

***Role of the Advisory Committee on  
Organic Research (ACOR) in the  
design and execution of research  
projects at the Swift Current Research  
and Development Centre***

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**Agriculture and Agri-Food Canada-  
Swift Current, SK**



- **M.R. Fernandez, B.G. McConkey, M.P. Schellenberg, R.P. Zentner (retired)**, AAFC-Swift Current Research and Development Centre
- **J.Y. Leeson**, AAFC-Saskatoon Research and Development Centre
- **S. Chant**, Saskatchewan Ministry of Agriculture, Swift Current, SK
- **G. Johnson, M. Meinert, B. Metke, D. Smith, and S. Wells**, organic producers in southwest Saskatchewan

***Some at AAFC-Swift Current have conducted research on organic management from the 1990's at the Alternative Cropping Systems study (organic vs. conventional) at Scott, SK:***

**Energy use efficiency of organic vs. conventional:**

***Zentner et al., 2011. Effects of input management and crop diversity on non-renewable energy use efficiency of cropping systems in the Canadian Prairie. Europ. J. Agronomy 34: 113–123.***

**Fusarium infections in wheat in organic vs. conventional:**

***Fernandez et al., 2011. Impact of crop management practices on root and crown rot of spring wheat in west-central Saskatchewan. Agronomy Journal 103: 756-765.***

➤ *In 2007, around 7 acres of land at the Swift Current Research and Development Centre, were set aside for organic research...*

*There have been several projects in this organic area since 2009, including:*

✓ *Organic breeding trials “A” and “B”, 2009-2013, coordinated by S. Fox and M. Entz (discontinued in 2014)*

## **Characterization of crops for reaction to root rot and leaf spots (2010-12), funded by Canadian Wheat Board (Organic Sector Market Development Initiative):**

- ***Fernandez, M.R. et al., 2014. Root rot severity and fungal populations in spring common, durum and spelt wheat, and Kamut grown under organic management in western Canada. Can. J. Plant Sci. 94: 937-946.***
- ***Fernandez, M.R. et al., 2014. Leaf spotting reaction of spring common, durum and spelt wheat, and Kamut under organic management in western Canada. Can. J. Plant Sci 94: 929-935.***

**Impacts of reduced tillage and diversified cropping sequences under organic management in the semi-arid Brown soil zone (2010-15), funded through Organic Cluster II / Western Grains Research Foundation (see posters)**

**Water and soil conserving tillage systems for organic crop production in the semi-arid Prairies (2015-17)**

**In 2015: our land base for organic research was tripled to 23 acres...**

**Diversifying organic cropping options for the Brown soils through intercropping – 2016 to 2018 (Western Grains Research Foundation, SaskWheat, SaskPulse, Prairie Organic Grain Initiative)**

**Influence of allelopathic cover crops and their residues on soil quality and the growth and spread of perennial thistles and other weeds in the semi-arid Brown soil zone – 2016 to 2018 (AAFC)**

**(see posters)**

**Impacts of reduced tillage  
and diversified cropping  
sequences under organic  
management in the semi-arid  
Brown soil zone**



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➤ **Advisory Committee (a.k.a. Council) on Organic Research at AAFC-Swift**  
**Current was “officially” established**  
**after our First Organic Field Day**  
**on July 24th, 2009**

*Why was it important to have a producer advisory body for our organic agronomic studies?*

- **... to identify the most pressing needs by organic producers in the Brown soil zone of south-west Saskatchewan...** so that we could design relevant studies for organic production
- **... to identify problems during the execution of the projects...** so that appropriate decisions regarding any changes to protocols could be made promptly

- ***Advisors have been those who provided any kind of recommendation, advice, input, feedback since the conception of our organic research program***
- ✓ **some were instrumental in the design of the projects, while others were less involved...**
- ✓ **some have participated regularly in meetings and visited the trials often, while others have provided advice upon request...**

## Organic producer and other members of ACOR in 2016:

- **Martin Meinert**
- **Kevin Beach**
- **Garry Johnson**
- **Dwayne Smith**
- **Stewart Wells**
- **Stan Noble**
- **Milo Chubb**
- **Kent Glass**
- **Allison Squires**
- **Cody Straza**
- **Blair Metke**
- **Will Oddie**
- **Doug Crabtree (Montana)**
- **Marla Carlson(SaskOrganics)**
- **Iris Vaisman (POGI)**
- **Lana Shaw (SERF)**

## Other members of ACOR:

### *SK Ministry of Agriculture:*

- Dunling Wang, **Alternative Cropping Systems Specialist**; Shannon Chant, **Regional Crops Specialist**

