Delta Potato Variety Observation Project Report

Cooperators: Bill Campbell, Alaska Plant Materials Center Don Quarberg, University of Alaska Extension Service, Delta Mike Carlson, Delta School District, FFA

A potato variety demonstration project was planted at the University of Alaska Experiment Station farm in Delta Junction on May 22, 1988. The project was intended to provide area growers the opportunity to compare 43 varieties and to give Delta High School Future Farmers of America (FFA) students experience in growing potatoes.

The plot was comprised of 12 russet, 8 red, 23 white/buff and one purple-skinned cultivars. The plot was fertilized at a rate equivalent to 1,400 pounds of 10-20-20 one week prior to planting. Two replications of 30 seed pieces per variety were planted on 12" centers with 2 marker plants between each variety. Rows were spaced 5' apart to minimize between row competition. Excellent weed control was accomplished with a Round Up/Lorox mix at a rate of one quart each per acre, applied ten days after planting. No evidence of herbicide injury was noted during the growing period although vine growth was stunted.

Stand counts were made on July 12. All varieties had 100% emergence. Growth was noted to be less than that observed in area commercial potato fields.

Harvest was conducted on September 13, 1988. Local growers were notified of the harvest and six attended the field day. Tuber size was small for all varieties. The maximum size attained was six ounces. Water stress or herbicide carryover is suspected of causing the small tuber size. No disease problems were observed.

This project was the first large-scale variety observation plot in the Delta area. Delta area growers were given the opportunity to observe the growth and yield of 43 potato varieties. The small tuber size observed was disappointing, especially since local growers achieved much better results. The growers were appreciative of the efforts that were made to provide them with this information.

The project was funded with a grant from the Applied Agricultural Research Account. Special thanks to: Don Quarberg, University of Alaska Extension Service; Ron Riesgaard, University of Alaska Experiment Station; Mike Carlson, Delta High School; Barney Hollembaek, Alamasu; and Brasier Farms for assistance with the project.

DELTA POTATO VARIETY DEMONSTRATION PLOT 1988

VARIETY	30 HILLS POUNDS	POUNDS	YIELD 60 HILLS POUNDS		COMMENTS
RUSSETS BUTTE	REP 1 51.6		TOTAL 94.8	11.5	HIGH VITAMIN C
LEMHI	49.8		93.8		
COLUMBIA RUSS	43.6			11.2	POOR SHAPE
TARGEE	46.6			11.1	GOOD SKIN LARGER TUBERS
NORGOLD "M"	39.4		87.6 83.8	$10.6 \\ 10.1$	MANY SMALL FAIR
ACADIA ALAGASH	41.8 42.8	42.0 37.4	89.8	9.7	
NORGOLD	42.8 30.2	45.4			SMALLER TUBERS
AK RUSSET	30.6				
AGASSIZ	27.6			8.6	POOR NET
BELRUS	28.6				GOOD NET SMALL
RUSSET BURBAN	31.2				SLIGHT NET
GOLDRUS RUSS	31.6	24.8	56.4	6.8	POOR NET
REDS					
RED PONTIAC	59.2	59.2			
RED LASODA	52.8 58.2	51.8 44.4	104.6 102.6		
BATOCHE CHIEFTIAN	98.2 44.0	44.4			
REDSEN	37.2	47.6	a 125 57 20105		
SANGRE	40.6				
NORLAND	39.8				FEATHERED PINK
CARIBE	42.8				
RED McLURE	39.2	42.6	81.8	9.9	FEATHERED
WHITES		/		1/7	
IRISH COBBLER	64.2	53.6	117.8 110.0	14.3 13.3	
KATAHDIN EPICURE	61.4 59.4	48.6 48.4	107.8		
BINTJE	62.8				
WARBA	56.8				
AK 114	53.4	48.8	102.2		
SNOWCHIP	50.2				
DENALI	54.4	41.4	95.8	11.6	
GREEN MTN.	49.0	44.4	93.4	11.3	GOOD SKIN
ONAWAY	39.4	52.8	92.2	11.2	GOOD SKIN EARLY
KENNEBEC	36.4	54.8	91.2	11.0	SOME GREEN
HAMPTON	49.0	40.2	89.2	10.8	
YUKON GOLD	51.8	29.8	81.6	2.2	YELLOW FLESH
ALPHA	45.8	34.2	80.0	9.7	YELLOW FLESH
JEMSEG	39.0	40.4	79.4	9.6	GOOD SKIN EARLY
SHEPODY	40.8	38.2 40.8	79.0 76.8	9.6 9.3	LIGHT SET HOLLOW HEART
CONESTOGA	36.0 28.8	40.8	76.8 75.2	9.1	
TOLAAS MONONA	40.0	48.4 32.0	72.0	8.7	
SABLE	36.0	27.0	63.0	7.6	GOOD .OOKING
BAKEKING	33.0	27.0	60.0	7.3	<pre>control = 1</pre>
sectors mus commune (Colorado C. Ch	100				