Pearl Millet Production Potential with No-till and Conventional Tillage on Cecil Soil in the Southeast

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Abstract

Importing grains from the Midwest to the Southeast for poultry rations results in a net regional accumulation of phosphorus which potentially threatens environmental quality. Regionally grown grains would help reduce the imbalance of phosphorus importation. Pearl millet is well adapted to the region and produces live weight gains in poultry equal to or superior to those of rations with corn. However, very few of the 2.5 million acres of pearl Millet grown in the USA are in the southeast. In 2006, we evaluated the viability and productivity of 9 pearl millet varieties at Watkinsville, GA on Cecil soil with 2 different tillage treatments, conventional and no-till, and application of inorganic fertilizer. Prior to 2006, fertilization of the research plots was with poultry litter or inorganic fertilizer in a corn-related research. The pearl millet variety evaluation was planted in 14 inch row spacing. An additional test evaluated 7, 14 and 21 inch row spacing for two of the varieties. Yields ranged from 1998 lbs/acre to 4869 lbs/acre. Average yields were higher in the historically poultry litter plots for both conventional and no-tillage treatments. The study will continue in the Summer of 2007.