TILLAGE PRACTICES, WEED MANAGEMENT, AND HERBICIDE RESISTANCE

Henry P. Wilson*

Virginia Tech Eastern Shore Agriculture Research and Extension Center, Painter, VA 23420 *hwilson@vt.edu

ABSTRACT

Farmers on the Eastern Shore of Virginia produce a diversity of vegetable and agronomic crops using conventional and reduced tillage production practices. A high percentage of land has been in continuous no-till production for five or more years. Vegetables are generally produced using conventional tillage systems since soils generally warm up and dry out more readily in the spring under tillage. Where vegetables are planted for fall harvest, no-till production is more feasible.

Research conducted at this station confirms that snap beans planted for fall harvest can be produced efficiently planted no-till as an alternative to soybeans.

Stubble height of 6 to 12 inches resulted in the most efficient harvest and yields equaled or exceeded those of conventional tillage.

Weed control was limited by the low number of herbicides registered for snap beans but registrations now include several non-selective, preemergence and postemergence herbicides. We have had little adoption of this practice in Virginia but all snap beans in Maryland and Delaware planted after barley and wheat are planted no-till.

Pumpkin is an additional crop planted no-till into a small grain cover crop or planted no-till behind small grain harvest. We are currently investigating additional herbicides for no-till double-crop pumpkins.