EMERGENCE DATE AFFECTS GROWTH AND FECUNDITY OF PIGWEEDS (*AMARANTHUS* SPP.). Ebandro Usganga, Frank Forcella, and Jeff Gunsolus; Graduate Research Assistant, Research Agronomist, and Professor, Department of Agronomy and Plant Genetics, University of Minnesota, St. Paul, MN 55108, and USDA-ARS, Morris, MN 56267.

Growth and fecundity of four pigweed species (redroot pigweed, Powell amaranth, common waterhemp, and prostrate pigweed) were evaluated in response to four simulated emergence dates at the Swan Lake Research Farm, Stevens Co., MN, during 2000 and 2001. Studies were conducted in both corn and soybean, as well as in the absence of any crop. In the presence of a crop, delayed pigweed emergence reduced rates of growth, adult plant sizes, and fecundities. This was true for all pigweed species. In contrast, in the absence of crops, plant sizes and fecundities were similar, within pigweed species, regardless of emergence date. Thus, some form of crop interference, most likely shading by the crop canopy, governed the negative effect of delayed pigweed emergence date on pigweed growth and seed production. Lacking crop interference, only with a premature end to the growing season (e.g., early frost) could the growth and fecundity of late-emerging pigweeds be penalized.