

EFFECT OF PREEMERGENCE HERBICIDES FOR CORN AND SOYBEAN ON THE WEED COMMUNITY. Dawn Refsell, Extension Specialist, University of Illinois, Urbana, IL 61801.

Field Studies were conducted in 2008 at four locations throughout Illinois to determine the effect that full and reduced-rate corn and soybean preemergence herbicides have on weed species abundance, density and height. Herbicides were applied at a 1x, 2/3x and 1/3x level in a RCB design with three replications. Data was collected weekly to bi-weekly at each location for 42 days.

Weed species diversity decreased as the rate of herbicide increased but these differences became less evident over time. Weed density was variable based on the herbicide treatment, regardless, density was reduced the greatest with the full rate compared to the reduced rates. Weed height varied by treatment, however most treatments followed the same trend with decreased height in associated with the full rate and these differences became more pronounced as time progressed.