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*Stabilization or Poison: The Effects of Soil Stabilizer on Plant Germination*

The purpose of my project is to see if SA-1 can affect plant germination near roads where it is used. My testable question is, does the amount of SA-1 added to potting soil have an effect on the germination rate of different plants? Increasing the amount of SA-1 in the soil mix will cause an increase in the length of time plants need to germinate. In my project I added 0.05%, 0.1%, and 0.2% of an SA-1 road stabilizer (containing sulfuric acid) each to 550 mL of water. Then I took 50 mL of each of these mixtures and added each of them to 500g of potting soil with various seed types, including wildflowers, grass, alfalfa, squash, and corn. All plant types other than corn grew best in the 0.2% SA-1 mixture, whereas corn seed grew best in the 0.05% SA-1 mixture. At the rates that SA-1 soil stabilizer is applied on Rio Grande County roads, I conclude that the use of SA-1 is not harmful to various types of seeds that might germinate near these roads.