emerging industrial markets while continuing to provide significant feedstock to established feed and malt markets. Using barley as a feedstock in ethanol could lead to other value-added products: for example, fractionation could produce high-value compounds from barley starches and sugars; examining cellulosic biorefining opportunities will determine if producers can realize further value from barley's high biomass.

Currently, the barley production is driven by feed and malt users, and barley producers have little direct connection to downstream business areas. As well, barley has traditionally been an under-valued and under-utilized commodity with limited focus on food or industrial applications. Currently, less than one per cent of the 10 to 12 million tonnes of barley produced in Canada each year is used for food and industrial uses.

Emerging technologies and major trends in food, feed and industrial markets have the potential for barley to become an important feedstock not only for traditional industries but also in new markets.

Project objectives

BBOP will examine barley's viability as a feedstock platform for ethanol and other value-added products in new and emerging markets. The primary objective is to improve farm gate returns and/or offering barley producers new and diversified business opportunities. The project will focus on four major areas: technical feasibility; business feasibility; business plan and marketing considerations; and knowledge and technology transfer plan.

The objective of the WBG/A and the Commission is to provide regional producer organization evidence-based information about investing and participating in renewable fuel or other bio-industrial projects. The project will provide producers, investors and funders with:

Reliable scientific data on production processing and operations



Reliable assumptions on costs, revenues and operating margins
Reliable assumptions on end-use markets and market trends
Operational management considerations including feedstock procurement, production and product marketing.

Knowledge/technology transfer

As the project is completed, the WBGA and the ABC will execute a communications plan to advise producers and producer organizations of the project's results. The plan will:

- Build general awareness of the new opportunities in barley
- Provide specific resource information to interested stakeholders
- Build and seek support for additional research to advance innovations for barley's ongoing use and success in ethanol and valued-added production.

Project Partners

The **Alberta Barley Commission** and the **Western Barley Growers Association** will jointly manage BBOP; the Commission will contribute \$30,000 in kind to the project and the WBGA will also make an in-kind contribution.

Syngenta has provided \$45,000 for support of Barley and Bioproducts Opportunities Project (BBOP). Syngenta is a world-leading agribusiness committed to sustainable agriculture through innovative research and technology. A leader in crop protection, Syngenta ranks third in the high-value commercial seeds market. Worldwide sales in 2006 were approximately \$8.1 billion.

Edmonton-based **Ceapro** has committed \$10,000 to the BBOP. Ceapro is innovative formulator and advanced processor of active ingredients, botanical extracts, and therapeutic products. In turn, the company creates ingredients and formulations for effective shampoos, cleansers, moisturizers, and cosmetics that are licensed and marketed worldwide.

A family-owned business with offices around the world, the **Wilbur-Ellis Company** markets and distributes agriculture commodities and is known for its ability to find the best markets for new and existing products. Through its Lethbridge office, Wilbur-Ellis Co. Canada is contributing \$2,000 to the BBOP.

Parkland Agri Services operates from nine locations in central Alberta, offering independent agricultural service and inputs to producers. The company focuses on delivering quality products and services, cutting edge technology and knowledgeable, skilled staff to help its customers succeed. Parkland Agri Services has provided the BBOP \$1,000 of funding.