

Variety Comparisons

Variety Comparisons

Varieties and hybrids were mentioned earlier as part of trials by Angela Tedesco and Gary Guthrie, but the so-called field crops were also part of variety comparisons in 2001. **Ron and LaDonna Brunk** and **Steve and Tara Beck-Brunk**, Eldora, wanted to know if the high-priced corn hybrids are really worth the cost, so they compared some of these with cheaper hybrids, throwing in a few short-season hybrids as well ([Table 10 click to view](#), Fig. 10). It was necessary for the Brunks to use two experiments in adjacent fields in order to fit all the hybrids they wanted to test. To compare across the two trials, they used the hybrid Pioneer 34B23 in both. Yields shown in the table and figure are adjusted to equalize the yields of this "tester" hybrid in the two fields.



As the table shows, the treatment cost (seed plus drying) was not always justified by the yield. On the other hand, just because the seed was inexpensive didn't mean the net profit was better.

The Neely-Kinyon Research Farm, Greenfield, also looked at corn varieties in 2001. The farm, which represents a partnership of ISU and the community of Greenfield, compared a common hybrid to an open-pollinated variety and two "varietal crosses" whose seed can be saved for several seasons. The varietal crosses came from ISU courtesy of USDA-ARS corn breeder Kendall Lamkey.

Seed costs varied drastically, from \$30.25 per acre for the hybrid to \$1.51 for the open-pollinated corn. Yields also varied widely. The cheapest corn was the least profitable, and the most expensive corn was the most profitable, at a net of \$75.14 more than the open-pollinated variety. However, one of the varietal crosses produced a net profit of \$56.61 per acre, only \$18.53 behind the leader. Kendall Lamkey feels this approach may hold promise, at least in places where the corn suitability rating is not high.

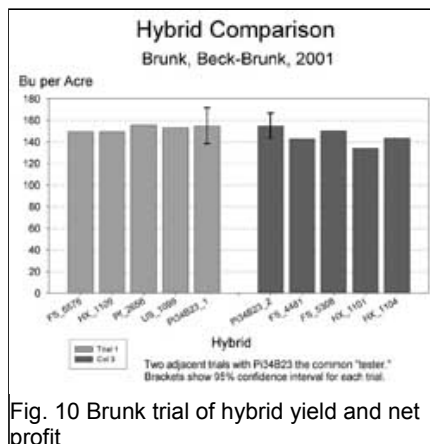


Fig. 10 Brunk trial of hybrid yield and net profit

Table 10. Multiple-Treatment Variety and Planting Trials

COOPERATOR	CROP	PREVIOUS CROP	YIELD SIGNIFI- CANCE	TREATMENT "A"				
				DESCRIPTION	YIELD (bu or T)	STAT.	TRT COSTS	\$ BENEFIT
BRUNK	CORN	SOYBEANS	*	Pi34B23 (USED IN BOTH TRIALS)	155.0	a	\$41.43	\$0.00
				HX_1109	149.2	a	\$26.54	\$14.89
				FS_5308	150.1	ab	\$40.10	\$1.33
NEELY-KINYON	CORN	SOYBEANS	*	PIONEER 34W67 HYBRID	108.1	a	\$30.25	\$75.14
TEDESCO, 2 YEARS RESULTS	SUMMER SQUASH	OATS/VETCH	*	DIRECT-SEEDED, COVERED	133.3	a	\$16.25	\$1.45

Multiple Treatment Variety and Planting Trials											
DESCRIPTION	YIELD (bu or T)	STAT.	TRT COSTS	\$ BENEFIT	TREATMENT "C"					OVERALL COMMENTS	
					DESCRIPTION	YIELD (bu or T)	STAT.	TRT COSTS	\$ BENEFIT		
US_1099	153.4	a	\$33.70	\$7.73	Pf_2656	155.6	a	\$42.72	-\$1.29	TWO 5-TRT TRIALS WITH COMMON Pi34B23 "TESTER" USED TO ADJUST YIELDS. TRT COSTS ARE SEED AND DRYING. \$ BENEFITS ARE COMPARED TO Pi34B23	
FS_6576	149.4	a	\$39.82	\$1.61	FS_4481	142.7	bc	\$38.79	-\$19.46		
HX_1101	134.0	c	\$24.32	-\$20.66	HX_1104	143.5	bc	\$26.68	-\$5.92		
GREENFIELD OPEN POLLINATED	50.4	d	\$1.51	\$0.00	BS11 x BS10 VARIETAL CROSS	74.5	c	\$7.56	\$37.26	YIELDS HURT BY SEPTEMBER WINDS	
					BSSS x BSCB1 VARIETAL CROSS	86.0	b	\$7.56	\$56.61		
DIRECT-SEEDED, NO COVER	80.2	b	\$0.00	\$0.00	TRANS-PLANTED, NO COVER	57.3	b	\$10.00	-\$10.00	\$0.33 PER SQUASH	