

How to Apply Limestone in a Crop of Tomato

Recognize the problem

The pH of the soil is a measure of how acidic or alkaline it is. An unsuitable soil pH makes crop production difficult because plants are unable to take up the necessary nutrients. The pH can also have a significant effect on some tomato diseases, such as Fusarium wilt. Soil at the wrong pH level can also lead to bacterial infections of your crop.

Background

In Trinidad, most of the soils used to grow tomato are acidic and it is often necessary to raise the pH to 5.5 - 6.5. This can be achieved by applying limestone. Limestone is also a source of calcium and magnesium for the growing crop.

Management

- A soil test needs to be done before any limestone is applied. Generally, the texture of the soil determines how much crushed limestone is needed to raise the soil pH. The soil test report gives the amount of limestone needed to raise the pH to 5.5.
- In order to correct soil pH, limestone can be applied a month before transplanting. The limestone is spread on top of the damp beds. It is ploughed in shallowly (no deeper than 16 cm) and then the seedlings are planted. It can also be worked into the soil using a rake or fingers, depending on the size of the field.
- Limestone can also be applied as a top dressing after transplanting. It must be applied to damp soil within the rooting zone of the plant. It is sprinkled evenly around the plant and gently worked into the soil.
- Tomato has a high calcium requirement; insufficient calcium will lead to reduced yield and blossom end rot. Limestone can be applied at a rate of 30 grams per plant every two weeks throughout the life of the crop, to provide sufficient calcium.

Crushed limestone used to correct soil pH. (Photo by Björn Sahlberg (CC BY-NC-ND))



The recommendations in this factsheet are relevant to: Trinidad and Tobago



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