

Boosting the Chemistry of Soil

Soil Amendment Products

What is a soil amendment? What does a soil amendment do?

Background

There are many new products for farmers to add to the soil to enhance nutrient availability to their seeds in the hopes of getting a better crop. If there is increased yield (more seeds harvested) then there is more money returned to the farmer. If the amount of money from the sale of the crop is not equal to or greater than the amount invested, then the farmer loses money.

Soil tests and tissue tests are performed on fields and crops to determine if nutrients are being absorbed and utilized by the plant.

In this case study, you will be investigating two different products that were used on test plots of soybeans. Your job is to analyze the data collected to determine if these products make a difference and what specific data you will need to make a decision.

Materials

BioBuild BioComplete product page

Fertizol Zn product page

Procedure

1. Investigate the three most common nutrients found in fertilizer: nitrogen, phosphorus and potassium. Use these links as a resource:
<https://www.greenwaybiotech.com/blogs/gardening-articles/whats-the-function-of-nitrogen-n-in-plants>
<https://www.greenwaybiotech.com/blogs/gardening-articles/whats-the-function-of-phosphorus-p-in-plants>
<https://www.greenwaybiotech.com/blogs/gardening-articles/whats-the-function-of-potassium-k-in-plants>
2. For this case study, Zinc is a critical soil mineral. Investigate which other soil minerals/nutrients may impact the uptake of Zinc. This link will give a good overview:
<https://plantprobs.net/plant/nutrientimbalances/zinc.html>
3. Study the product pages for BioBuild and Fertizol. Answer the questions below.
 - a. What does each product do?
BioBuild BioComplete

Fertizol Zn

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3. What data will help you to tell if the products above make a difference?

BioBuild BioComplete

Fertizol Zn

4. Create a list of questions to which you would like to find answers. How might you use the data collected on soil tests and soil tissue to help you to find the answers?

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