

MINIMUM TILLAGE PLANTING OF POTATOES

A PANEL DISCUSSION INTRODUCTION

by

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Work on reducing the effect of wind erosion by reduced preplant spring tillage called for lack of a better term minimum tillage or mini till has been conducted by WSU over the past three to four years. Some work has also been conducted by Oregon State University and the University of Idaho.

During the 1976 production season there was a total of 5,000 plus acres of potatoes planted using "non conventional" methods. There were two distinct types of situations represented in this commercially planted acreage. The smaller portion, approximately 400 acres, was mini till planted with a Lockwood semi mount four-row planter modified as described by Dr. Gary Hyde in his paper in these proceedings. The balance of the acreage was "non conventionally" planted by various means by individual growers as they saw fit.

Those acres that were planted with the Lockwood-WSU mini till planter were in cooperation with WSU personnel but they were totally a commercial approach. WSU delivered the planter to the growers. Each grower furnished the power unit, the crew, the seed and adapted the unit to his situation with the guidance and counsel of Dr. Robert Kunkel.

In addition to the mini till acreage using the Lockwood-WSU planter, at least 5,000 acres were planted in various ways that can not be considered "standard or conventional." The methods used varied from simply not plowing ahead of planting to having a commercial potato planter modified to the WSU specifications. Most of these efforts were influenced by the WSU concept of minimum tillage but if their systems were described to you there might be little if any resemblance to the method developed by WSU.

The minimum tillage panel that is being presented is made up of four growers who have at least one year's experience with the nonconventional or minimum tillage concept. Two of these gentlemen used the Lockwood-WSU planter and two developed their own system. These growers have been asked to explain to you the how, what, and why they did what they did. In addition, I have asked them to indicate to you if they plan to continue with this method the coming year and, if so, to explain the changes they intend to make from last year.

I'm aware as many of you are that some growers who used minimum tillage this past season experienced disappointing results. I have not had an opportunity to talk to all of them, but I feel from those that I have talked to and the various secondhand comments I hear that it is unlikely that the minimum tillage concept per se is entirely, if at all, at fault. However, this panel is intended to explain to you how minimum tillage can, and does, work.