

Evan Waters
How Much Is Too Much?

The purpose of this experiment is to see what the optimum amount, for wheat, of nitrogen in the soil is. Planting Method: Fill four 34.6x21 cm containers that are at least 11 cm deep with top soil. Make three lengthwise rows, in each box, that are each 4 cm deep in soil. Plant 0.48g of wheat seed per box. Cover completely with soil. Fertilizing Method: Measure the height of all four containers, 9 days after planting, in cm. Take three of the containers. In the first add 1.125g of 32% Nitrogen solution mixed well with 236 ml of water. In the second add 1.5g of 32% Nitrogen solution mixed well with 236 ml of water. In the third add 1.825g of 32% Nitrogen mixed well with 236 ml of water. After Fertilizing, Measure the height of the wheat every two days. Watering Method: Before fertilizing water as needed. After fertilizing water each box 236 ml every four days. The nitrogen definitely had a positive effect on the wheat. The three containers that received fertilizer grew the tallest, and the two that received more nitrogen grew half of a centimeter taller than the other two. The "control" box grew 14 1/2 cm, the "25% less" box grew 15 cm, the "regular" box grew 15 1/2 cm, and the "25% more" box grew 15 1/2 cm also. The hypothesis was partially supported.