

RESPONSE OF SWEET CORN AND POPCORN TO POSTEMERGENCE APPLICATIONS OF FORAMSULFURON. David J. Lamore, Daren Bohannon and Jayla Allen, Technical Service Representative, Bayer CropScience, Research Triangle Park, NC.

Chemical weed control options are limited in commercial sweet corn and popcorn production field. Many of the newer chemistries are not yet registered for use on these crops. Crop tolerance and the high value of these crops, often limits the registration of new products.

Field studies have been conducted in 2000-2003 to determine the tolerance of multiple sweet corn and popcorn hybrids to foramsulfuron + isoxadifen, nicosulfuron, mesotrione, dicamba, and carfentrazone-ethyl. Rates were 37 + 37, 35, 105, 214, and 9.2 grams ai/ha respectively. Foramsulfuron + isoxadifen is a new chemical and safener combination first registered for postemergence applications to field corn in 2002. The potential exists for this chemistry to be expanded into sweet corn and popcorn.

Data generated by university, food processors and industry indicates acceptable sweet corn tolerance to the combination product of foramsulfuron and isoxadifen. Canning hybrids have the highest tolerance. The safening effect of isoxadifen to other chemistries was evident as well. Popcorn tolerance has yet to be properly addressed. Initial injury ratings are high in relation to other products, but recovery is rapid and yields are not effected. Processing hybrids and more tolerant than the more common hybrids. Further evaluations need to be made on both of these crops.