Adapting On-Farm Water Supplies for High Value Irrigation Uses

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Throughout much of the humid east, irrigated row-crop fields are being converted to higher valued production including vegetables, orchards, ornamental plant nurseries, and sod production. In part, this is in response to greater competition resulting in lower prices for bulk traded commodities. Increasing land values and competition for water is forcing land and water to higher valued uses. Conversion from row-crop irrigation requires a reevaluation of water supply systems. Throughout the humid region, most irrigation water is obtained from on-farm surface and underground supplies. This paper briefly explores government limitations in place and proposed. Then, using data gathered from 800 farms in Georgia, it explores water needs for higher valued crops. Finally it lays out a systematic process that evaluates feasible options with current water supplies, steps to increase efficiency of the supply, and design and management changes that will assure flexibility and dependability for these high value crops.