

TOLERANCE OF POPCORN TO VARIOUS HERBICIDES. Thomas T. Bauman, Michael D. White, and Chad D. Dyer, Professor, Research Associate, and Graduate Student, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN, 47907.

Between 70,000 and 80,000 acres of popcorn are grown in Indiana each year. The number of herbicides available for popcorn producers to use is limited. To provide producers with more weed control options we have evaluated mesotrione and foramsulfuron for possible use in popcorn.

Four different popcorn hybrids with different genetic make ups were tested to determine whether crop response and yields were affected by the different weed management systems. The herbicides were tested at the labeled dent corn rate and were applied to ten inch popcorn. Both herbicides were tested alone and as tank mixes. Different adjuvant systems were also tested. These herbicides were compared to several industry standard post emergence herbicides.

Both mesotrione and foramsulfuron caused injury seen as bleaching and stunting of the crop. The impact of this early season injury depended upon environmental conditions and popcorn hybrid. Even if the popcorn recovered from the early season injury, it might deter many producers from using these herbicides.