DOSE-RESPONSE OF 2,4-D AND GLYPHOSATE ON *ABUTILON THEOPHRASTI*, *IPOMOEA SPP*. AND *CHENOPODIUM ALBUM*. Andrew P. Robinson, Chad B. Brabham, and William G. Johnson. Graduate Student, Graduate Student, and Associate Professor, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907.

New trait technologies incorporating 2,4-D and glyphosate tolerance in soybean will enable farmers to apply POST tank mixed 2,4-D and glyphosate to control summer annual weeds. Our objective was to evaluate the response of *Abutilon theophrasti*, *Ipomoea spp.* and *Chenopodium album* to various rates of 2,4-D (0, 70, 280, 560, 1120, 2240, 3360 g ae ha⁻¹) and glyphosate (0, 75, 210, 420, 840, 1680, and 3360 g ae ha⁻¹) in field. This paper will discuss GR₉₀ as well as synergistic and antagonistic effects of tank mixed 2,4-D and glyphosate.