

### Understand Your Fertilizer

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. I'm on a garlic grower's facebook page and I am continually amazed at how uninformed these growers are of soil fertility and fertilizers. The two biggest mistakes I see are people not knowing what the nutrient content of the fertilizer they are using is and whether it is a fast or slow release product. One person shared photos of clearly nitrogen deficient plants but they didn't understand why because they had fertilized with a dried seaweed product a few weeks before. This seaweed product was all of 1% nitrogen and was very slow release. Assuming 1 pound of nitrogen per 1,000 square feet they would need to apply 100 pounds of this fertilizer per 1,000 square feet to meet that need. By the time that natural N product is available, the garlic will be harvested and small. Learn those fertilizer numbers! I'm Chuck Otte and this has been Gardening with Chuck.

## Fertilize and Hill Potatoes

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. If you were lucky enough to get your potatoes in the ground in March then they are probably about to the stage where they really need to be fertilized and hilled. Applying a half pound of nitrogen per hundred feet of row now and again in about 3 or 4 weeks will really boost yield and tuber size. You can sprinkle that right along the row and then hill the soil up as much as you can on the plants. The reason we need to hill the soil up is because the plant will only produce tubers ABOVE the seed piece you used to start the plant. The more you can hill them up, the more stem you put under the soil and that stem will then develop roots and tubers. You can actually hill them up a couple of times during the growing season if you have the energy to get it done. I just hilled mine up before this last rainy spell and I'm hoping I can get it done one more time in about 3 or 4 weeks! I'm Chuck Otte and this has been Gardening with Chuck.

## Fertilize Onions

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. One of the things that I've noticed over the years is that many gardeners don't apply enough fertilizer, other than to their tomatoes. Part of it is simply not knowing how much fertilizer, generally nitrogen, your plants need. Onions are one of these. Onions, to produce good large bulbs, need 160 pounds of nitrogen per acre. That breaks down to about 1/3 pound of actual nitrogen per 100 square feet. For products like calcium nitrate or ammonium sulfate that'd be about a cup per 20 feet of row sprinkled over the top of the row. Ideally we'd break this down into a couple three applications every 3 weeks after planting. Once the onions start to bulb you want to stop fertilizing. You will know when this is because the soil will split at the base of the plants and you'll see the growing bulb. Once they really start to bulb you'll have 3 to 4 weeks to harvest. Once a majority of the plants have fallen over, it's time. I'm Chuck Otte and this has been Gardening with Chuck.

## Cabbage Worms

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. We've all seen those little white butterflies around our yards and gardens in the spring. They are one of the earliest butterflies that we'll see in fact. While it's nice to see something of warmer weather, those pretty butterflies are also the adult form of the cabbage worm caterpillar that eats holes in cabbage leaves and sometimes other cole crops. Now is a critical time to initiate control before they have a chance to do much damage. *Bacillus thuringiensis* or BT and spinosad are two excellent organic products to control this pest. BT is deactivated quickly by sunlight so applying it in the evening is helpful. It's also important to treat the undersides of those leaves as well. Dusting formulations often make this easier. Conventional insecticides like Sevin dust, malathion or methoxychlor are also effective but they are less discriminate and will tend to kill many of the natural enemies of the cabbage worm. I'm Chuck Otte and this has been Gardening with Chuck.

Rabbits!!!!

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. I've been blessed that ever since we moved to the farm last year my garden has been free from the ravages of rabbits. I can probably thank the coyotes I hear many nights for that! But rabbits can be a real problem in gardens. Not all plants are equally liked by rabbits. But for those that are, you have options. A fine mesh fence 2 to 3 feet tall and well staked to the ground will usually keep them out. You can also use floating row covers, which is a fine mesh material that will keep rabbits from eating many plants. You can even use live traps. In the country we also tend to use various other depopulation efforts that shouldn't be used in town. One newer technique is motion activated sprinklers. These are attached to a garden hose and when a sensor detects motion it releases short bursts of water which will hopefully discourage the bunny. Scent deterrents, while often tried, rarely work. I'm Chuck Otte and this has been Gardening with Chuck.