



Measuring the effect of soil amendments on soil strength with Cohesive Strength Meter

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Good soil structure is important for achieving a high production capacity of agricultural land. Soil structure also affects the soil's resistance to erosion. Given its importance, soil structure is usually improved through the application of amendments of different kind, but little is known about the effect soil amendments have on the soil resistance to erosion. Soil resistance to erosion can be characterized by its critical shear strength. In this study we use the cohesive strength meter to measure the critical shear strength in soils treated with different amendments in order to assess the impact of different treatments on resistance to erosion.

Results show that: (i) The pressure necessary for erosion to start is fairly the same for all treatments and (ii) Once erosion has started it evolves faster for the soil treated with dolomite flour when compared with the soil with no treatment and it has the slowest evolution for the soil treated with slaked lime.