

MINIMUM TILLAGE EXPERIMENTS AT THREE LOCATIONS 1969

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Minimum tillage testing was continued at three locations, the Cotton Research Center, Marana Experiment Farm and the Safford Experiment Station. Five treatments were used at Marana and Safford, while only four were employed at the Cotton Center because of limited space.

The five treatments were as follows: (1) Minimum tillage, rebed old beds with lister; (2) Maximum tillage, disc, plow, float, disc and list; (3) Chisel-list deep, rebedding old beds; (4) Chisel-list at shallower depth, rebedding old beds; and (5) Chisel-list deep, moving laterally 20" to form new beds.

Penetrometer readings, down to 24", were made at the Cotton Center and Safford shortly after land preparation. Tests at the Cotton Center were not conclusive due to poor instrumentation. The tests at Safford showed no difference in penetrometer readings due to land preparation.

The incidence of verticillium wilt was counted at the Marana Farm, but there were no differences due to treatment.

The table following shows the yield data, in pounds of seed cotton per acre, for the three locations, first-picking yields only. There were no significant differences in yields.

FIRST PICKING YIELD FROM MINIMUM TILLAGE TESTS AT THREE LOCATIONS IN 1969. YIELDS ARE POUNDS OF SEED COTTON PER ACRE

Treatment	Location		
	Cotton Center <sup>/1</sup>	Marana Farm	Safford Station
1. Minimum tillage, rebed old beds	3,347	3,421	2,648
2. Maximum tillage, disc, plow, disc, float, list	2,997	3,374	2,711
3. Chisel-list deep, rebed old beds	3,421	3,390	2,801
4. Chisel-list shallow, rebed old beds	Not Used	3,250	2,651
5. Chisel-list deep, move beds 20 inches	3,481	3,454	2,527

<sup>/1</sup> Yields at Cotton Center were adjusted because of skips.