

Triticale--Is this my beautiful alternative crop?

This cross between Durum wheat and rye has slowly been improving in yield and quality since it was first grown in the 1960s. Test weight is now typically 56 pounds per bushel, the same as corn, and there are varieties available that are not subject to infection with the fungus that causes ergot in rye. ISU Assistant Professor of Agronomy Lance Gibson believes that triticale may be ready to take its place on Iowa farms that can feed it to livestock. Lance is working with several PFI cooperators to evaluate new varieties of triticale.

In 2003, two northwest Iowa PFI farms worked with Gibson on the project. **The Dordt College Agricultural Stewardship Center**, near Sioux Center, and **Paul and Karen Mugge**, Sutherland, both compared triticale to oats ([Table 4, click to view](#)). In both cases, the oat yield (in 32-lb bushels) was much greater, but the harvested weights were very similar to the triticale yields.

How do you place a value on triticale? There is no established "market price" for the crop. Lance Gibson suggested basing it on the 2003 corn price. In 2003, oats enjoyed a good price, so the oats came out ahead in the economic calculation. However, pound-for-pound triticale is a superior feed to oat, containing more crude protein, equivalent lysine, greater energy content, and much less fiber than oat. So a farmer in a position to feed these crops would have been better off with the triticale. This evaluation is continuing in 2004.

Table 4. Small Grains, Cover Crop, and Tillage Trials

COOPERATOR	CROP	TREATMENT "A"			TREATMENT "B"
		DESCRIPTION	YIELD (bu.)	TREATMENT COST	DESCRIPTION
DORDT COLLEGE	SMALL GRAINS	TRITICALE	91.3		OAT
		LBS GRAIN	5,112		
		T STRAW	1.88		
MUGGE	SMALL GRAINS	SPRING TRITICALE	67.1		OATS (JERRY)
			3,670	(LBS GRAIN)	
			1.1	(T STRAW)	
THOMPSON	CORN	RYE ON RIDGE, FALL BEFORE CORN	174.1	\$57.71	NO RYE
FREDERICKS	SOY-BEAN	DEEP TILL	33.4	\$10.01	CHECK (NO DEEP TILLAGE)

Small Grains, Cover Crop, and Tillage Trials

TRT "B"		DIFFERENCE				COMMENT
YIELD (bu.)	TREATMENT COST	YIELD DIFF.	YLD LSD (bu.)	YLD SIG.	\$ BENEFIT OF TRT "A"	
153.8		-62.5	20.3	*	(\$72.90)	OAT MARKET VALUE VS. TRITICALE PRICE BASED ON FEED VALUE
4,922	(LBS GRAIN)					ACTUAL GRAIN WEIGHTS ARE ALMOST THE SAME
2.29	(T STRAW)	0.40	0.15	*		TRITICALE HAS GREATER FEED VALUE PER POUND
121.5		-54.4	11.3	*	(\$69.07)	" "
3,813	(LBS GRAIN)					
1.4	(T STRAW)					
183.5	\$0.00	-9.4	12.1	N.S.	(\$57.71)	RYE SEEDED NOV. 22, 2002. GOOD RYE REMOVAL, BUT ROW SKIPS LED TO WEEDS IN CORN
33.1	\$0.00	0.3	1.5	N.S.	(\$10.01)	MAYBE A BENEFIT IN COMPACTED FIELD BORDER