

New production system helps local grower, demonstrates success

BY Kenny E. Perry, Extension Agent for Agriculture and Natural Resources

New things are popping up everywhere in agriculture. Improvements in technology and equipment over the last twenty years are astounding and the next twenty years promise to be just as important. Better production techniques have also improved yields of crops. Some of those are developed for specific crops while others are adapted from a different cropping situation.

For many years, vegetable growers have utilized a system called plasticulture where they use a narrow piece of plastic usually black, anywhere from 36 – 60 inches wide, with a plastic water line underneath. Holes are punched in the plastic and seeds or transplants are placed into the soil. This system accomplishes several tasks for the grower: better weed control, more rapid warming of the soil in the spring, less evaporation of moisture and the convenience of being able to water the crop when it needs it.

In 2009, David Meeks, owner of the Pumpkin Barn in northwest Graves County, asked for help with a pigweed problem he was encountering in his fields. There weren't a lot of herbicides available and the ones that could be used in that situation weren't very effective. So in 2010, his pigweeds were still a problem.

Late last year, after consulting several of our horticultural specialists at the University of KY, Meeks was teamed up with an Extension Associate, Vaden Fenton. Fenton was hired by UK with tobacco settlement funds through the Governor's Office of Ag Policy (GOAP) to demonstrate new production techniques for fruits and vegetables.

Fenton suggested that Meeks should use plasticulture to help with his weed problem and improve moisture efficiency and said to use white plastic instead of black because it wouldn't get as hot. Intense heat would cause the fleshy pumpkin vines to burn and scorch reducing the number and size of the fruit set. So a demonstration plot was established on Meeks farm using the white plastic and raised beds for his pumpkin production.

Meeks has been impressed with the new production technique. The plastic helped with weed control, but he's more convinced that the water line under the plastic saved his production this year. The northwest corner of Graves County where his farm is located received very little rain in 2011. He estimates that without the plastic and irrigation that he might have had half of a crop at best with very little size to the fruit. He's convinced that all of his fields will at least have drip irrigation in them in the years to come.

For more information, contact the Graves County Extension Office at 247-2334.

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