Investigating soil fauna

Background

The physical and biological composition of the soil varies a great deal, depending on when measurements are taken. Soil samples taken in winter, for example, may differ greatly from those taken in summer, even when sampling in the same place. The dynamic nature of soil makes sampling a challenge for soil scientists and investigations need to consider the changing environment.

Purpose

Plan an experiment to explore how soil fauna respond to a change in soil conditions devised by your group.

Planning

1. What are you going to investigate?

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2. What is the hypothesis for your investigation?
   For example, 'If I increase soil moisture then the _____ will _____ .

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3. In the example hypothesis, soil moisture is an independent variable (a variable you are going to change). What are the variables in your investigation?

INDEPENDENT VARIABLE(S) variables you will **change**	DEPENDENT VARIABLE(S) variables you will **measure**	CONTROL VARIABLE(S) variables you will keep **constant**

4. Plan how you are going to investigate your hypothesis, remember:

- What safety precautions do you need to take with soil?
- How are you going to ensure your experiment is fair?
- How are you going to record your results? Draw a suitable table.

Results

5. Record and display your results in an appropriate format.

6. Explain any relationships, patterns or trends shown in your results, including why soil organisms may have behaved the way they did. What is your conclusion?

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7. Did the outcome of your soil fauna investigation support your hypothesis? Explain your answer.

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8. Suggest how you could improve your investigation in terms of fairness and accuracy or results.

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