Keep soil moist to prevent brown tomato bottoms

If you have read that adding limestone to raise soil pH will prevent blossom end rot in tomatoes, you may not have read it in a book about Montana growing conditions. Blossom end rot, which causes brown, sunken spots on the bottom of the fruit, is not a disease or fungus. It’s a physiological disorder caused by a lack of calcium.

In acid soils, the conventional treatment is to add limestone to raise the pH and add calcium. But Montana soils usually have plenty of calcium, and soil pH is already too high in many cases. In our growing conditions, adding limestone to raise pH may do no good, and might actually cause harm.

A more likely cause of tomato blossom end rot in our area is fluctuating soil moisture. If soil is dried out and flooded repeatedly, plants may suffer from calcium deficiency even though there is plenty of the stuff present in the soil. Why? Plants need water to take up the calcium in the soil, so it stands to reason: no water, no calcium.

Pruned plants and staked plants tend to develop more end rot than plants that are left to run on the ground.

So to prevent blossom end rot in Montana, adding limestone probably isn’t the answer. Instead, do what you can to keep the soil moisture consistent. Mulch plants with red or black plastic mulch, grass clippings or straw. Water regularly and moderately, and don’t bother to prune them.

You can download the MSU Extension fact sheet, “Growing Tomatoes in Montana,” at www.montana.edu/publications. For more resources from MSU Extension, contact your county or reservation office, or visit www.msuextension.org