

Mustard 21 Canada Inc. Update

By Tom Burwell and
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Mustard 21 Canada Inc. (M21) was established as a not-for profit organization in 2009 to implement long-term strategic research for growing and expanding Canadian mustard opportunities. The founding members of M21 are Saskatchewan Mustard Development Commission (SMDC) and Canadian Mustard Association (CMA).

M21, as an initiative prior to its incorporation, working with stakeholders in 2007-08 developed a Canadian Mustard Strategy to make mustard a globally competitive crop and maintain mustard production as a viable option for producers. It became evident that the mustard industry will need to focus its limited resources on two main areas:

- i) Improving yield and agronomic aspects of production to make mustard a more viable business option for growers in common crop rotations; and
- ii) Creating higher value products from mustard in addition to traditional condiment mustard and helping establish an alternate market for mustard crops.

In 2009, SMDC and CMA, the founding members of M21, challenged M21 to develop a long-term action plan to implement the strategic research priorities plan that were part of the mustard strategy developed in 2008.

M21 has focused its activities on these priority areas and developed a long-term investment program to implement an action plan addressing these two areas. M21 has developed proposals to leverage SMDC and CMA investment of \$680K over four years to secure additional funds from Agriculture and Agri-Food Canada (AAFC) Growing Forward program, Agricultural Council of Saskatchewan (ACS) and the Western Economic Partnership Agreement (WEPA).

The 'Innovate Mustards' project, funded under the Growing Forward Program is one such project to implement a long-term plan to address critical aspects of mustard production and new options for total mustard utilization. The 'Innovate Mustards' project, ACS and WEPA funds have helped M21 to establish a long-term program that has focused resources to address priority aspects that will enhance competitiveness of the mustard industry. The long-term plan is to focus on four areas:

- i) Increasing mustard yield through improved germplasm and variety development to keep mustard competitive with other major crops so growers will continue to grow mustard as part of their crop rotation. The breeding work at AAFC over the past two years is now showing promising results to develop synthetic varieties for yellow mustard, which will be evaluated over the next couple of years.

- ii) Working on the use of mustard meal as an antimicrobial agent in processed and or packaged foods work done in Winnipeg at University of MB and at AAFC laboratory in Guelph has shown good activity as a natural antimicrobial. This work will need to demonstrate the proof of principle of antimicrobial activity in processed and or packaged foods prior to industry partner supporting demonstrating the commercial application.

- iii) Developing a new dedicated industrial oilseed Ethiopian mustard (*B. carinata*) with erucic acid for new markets for non-food and non-traditional mustard uses. AAFC's established breeding program is now moving forward faster to create robust varieties adapted to the prairie region.

- iv) Creating value added products from meal and oil for non-food applications, such as biopesticide from meal and value added products from its oil.

Please watch for updates and information on the M21 'Innovate Mustards' project and other project activities in the SMDC newsletter. M21 always looks forward to your inputs and suggestions for improvement of the mustard industry. If you would like to discuss any ideas, please feel free to contact Pete Desai, 403-286-4593 or Tom Burwell at 306-373-3938.

