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Herbicides: Killers or Saviors?

In my 2013 science fair project, I wanted to see the effects of herbicides on human consumption plants. I chose radish plants because they germinate and grow quickly (typically 27-days). I believed that plants exposed to a higher level of herbicide both prior to, and after germination would produce fewer radishes. To conduct the experiment, I mixed a common garden herbicide (2,4-D dimethylamine salt) into solutions of 1.00%, 1.95%, 5.00%, 7.50%, 10.0%, 12.50%, 15.0% and 20.0% concentrations, and created (3) groups of radish plants, (10) plants per concentration:

1. Control

2. Prior to germination: Plants exposed to herbicide prior to germination

3. After germination: Plants exposed to herbicide after germination

The prior to germination group received their respective concentrations of herbicide solution after planting. The after germination group received their respective concentrations of herbicide solution once after a majority of plants in each group had germinated. I obtained no conclusive results in the prior to germination group as none of the plants germinated. In the after germination group, the plants exposed to 1.00% to 12.5% solution died 6-7-days after a single exposure to the herbicide. The 15.0% and 20.0% solutions died 4-days after a single exposure to the herbicide. Even though the 15.0% and 20.0% concentration died 2-days earlier, what I found most interesting was that, one-half (1.00%) the manufactures recommended concentration of herbicide was able to kill all of the plants. This concerns me because I don't know what affect even small concentrations of herbicide have on humans.