

# Mustard 21 Project Update

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**M**ustard 21 (M21) is completing its second year of strategic product development with support from Agriculture and Agri-Food Canada, Saskatchewan Ministry of Agriculture, Agriculture Council of Saskatchewan and industrial partners. Exciting news is the approval of a Biopesticide label in the USA and a Soil Amendment label in Canada that allow industrial partners to continue product development and launch their products this year.

With the withdrawal of some traditional pesticide formulations from the turf market place, a significant opportunity is emerging for a natural renewable biopesticide. Utilization of mustard seed meal will have large potential to add value to the industry.

Mustard seed meal has excellent antimicrobial properties that can be of significant value to the processed food industry, and in extending life of perishable packaged foods. These properties are being investigated; however this is an area in the very early stages of understanding and will require considerable refinement.

Capitalizing on the natural properties of a commonly occurring substance is the attractive feature to customers looking for natural ingredient with no chemical additives. The mustard family of plants is very diverse in genetic material and holds a great deal of promise for development of its

specific characteristics to create value added products.

Increased volume of domestic processing and marketing is a most likely outcome of these efforts. M21 and SMDC continue to explore additional avenues that will enhance the profitability of mustard producing enterprises in Saskatchewan farm businesses.

As reported in the January issue of Mustard Grower, M21 receives financial assistance from Advancing Canadian Agriculture and Agri-Food Saskatchewan (ACAAFS) for specific projects in biodiesel additive and biolubricant product development. While mustard seed has significant oil content, the volume of oil available now and in the foreseeable future is not sufficient to pursue large volume biodiesel sector. The erucic acid content of mustard seed oil versus the high oleic acid oils such as canola can be useful in developing biodiesel additives to improve the performance and value of biodiesel.

With these exciting developments under pursuit, continued variety improvement is essential to maintain product volume, quality and availability. Mustard breeders in the Prairies are in constant consultation with SMDC and the Canadian Mustard Association (CMA) to address yield, weed control and hybrid types for better varieties in the coming years. Through this consultation process and with M21 coordination, a

long-term mustard breeding effort will be undertaken in 2009 - 2010 to ensure better alignment of goals and development of new varieties.

Economic uncertainty in today's environment is affecting the agricultural sector, and mustard is no exception to the economic upheaval. However, this is an opportunity for us to set some stretched goals and focus our limited resources to make mustard a more competitive crop for the western grower. Through efforts such as M21 and by developing higher value products, some of this uncertainty is reduced and made more manageable. Watch the next issues of Mustard Grower for further progress reports.

