

Emily Nicol
Slurry Fury

Especially in the increasingly wildfire plagued slopes of Colorado's Rocky Mountains, wildfire retardant has become a critical resource that protects both people and the natural materials around them. The purpose of this lab was to test if wildfire retardant also affects the environment negatively by stunting or killing plants.

To test the hypothesis, two flower pots containing radish sprouts, two containing radish sprouts with slurry sprayed on them, two containing radish seeds, and two containing radish seeds sprayed with slurry were observed over nine days.

The overall results showed that slurry impacts the already sprouted plants, but not seeds or future generations. Quantitative results showed that just radish sprouts grew normally while the radish sprouts with slurry sprayed on them died except for two small sprouts that grew after the slurry. Qualitative results were that slurry sprouts turned brown, shriveled, and died while non-slurry sprouts grew tall and green. Both slurry seeds and no-slurry seeds grew with green, straight stalks and leaves.

This was thought to be because, possibly due to the error of too much slurry, Ammonium Polyphosphate is a fertilizer and fertilizers, if too much is applied, burn a plant. That is why the slurry covered sprouts died very quickly, especially their leaves which shriveled immediately. Since the slurry never directly touched the seeds because of the protective seed coating, it didn't affect any of the seed plants.

These findings show that wildfire slurry may damage the present growth, but should not have a lasting impact.