

Science Fair Projects

3rd Grade to 5th Grade

Plants (growing organically)

Stating the Problem – The Big Question

In your experiment you will be comparing plants grown using commercial fertilizers with those grown using organic fertilizers. Write a question which asks what you want to learn from the experiment.

Forming a Hypothesis – A Smart Guess

Before you begin growing your plants, write a hypothesis about how the different kinds and amounts of fertilizers will affect the growth of your plants. Your hypothesis should be brief and answer your Big Question.

Planning the Procedure

In your experiment you will be growing plants organically. What does the phrase “organic gardening” mean? Find at least two books about organic gardening. Use these books to gather information on how to grow plants organically.

Locate information about making organic fertilizer. If your city has a garden club, you may try to visit a member who gardens organically and ask how he or she makes the organic fertilizer. After you have learned how to make organic fertilizer, try to make some for your experiment.

Choose one or two different commercial fertilizers to use in your experiment; there are many different kinds available. A salesperson at your local garden supply center can usually explain the advantages and disadvantages of the various types of fertilizers.

Write a description of your experiment. Include the following information:

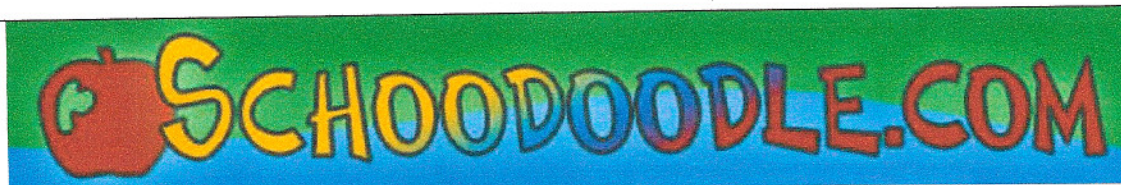
- . The kind of plants that you will grow.
- . The kinds of fertilizers that will be used.
- . Where the plants will be grown and the conditions under which they will be grown, such as temperature, light, amount of water, etc.

Recording the Results

As you grow your plants, remember to give each one identical care. The only variable should be the kind or amount of fertilizer. All the plants should receive the same amount of water, light and heat.

Use your chart to record data and comments about each plant.

This project is from Daryl Vriesenga's book, *Science Fair Projects, Grades 4-6*, Michigan, Schaffer Publications, 1990. The Guide is available on line at: SchooDoodle.com



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(continued)

GROWING PLANTS ORGANICALLY

Plant	#1	#2	#3
Type of Fertilizer (Organic/Commercial)			
Amount of Fertilizer			
Planting Date			
First Bloom			
Number of Blooms at End of Experiment			
Height/Condition Day 5			
Height/Condition Day 10			
Height/Condition Day 15			
Height/Condition Day 20			
Height/Condition Day 25			

Drawing a Conclusion

What did you learn from your experiment? Write a report that includes your Big Question, your hypothesis, a description of your experiment, the data that was recorded and an explanation of what you learned about the different effects that commercial and organic fertilizers have on the growth of plants.

Display

Make a display of your research project. Include your report, graphs, charts, and, if possible, some of the plants from your experiment.