

Country Green

T U R F F A R M S

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LIME

Lime is a soil amendment with several important functions relating to turf growth and soil conditions. Lime is not a cure-all for many common problems. Its most important role is to maintain the soil pH between 5.5 and 7.0. Some common questions regarding lime are:

Why should I lime? There are a number of important functions lime serves. The most important is the reduction of soil acidity. Lime also increases the rate of organic matter decomposition, decrease the solubility of certain toxic elements, improve soil aggregation, and aid in the release of soil phosphorus.

What does pH have to do with growing turf? Turfgrasses respond differently to different levels of acidity, or pH. In western Washington, calcium is leached from the soil. As the calcium level decreases, the soil acidity increases. As the acidity increases the breakdown of organic material decreases which reduces the rate of conversion of organic nitrogen, phosphorus, and sulphur to more readily available inorganic forms. Additionally, iron and aluminum react with phosphorus, a process known as phosphorus fixation, when the soil acidity increases. By decreasing the pH, the amount of phosphorus available for the plant is increased. The grass species grown in western Washington respond best in a soil pH ranging from 5.5 to 7.0.

How do I know if I need to lime? Most often, symptoms will be a lack of response to a fertilizer application or a general yellowing of the grass. However, there are a number of reasons that will give the same symptoms, so we highly recommend that you test your soil to verify the pH of the soil. Once the pH has been determined as the problem, follow the recommendations of the test to properly correct the pH level.

Can I put too much lime down? It is possible to put too much lime down. When too much lime is applied to a lawn, iron chlorosis can occur. This problem occurs when excessive lime raises pH excessively and makes iron insoluble and unavailable. Do not apply lime at rates above 50 pounds per 1000 square feet. Again, it is best to have the soil tested and apply lime based on the results.