

Soil lab report

Business



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Laboratory Report -Soils Soil ph Soil texture Soil organic matter Soil water retention Two soil samples were consistently used for all four test completed below. The first is labelled as Valley A, and was obtained from a field which has been known to be uncultivated for 10 years in the valley.

Valley B was obtained from a domestic garden, under a Magnolia tree in the same region. At times when a third sample was tested, the source will be indicated. Soil texture tests These tests were carried out using a texture by feel analysis.

This test began by taking a sample of soil in the palm and then by adding water to begin assessing the soil cohesion by attempting to form a ball. Subsequently referring to a flow diagram for further instruction according to how the soil behaved. The Valley A sample results indicated it to be a clay soil and the Valley B sample indicated it to be a clay loam.

The test revealed different results amongst the team members who were testing the soil. The test also yielded different results based on the amount of water already in the soil.

Results were found to change still further if more water was added. Soil pH tests This test was performed by using a standard ph indication solution in which the pH is indicated by the colour change and then matched to a chart. The two samples were tested and the Valley A sample had a ph of 6.

0 and the Valley B sample had a ph of 7. 5. A third sample obtained from the Arboretum resulted in a ph level of 5. These three results were able to be

repeated achieving the same conclusions thus ensuring the accuracy of the tests performed. Soil organic matter content Test

The procedure used to estimate the amount of organic matter present within the soil sample was completed by heating the soil sample to temperature high enough to burn the organic matter content within the sample. The soil was placed in a crucible and heated by Bunsen burner until no additional weight difference was achieved.

The valley A sample showed a result of 25% organic matter and the valley B sample showed a result of 50%. A third sample tested at 33% was obtained from a Garden. This test was not repeated and a degree of error was recognized as when testing the