## **Other advisors over the years have included:**

- Steve Shirliffe, **U. of Saskatchewan**
- Martin Entz, **U. of Manitoba**
- Others at **AAFC...**

**Principal Investigator, and research team members:**

- **Myriam Fernandez, AAFC-Swift Current**
- **Brian McConkey, AAFC-Swift Current**
- **Mike Schellenberg, AAFC-Swift Current**
- **Julia Leeson, AAFC-Saskatoon**
- **Newton Lupwayi, AAFC-Lethbridge**
- **Bob Zentner (retired AAFC)**
- **Sean Hemmingsen, NRC-Saskatoon**
- **Antoine Pagé, NRC-Montreal**



## *What do our meetings consist of?*

- **discussions on needs and problems faced by organic producers in south-west SK**
- **presentations by experienced organic producers on various topics related to organic methods/production**
- **discussion of progress and problems, and suggest possible solutions to various issues encountered during execution of the projects**

➤ *In addition, ACOR has also been a forum for multiple exchanges of information and knowledge of interest to organic and low-input research and production...*

*Invited presentations of general interest to organic producers, researchers and others:*

- ✓ A. Navarro: “**Arbuscular mycorrhiza symbiosis and organic management of wheat-based cropping systems**”
- ✓ S. Fox: “**Overview of organic breeding in the Prairies**”
- ✓ M. Entz: “**Update on organic breeding trials**”
- ✓ A. Hammermeister: “**Organic research programs for the prairies: the Organic Science Cluster**”
- ✓ C. Jacobs: “**Organic update for SK**”
- ✓ B. Frick: “**What’s Happening in Organics in Alberta?**”
- ✓ M. Entz: “**Natural Systems Agriculture on the Prairies**”
- ✓ D. Hobson, Bauta Family Initiative: “**Canadian Seed Security**”
- ✓ R. Hynes: “**Status of *Phoma macrostoma* for biocontrol of Canada thistle**”

*Invited presentations focused on cover crops and intercropping: ... with the objective of starting studies in these areas, which was achieved in 2015*

- ✓ M. Schellenberg: “Are there advantages to introduced or native grasses, mixtures or monocultures?”
- ✓ J. Bainard: “Implications for the use of annual forage polycultures in low input agriculture”
- ✓ A. Kirk: “Cover cropping in organic agriculture”
- ✓ M. Entz: “Intercropping in organic farming”
- ✓ B. Blackshaw: “Cover crop options for brown soils”

*Main challenges faced in the first few years of our organic research program:*

- **Lack of funding!!!!**
- **First proposals to AAFC and SK ADF weren't successful** – “organic production in SK was not significant”!!!

**For all organic projects subsequently approved by various funding organizations...**

- ✓ ***Letters of support* from organic producers and others, such as SK Ag and private industry**
- ✓ ***In-kind contributions* from the most active producer members allowed us to receive more matching funds**

***Other responsibilities of ACOR consist of annual field days which have included “low-input and organic” research...***

- **low-input studies at our research centre are of relevance to organic producers**
- **low-input research is of interest to conventional producers, which might lead them to transitioning to organic**
- **many conventional producers are increasingly interested in intercropping, cover crops, green manure, and chemical-free weed control methods used in our organic trials**







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## ***Proceedings of the 2016*** **Low-Input and Organic** **Agricultural Systems Field Day**

*Swift Current Research and Development Centre,  
Agriculture and Agri-Food Canada,  
Swift Current, Saskatchewan*

**August 9th, 2016**

**Co-hosted by:**



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***Guidelines for ACOR were  
established in 2015...***

## Job Description includes:

- ✓ create a link **between the organic farm community and research and extension**
- ✓ assure the greatest value **of research to organic producers**
- ✓ advice to scientists **conducting organic research**

## Highlights of Key Duties:

- ✓ provide comments **based on observations of trials**
- ✓ attend **in-person and teleconference meetings to deliver feedback and discuss experiments**
- ✓ participate in planning **of new trials and field days**

## Qualifications include:

- ✓ a keen interest in organic agriculture
- ✓ practical organic farming experience
- ✓ ability to reply in a timely fashion
- ✓ provide feedback as requested

**The key to success of an advisory council  
such as ACOR are active members for  
regular communication and discussion  
of organic trials,  
in addition to information sharing that  
contribute to members' knowledge of  
successful organic practices...**

*We expect continued success with this  
organic research advisory model...*



***THANK YOU!!!!!!***

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