
Canola Project Directors' Workshop

Great Plains Region Report
February 24, 2010

Gary M. Pierzynski – Professor and Head, Department of
Agronomy, and Great Plains Region Director for the NCRP

J. Ernest Minton – Associate Director of Research and
Technology Transfer for KSRE and PI

Michael J. Stamm – KSU/OSU Canola Breeder and Co-PI

Great Plains Canola Research Program - NCRP History

- Canola interest initiated by GRAS approval in the 1980s and the need for alternative cropping systems
- K-State was directed by the CSRS in 1991 to start a breeding program through a special research grant
- Once NCRP funding began in the 1990s, K-State was selected as the lead institution for the Great Plains because of the breeding program
- Today, the region's highest priorities remain variety development and new crop production research

Great Plains Canola Research Program

- Funded through the SACC since 2007
- The Great Plains Region distributes its SACC award through subcontracts
- Sub-contracts have been issued for over 10 years to CSU, UNL, MU, OSU, TT, and TAMU-Vernon.
- Beginning in FY2009, the region was strengthened by the inclusion of a research group centered in the southern High Plains
 - Adding TAMU-Lubbock, NMSU, and others from CSU

Great Plains Canola Research Program

- The project director allows the individual subcontractor to determine how to divide funding
- A significant amount supports breeding and the longstanding regional testing network
 - One of the only public winter canola breeding programs in the region
 - The source for experimental and new cultivars from public and private institutions in the Great Plains
 - Critical performance testing for the development, evaluation, and release of new, better adapted winter canola varieties
 - Multiple subs are listed as co-authors of the annual NWCVT publication and varieties released by K-State

FY09 Project Personnel

Gary M. Pierzynski	KSU	Prof. and Head, Dept. of Agronomy, Great Plains Region Director of the NCRP
J. Ernest Minton	KSU	Project PI, Associate Director of Research and Technology Transfer for KSRE
Michael J. Stamm	KSU	Co-PI, Canola Breeder
Johnathon D. Holman	KSU	Asst. Prof., SWREC, Cropping Systems
Victor L. Martin	KSU	Assoc. Prof., Alternative Crops and Annual Forages
Kraig Roozeboom	KSU	Asst. Prof., Cropping Systems/Crop Production
Jerry J. Johnson	CSU	Assoc. Prof., Crop Production Extension Coord.
William J. Wiebold	MU	Prof., Corn and Soybean Management
Dipak Santra	UNL	Asst. Prof., Alternative Crops Breeding
Sangu Angadi	NMSU	Asst. Prof., Crop Production
Chad B. Godsey	OSU	Asst. Prof., Cropping Systems Specialist
John W. Sij	TAMU-Vernon	Prof., Crop Science
Calvin Trostle	TAMU – Lubbock	Assoc. Prof., Extension Agronomist

FY09 Budget Breakdown

Kansas State – Canola Breeding	\$75,000
Kansas State – Extension and Production Research	\$15,000
Colorado State	\$30,500
Missouri	\$5,000
Nebraska	\$7,500
Texas A&M – Vernon	\$5,000
Oklahoma State	\$11,000
Texas A&M – Lubbock	\$30,500
New Mexico State	\$30,500
Total	\$210,000

FY09 Project Breakdown

Projects	CSU	KSU	UM	UNL	NMSU	OSU	TAMUV	TAMUL
Canola Variety Development		X		X		X		X
National Winter Canola Variety Trial	X	X	X		X	X	X	X
Great Plains Canola Variety Trial	X	X	X	X		X	X	X
Early Generation Screening Nursery		X		X		X		
Canola Establishment	X	X			X	X		X
Irrigation	X	X		X	X		X	X
Cultivar Development in No-till		X				X		
Planting Date		X			X			X
Canola Harvest Mgmt.		X				X		X
Canola Forage Clipping		X						X
Insect Assessment					X			X

Comments from FY09 proposal review package

- Placed in the “outstanding” category
- Proposal is “well-written and directly addresses key criteria outlined in the request for financial assistance”
- Positive aspects:
 - ✓ History of experience and successful implementation of canola research
 - ✓ Unique aspect of the forage research
 - ✓ Established team of experts with qualified PIs
 - ✓ Previous collaboration with other states within the region
 - ✓ Significant education and outreach program to producers
- Negative aspects:
 - ✓ Need to strengthen external research advisory committee to ensure all states in the region are represented

Research Objectives

The long-term goal of this multi-state, multidisciplinary project is to facilitate the adoption of winter canola as a viable rotational crop for the Great Plains and the southern High Plains. Researchers have adopted the high-priority area winter canola production systems, including, but not limited to genetic improvement, and the following supporting objectives to aid in facilitating the program.

- Continue the evaluation and development of high-yielding, locally adapted canola cultivars for the region
- Improve canola production systems in the region by addressing agronomic management issues
- Extend production and marketing technology for canola through appropriate, coordinated technology transfer programs

Research Highlights

- Shown simulated grazing reduces grain yield by one third
- KS4022 experiences no significant reduction in winter survival or grain yield following simulated grazing
- Swathing prior to harvest and direct combining produce equal yields in the SGP
- Removing crop residue from the seed-row in whatever manner necessary will enhance establishment, survival, vigor, and yield
- Kiowa, released in 2008 for its improved winter hardiness, will be available to producers in fall 2010
- KS4158 has 1% greater oil content and improved performance over the longstanding check cultivar 'Wichita'; release is pending in summer 2010
- New breeding materials developed include 125 conventional, 34 glyphosate resistant, and 238 specialty oil populations
- The 2009-2010 NWCVT was planted at 65 locations in 25 states and included 42 entries from 10 breeding programs

Structural changes for 2010

- The joint KSU/OSU canola breeding and management program was initiated in 2005
- After 2010, OSU will not be supporting canola breeding efforts
- The Kansas Agricultural Experiment Station is committing 3 years of support to fill the void left by OSU
- In addition to the SACC grant program, more pressure will be placed on external funding sources

Questions?

