

Comparison of Mesotrione and Glyphosate Weed Control Programs in Corn. Terence M. Carmody and Michael D. Johnson, Research and Development Scientist and Technical Brand Manager, Syngenta Crop Protection, Greensboro, NC 27419

A new mixture of mesotrione (2-[4-methylsulfonyl-2-nitrobenzoyl]-1,3-cyclohexanedione), *S*-metolachlor (2-chloro-*N*-(2-ethyl-6-methylphenyl)-*N*-(2-methoxy-1-methylethyl)acetamide) and atrazine (6-chloro-*N*-ethyl-*N*-(1-methylethyl)-1,3,5-triazine-2,4-diamine) (trade name Lumax) has been introduced by Syngenta Crop Protection. Mesotrione provides excellent control of most important broadleaf weeds in corn including velvetleaf, pigweed species, waterhemp species, common lambsquarters, common ragweed, jimsonweed, nightshade species, and Pennsylvania smartweed. The addition of *S*-metolachlor plus atrazine to mesotrione in a pre-packaged mix results in the control of a broad spectrum of annual grass and broadleaf weeds. Corn shows excellent tolerance to Lumax. Preemergence Lumax is compared to postemergence single and multiple glyphosate weed control timings.