Soil health comparison

How do soils differ?

Scenario:

A grower would like to find the healthiest soil to grow a specific plant. For example, tomatoes and soybeans need different soil conditions to grow best. Choose a specific plant to grow, then complete the activities in this unit to determine the best soil for growing the chosen plant(s).

After sampling several types of soil, compare your soil samples to those of others in the classroom based on these findings.

Soil sample location	Texture	Macro-/meso- diversity (use Simpson's index of biodiversity or a rating scale)	Microbes (both Gram-negative and Gram-positive, or a mix of fungi and bacteria)

Soil Health and Microbes

Be sure to include observations from the locations where soil was collected. Was it in an area that is excessively wet or dry, compacted or tilled, covered with diverse plant life or a single crop? Was it bagged soil from a store?

Based on the data above and your observations, which soil is the healthiest?

Write your answer following a claim, evidence and reasoning format. (Mention factors you have learned as you have completed this set of activities: What might be the causes? Why is this soil healthy? What is the effect of the practices used on the soil sample? How does the ecosystem where the soil was found impact its health?)