

**Report on the Analysis of Physical and Chemical Properties of Soils
Sampled from Two Selected Sites in Campus**

by

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Results

		<i>Site A</i>	<i>Site B</i>
			
Depth of soil		6 cm	10 cm
pH		6.1	6.8
Soil water content		9.6%	22.5%
Organic matter content		3.7%	3.9%
Texture	Sand	48.9%	49.1%
	Silt	14.1%	19.1%
	Clay	37%	31.8%
Type of Soil		Sandy Clay Loam	Sandy Clay Loam

Diagnosis

- Through a series of tests, it is found that both soils are similar in terms of acidity and soil texture. Both sites have slightly acidic soil. Though the soil acidity is slightly lower in Site A, both soils lie within the ideal range of soil acidity (pH 6 – 7).
- According to the soil texture analysis, both sites belong to the same type of soil - sandy clay loam. This result suggests that the soil texture and type is not a factor in affecting the growth of vegetation.
- However, there is a great contrast of soil moisture. In Site B, where plants grow well, the soil water content is 22.5%; on the other hand, that in Site A is 9.6%. In an ideal soil composition, water shall take around 25%. The low soil water content in Site A shows that moisture is one of the factors leading to the poor growth of vegetation.
- Soil depth seems to be another crucial factor in limiting the growth of vegetation. It is found that the soil depth of the sites have a great difference. Where Site B has a depth of 10 cm, Site A has 6 cm. Such shallow soil may not be deep enough for vegetation to grow.

Recommendations

- It is recommended that more irrigation should be carried out on Site A. This helps increase soil water content, facilitating the growth of vegetation.
- Soil of Site A should be thickened so that there will be enough room for roots to extend.
- Adequate sunlight is important to the growth of vegetation for photosynthesis. The existing mirror intends to reflect sunlight but it turns out not to be quite helpful. Additional engineering measures shall be taken to install light source as a substitution.