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The program and abstracts of posters and papers presented at the annual meeting of the North Central Weed Science Society are included in this proceedings document. Titles are listed in the program by subject matter with the abstract number listed in parenthesis. Abstracts are listed in numerical order followed by the author and keyword listing.

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Conventional Soybean Growth and Sensitivity as Influenced by 2,4-D. Ivan B. Cuvaca*,
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(33)

ABSTRACT

With the recent launching of Enlist E3 soybean in the U.S., 2,4-D use is likely to increase. An
experiment laid out in a randomized complete block design with a split-plot arrangement and
eight replications was conducted to study the influence of 2,4-D on conventional soybean growth
and sensitivity. Main plots consisted of three 2,4-D application times [second trifoliate (V2);
beginning of flowering (V7/R1); and full flowering (R2)] and subplots consisted of six micro
rates of 2,4-D (1/5; 1/10; 1/50; 1/100; 1/500; and 1/1000 of the label recommended dose of 1,120
g ae ha^{-1}) and a check with no herbicide applied. Visual injury and plant height were measured at
7, 14 and 21 days after treatment (DAT). Number of days to canopy closure was also recorded.
Results showed an increase in soybean injury and reduction in plant height with increase in 2,4-
D dose. Based on estimates of the effective dose of 2,4-D required to cause 5% injury, soybean
sensitivity to 2,4-D was 1.2 (39.62 g ae ha^{-1})-fold higher at R2 than the V2 and R1 stages. 2,4-D
dose of 6.64-11.72 g ae ha^{-1} reduced conventional soybean height by 5% (3.7 cm) regardless of
application time. This reduction in plant height has ultimately delayed soybean canopy closure.
A 2,4-D dose of 7.94, 1.27 and 15.31 g ae ha^{-1} delayed canopy closure by 5 days at the V2, R1
and R2 stage, respectively. In general, these results show that 2,4-D influences conventional
soybean growth and sensitivity the most at the R1 stage; therefore, late-season 2,4-D drift should
be avoided.