

DIXIE THINNER TRIALS, GARLAND, UTAH, 1943

Orson A. Christensen 1/

Explanatory Notes.- The drills used were converted old model J. Deeres: the No. 4 box type to a 22 flute from the regular 10 flute feed roll; the No. 7 plate feed to the 72 - 11/64-inch hole feed. No. 7 drill made the best distribution of seed, the No. 4 left more frequent seed skips and bunches, hence No. 7 plantings were acceptable oftener for blocking.

The after-blocking hoeing time records seem to show inconsistencies but on acquaintance with the many variable conditions encountered the seeming inconsistencies and the excess time are understandable. Furthermore, thinning and the hoeing after thinning included, in fact, the conventional thinning and first hoeing operations.

The acre yields show no definite conclusions though hand-thinned plots in more cases showed better yields. The number of beets in the stands though less, were larger in size. The 1943 season elements inscrutably contributed to the production of unusually large beets in the thinner stands. To explain this fact our growers want to credit too much to single-germ seed.

General Observations.- The regularity of distribution is of more importance in thinner stands than number of plants. Likewise the condition of the seedbed and drill operation and planting technique is more important than seed quantity in getting a plant stand suitable for the use of the Thinner.

It is concluded that with adequate stands as tried, the cut space should be relatively wider, i.e., 4-1/2-inch to 1-1/2-inch block to leave more single beets in better distribution. A familiarity with the Thinner and mechanical ability of the operator is the element necessary to do satisfactory work and inspire confidence of growers in it. Covering of beets is the main objection. Hand thinners opposed the use of the Thinner and scared growers off. The Thinner operation well done should be considered as the final thinning operation, and the following operation as the first hoeing to remove the basis of an undue thinning charge by labor.

1/ District Manager, Utah-Idaho Sugar Company.

RECORD OF DIXIE THINNER OPERATIONS - GARLAND, UTAH 1943

Beet Plantings - Segmented Seed - 7/64" - 11/64"

Grower	Field	Drill Used	Seed Rate	Field Stand Per 100"	Beet Size	Blade Setting-Centers	Block Size	Beet Counting Blocks Per 100'	Singles	Doubles	Stand After Selective Hoeing	Time Per Ac. (Hours)	Stand Count Yield Per Sept. 1 Acre			
													Test Plot	Field Test Avg	Test Plot	Field Test Avg
Garfield		J.D.#4 10 Flute	5.0#	48	3"	6"	1 1/2"	135	51	84	101	19	88	61	19.7	20.7
Hansen		J.D.#4 22 Flute	5.3#	30	1"	6"	2"	122	79	43	92	16.5	92	59	16.1	13.7
Gleason		J.D.#7 Plate	5.7#	30	2 1/2"	6"	2 1/2"	110	67	43	99	16.6	90	72	15.3	13.9
Rhodes		J.D.#7	5.0#	33	1 1/2"	6"	2 1/2"	110	72	38	97	22	94	66	25.5	28.1
Brown		J.D.#7	5.2#	32	3/4"	6"	2 1/2"	112	71	41	85	15	81	85	17.0	18.6
Potter		J.D.#7	4.8#	37	2 1/4"	6"	2 1/2"	124	68	56	108	28	115	83	17.1	19.5
Holmgren		J.D.#7	7.5#	45	1 1/2"	7"	2 1/2"	116	60	56	92	--	90	87	23.2	20.6
Christensen		J.D.#7	5.3#	32	2"	6"	3"	85	59	26	84	15	99	84	21.8	23.2
Sakata		J.D.#7	3.5#	18	3 1/2"	10"	4"	58	18	40	80	26	82	78	19.8	22.2
Wilson		J.D.#7	6.0#	26	2"	6"	2"	60	39	21	65	20	65	--	7.1	7.7
Woodruff		J.D.#4	4.5#	17	2 1/2"	(Hoed Only - no blocking nor hand thinning)					95	16	84	64	22.62	22.68