The T/Ha Yield Potential of Simulated Herbicide Drift on Glycine max

Jeckel, Prescott (School: Delavan High School)

Purpose: The purpose of this experiment was to apply simulated herbicide drift of 2,4-BD and cobra on to soybeans to increase T/Ha yield.The herbicides in this research were applied to soybeans at a rate of 8.76933 deciliters per hectare (12 oz per acre) for cobra and 1.46156 deciliters per hectare (2 oz per acre) for 2,4-DB. The herbicide was change from Dicamba to 2,4-DB and Cobra due to the use of Dicamba resistant soybeans. Procedure: Load chosen seed into planter.Plant the soybeans. Wait until the field hits growth stage V4 and spray the field with Cobra and 2,4-DB. Wait until the plant matures in the field and the growth stage R8 appears on the majority of the plants. Harvest the fields separately. Obtain a bushel summary report from the grain elevator and compare to the field taken.Take the bushels and divide them by the acres to get bushels per acre and repeat for the other fields. Convert BPA to T/Ha. Compare the averages to find the highest T/Ha yield of the Field. Conclusion: In conclusion, the experiment supported the hypothesis. The fields sprayed with the chemicals had a higher yield than the non-sprayed control fields. This data is especially relevant because, the fields were near to each other and eliminate variables. is important because they will have closer soil types and rainfall amounts than fields separated by a larger distance.