CAPRENO<sup>TM</sup> (THIENCARBAZONE-METHYL + TEMBOTRIONE + ISOXADIFEN-ETHYL): A NEW HERBICIDE FOR GRASS AND BROADLEAF WEED CONTROL IN CORN. George S. Simkins\*, David Lamore, Jerry Hora, Brent Philbrook and James R. Bloomberg, Bayer CropScience, Research Triangle Park, NC. (121)

Capreno is a new postemergence corn herbicide premix from Bayer CropScience that consists of thiencarbazone-methyl + tembotrione + isoxadifen-ethyl. It may be applied in emerged corn for burndown of emerged weeds, as a 'one pass' postemergence treatment, or as the postemergence component of a 'traditional' two-pass herbicide program. Capreno offers growers two differing modes of action for control of grass and broadleaf weeds, including weeds resistant to glyphosate and other chemical classes. Capreno herbicide active ingredients are formulated as a 33.9 % suspension concentrate (SC) formulation. The suggested use rate of Capreno is 90.7 g herbicide ai ha-1 and the product should always be tank mixed with an external surfactant and a nitrogen fertilizer adjuvant to optimize weed control. Application timing is optimized in corn from burndown to V5 which prevents early weed competition and exploits the residual activity of Capreno.

Research trials conducted by Bayer CropScience and University researchers in 2008 and 2009 have demonstrated the following results: Early postemegence applications (V1 to V5) of Capreno combined with crop oil concentrate and a nitrogen fertilizer source provided control of most annual grass and broadleaf weeds. The addition of atrazine to this combination enhanced the weed control (~ 5%) provided by this treatment. Early postemergence Capreno applications provided superior weed control as compared to mid-postemergence applications. Capreno provided residual control of both grass and broadleaf weed up to crop canopy closure.