**JOSH LOPEZ  
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**STATEMENT OF THE PROBLEM**

1. What is the germination rate of mung beans in**:**a. fertilized soil   
   b. non fertile soil?

**FERTILIZED SOIL**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Week | Plant growth length(cm) | Date and time of Data Taken (Month/Day/Year, Time) | Water Quantity (ml) | Other Observations | **Germination Rate** | Appearance |
| 1. | 8.3cm | April 19, 2021 | 40 | The plant has green leaves | **100%** | Has 3 green leaves, the plant looks healthy |
| 2. | 14cm | April 26,2021 | 40 | The plant is tall. | **100%** | Has 3-4 leaves, the plant still looks healthy |
| 3. | 30cm | May 3, 2021 | 40 | The plant is even taller than before, and we need to put a stick to make the plant stand. | **83.4%** | Has 4-5 green leaves, the plant still looks healthy |

**NON-FERTILIZED SOIL**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
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| 1. | 6cm | April 19, 2021 | 40 | The leaves started to grow | **100%** | The plant looked healthy |
| 2. | 11cm | April 26,2021 | 40 | The plant grew taller | **100%** | The plant was the same as before, but more leaves grew |
| 3. | 19cm | May 3, 2021 | 40 | The plant grew taller, we have to support the plant with stick | **66.7%** | The plant grew taller but 2 of the plants died. |

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**NON-FERTILIZED SOIL**

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| --- | --- | --- | --- | --- | --- | --- |
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1. What are the physical characteristics of mung bean in   
   a. fertilized soil   
   b. non fertile soil?

**FERTILIZED SOIL**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
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**NON-FERTILIZED SOIL**

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**INTRODUCTION**

This chapter presents the data in accordance to the sub problems raised: 1. What is the germination rate of mung beans in a. fertilized soil b. non fertile soil? 2. What is the growth rate of mung bean in a. fertilized soil b. non fertile soil? 3. What are the physical characteristics of mung bean in a. fertilized soil b. non fertile soil?

**INTERPRETATION OF DATA**

Based on the data gathered from the past 3 weeks, we infer that fertilized soil is much more effective than non-fertilized soil since the growth of the monggo bean is much better in terms of leaf color, height, and sturdiness.   
  
The results of the data we gathered suggests that fertilized soil is better, but it does not mean that non-fertilized soil is that bad. Fertilized soil is mostly used in commercial or by farmers to grow monggo bean efficiently. Fertilized soil is better than non-fertilized soil because it has more nutrients which helps in plant growth.   
  
This is supported by Haouvang Laba Christophe's study that states "compost and other organic fertilizers have been reported to improve soil nutrient levels, as fertilizers provide a ready source of carbon and nitrogen for soil microorganisms, improve soil structure, reduce erosion, lower soil temperatures, facilitate seed germination and increase soil water retention capacity."