

wins variety crown 5th straight year

popular Colorado variety was planted on 49.7 percent of the 1992 crop. It is the leading variety in acreage planted in the 1992

Scout 66 is the most popular variety at 21.0 percent

8 percent of the 1992 crop

planted for the first time in 1992

and Eagle Scout with 2.8 percent of the 1992 crop

8 percent of the 1992 crop

Winter Wheat: Percent Planted by Variety, Colorado, 1987-93*

Variety	1987 Crop	1988 Crop	1989 Crop	1990 Crop	1991 Crop	1992 Crop	1993 Crop
	Percent						
Tam107	2.9	8.3	22.0	37.9	49.3	49.7	51.5
Lamar	—	—	—	.3	2.6	5.7	7.2
Scout**	9.4	9.3	6.9	9.2	6.2	5.7	6.0
Baca	13.2	5.6	7.9	7.6	8.0	7.9	4.8
Hawk	21.0	21.4	17.8	10.4	6.9	4.8	3.9
Tam 200	—	—	—	—	2.8	2.7	2.8
Vona	13.7	15.0	9.1	6.2	2.6	2.2	2.5
Thunderbird	—	.5	1.8	2.3	1.1	2.4	2.2
Sandy	13.1	8.0	6.3	4.6	2.4	3.1	1.5
Eagle	1.0	1.7	1.3	.9	1.1	1.0	1.4
Abilene	—	—	.2	1.3	.9	1.6	1.3
Newton	4.1	4.6	3.3	2.0	1.3	1.7	1.1
Jeff	1.4	2.1	2.4	1.2	2.0	1.1	.9
Yuma	—	—	—	—	—	—	.8
Arapahoe	—	—	—	—	—	—	.8
Larned	.7	.9	1.1	1.3	.4	—	.6
Other***	19.5	22.6	19.9	14.8	12.4	10.4	10.7

* Dashes indicate either none or minor amount reported.
 ** Includes Scout 66.
 *** Includes unknown, minor, and older varieties such as Slouland, Centurk, Victory and Tam 108.

may unseat champs

quality, and leaf rust resistance. Its test weight is lower than most varieties, particularly under late season heat or drought stress.

Hence, Jules is only recommended for longer cooler growing areas like northeastern Colorado or higher elevation areas. Jules was developed by the Department of Agronomy at CSU with funds from the Colorado Agricultural Experiment Station, CWAC, Colorado Seed Growers and private industry.

John Shanahan, CSU Cooperative Extension agronomist specialist, said the new winter wheat variety was named Jules to recognize one of the major dryland wheat-producing areas in the state and to indicate its particular adaptation to this area.

"We also want to emphasize the important leaf rust resistance and

winter hardiness of this variety for this area of the state."

Jules is a high-quality bread wheat, superior to TAM 107 and TAM 200 in bread-making traits. Jules has been equal to Yuma and slightly inferior to Lamar, the current quality standard, in all measures of end-use quality.

Foundation seed was distributed to selected seed growers in August 1992 to produce registered seed for commercial wheat producer for 1993 planting.

IRRIGATED VARIETY TRIALS				
Locations:	4	3	7	
Jules	79.8	-	80.6	80.2
Yuma	78.3	-	90.1	84.2
TAM 107	70.6	-	85.7	78.2
TAM 200	79.4	-	90.8	85.1

Aphid resistant wheat strains beginning to show promise

Russian wheat aphid resistant strains of hard red winter wheat have been developed and are being tested for agronomic and quality traits in the state-wide wheat breeding and testing program.

The Russian wheat aphid (RWA) was discovered in Baca County in 1986. By July 1987, the aphid was in every small-grain producing county in Colorado. Aphids have cost Colorado wheat producers more than \$100 million in lost production and control costs, said Frank Peairs, Colorado State University (CSU) Cooperative Extension entomologist.

"We're moving very fast in our wheat breeding program," said James Quick, a CSU agronomist and wheat breeder. "In 1987 we found a wheat variety grown on the steppes of Russia with significant resistance to the aphid and confirmed this resistance in 1989. Unfortunately, this wheat, T-57, has essentially none of the other qualities our wheat producers need."

T-57's aphid resistance is the variety's only redeeming charac-

terized by going through a period of 35 degrees or less for at least two months to move from the vegetative to the flowering stage. Normally vernalization occurs when wheat is planted outside in the fall and goes through the winter, Quick explained.

The growth chamber speeds up the vernalization process. It enabled CSU wheat breeders to get two crops per year during the initial stages of the breeding program. Consequently, it took only two years to produce the first four generations rather than four years.

"After the first four generations, we selected 800 lines for RWA resistance, red grain, hard kernels, short height and early maturity. Seed from these lines was increased in the summer greenhouse in 1990 and planted outside in test plots the fall of 1990 and evaluated for RWA resistance as well as such characteristics as yield, quality, maturity, height, lodging, shattering, resistance to wheat streak mosaic virus and winter hardiness.