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Stones are Important

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In the world of soil science, all particles of 2mm and larger, are regarded as coarse fragments or stones. In a soil analysis report the amount of stones in a soil is expressed on a volume basis, e.g., 30% of the soil sample received at the lab consisted of fragments $\geq 2\text{mm}$.

Stones are inert. They do not hold water or nutrients, but they take up space, and as such, reduce the soil's capacity to store water and nutrients.

Water (and air) is stored in the pores between the soil particles. Stones reduce the number of pores available for storing water and thus reduce the soil's water holding capacity. In a stony soil, irrigation must, therefore, be more frequent and in smaller volumes.

Nutrients are adsorbed to the surface of soil particles, especially clay, silt, and organic particles. More stones equal less soil particles, which equals a smaller nutrient holding capacity in the soil. Fertilisers must be applied in smaller installments and more frequently if the soil is stony.

Having a good knowledge about the stone content of your soils is very important - it impacts on your irrigation scheduling and nutrient management. For this reason, the measurement is included in Labserve's analyses.

The lab can only report on the stones received with the sample. It is therefore important to estimate the amount of stone within the soil profile, as it is often not practical to include it in the lab sample. The estimated and/or the measured amount of stone must be taken into consideration when calculating irrigation volumes, lime requirements, and fertilizer applications. This will ensure that resources such as water and fertilizers are managed optimally, and that conditions in the root zone remain favourable for root growth.

