

CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

Xena L. Senn

Project Number

J2319

Project Title

Does pH Affect Glyphosate Performance?

Abstract

Objectives/Goals

My objective was to determine if lowering the pH of the mix water to a pH of 5 would decrease the performance of Glyphosate on Bermuda grass.

Methods/Materials

Take a Glyphosate sample mixed with water with a pH value of 5 or pH of 9 and apply both herbicide samples to 10" by 10" squares of Bermuda grass. Each pH value was tested 35 times. After a 2 day and 7 day interval, the Bermuda squares were measured with a measurement grid and performance recorded in percent.

Results

Glyphosate mixed with water with a pH of 5 did not perform as well as the Glyphosate mixed with water with a pH of 9 when measured at both the 2 day and 7 day intervals.

Conclusions/Discussion

My conclusion is that pH does affect Glyphosate performance and that Glyphosate mixed with water with a pH of 5 had a decrease in its performance.

Summary Statement

Determining if lowering the pH value of the water mixed with Glyphosate would affect its performance.

Help Received

Mother helped type report and glued title on project board. Father supervised the safe handling and application of Glyphosate.