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The Effects of Magnesium Chloride Road De-icer on Plants

The purpose of this experiment was to find out if magnesium chloride road de-icer had any effects on plants. The procedure of the experiment involved spreading rye grass seeds on potting soil, dividing the soil into four plots, and spraying one plot with just water, and the other three plots with varying amounts of magnesium chloride road de-icer solution and water. The data revealed that the seeds sprayed only with water sprouted into grass plants, and the seeds sprayed with magnesium chloride road de-icer solution did not sprout at all. In particular, the seeds in Plot 3 did not sprout even though they were sprayed with only 1mL (one squirt) of magnesium chloride road de-icer solution at the beginning of the experiment, and with just water for the remainder of the experiment. Additionally, the grass plants in Plot 2, which sprouted when sprayed with just water, died within 24 hours of being sprayed with magnesium chloride road de-icer solution. In conclusion, the experiment appears to demonstrate that magnesium chloride road de-icer may be harmful to plants. If additional experiments prove this is true, then perhaps the use of magnesium chloride road de-icer should be reconsidered.