

NEW DEVELOPMENTS WITH ENVOKE IN COTTON**J.C. Holloway****Syngenta Crop Protection, Inc.****Jackson, TN****J. C. Sanders****J. L. Glasgow****E. W. Palmer****Syngenta Crop Protection****Greensboro, NC****B.D. Black****Syngenta Crop Protection, Inc.****Searcy, AR****B.W. Minton****Syngenta Crop Protection, Inc.****Cypress, TX****H. S. Mclean****Scott Martin****Syngenta Crop Protection****Greensboro, NC****Abstract**

Envoke is a post emergent cotton herbicide developed by Syngenta Crop Protection that can be applied early pre-plant, preemergence (EPP) or postemergence. Envoke can be applied postemergence, over the top (OTT) from the 5th cotton leaf stage to 60 days before harvest. Envoke can also be post directed to the cotton crop with same pre-harvest interval. This flexible application timing allows applications later in the season when residual activity is needed to control weeds through harvest. Applied later in the season as a tankmix partner with glyphosate on Roundup Ready® Flex cotton, Envoke offers contact as well as residual control of tough weeds that are not controlled with glyphosate alone. This allows the grower the ease of a single application of two modes of action, providing broad spectrum and residual weed control. Residual control of redroot pigweed, common cocklebur, ivyleaf and pitted morningglory, common ragweed, henbit, carpetweed and large crabgrass can be expected for a minimum of 14 days. Following activation with at least 0.5 inches of rainfall or irrigation, residual control of Palmer amaranth, yellow nutsedge and horse purslane has also been observed.

In addition, a new feature for the herbicide market is that Envoke can provide growth regulator effect equivalent to that of 6 oz/A of mepiquat chloride. This effect would have previously been considered crop damage – we're now making growers aware of the benefit.

Envoke applied in the Fall, (November 1st and later), up to no later than 90 days before planting cotton will provide residual control of most winter annual weeds, including glyphosate-resistant horseweed, henbit, cutleaf evening-primrose, shepherd's purse, annual bluegrass, mustard species and chickweed species.

Research also demonstrated that wheat, planted as a cover crop, is not affected by Envoke applied at 0.1 oz product /A in the fall. Applying Envoke before wheat is top-sown caused the lowest crop response, while drilled wheat or rye can be planted when Envoke is applied preemergence at 0.1 oz product/A with limited crop response noted. Envoke applied postemergence to 2-3 leaf wheat or rye will control troublesome weeds while leaving sufficient cover crop to prevent soil and wind erosion.