

## EAB Treatments

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Everyone with ash trees in their landscape need to be paying attention. With the discovery of Emerald Ash Borer in Wyandotte County Kansas last year, the threat grows ever closer. Emerald Ash borer is one of those pests that once it's into your tree, it's too late. You need to start protecting your trees NOW. There are a couple of homeowner products that you can apply yourself. These products are applied to the soil, they last season long so only one treatment is needed. The two active ingredients that are available are imidicloprid, which has been around for several years, and dinotefuran sometimes marketed as Safari. Imidicloprid is a liquid, dinotefuran is a granular product. Both products are applied to the soil, just a little ways out from the trunk of the tree, meaning a foot or two. They then need to be watered into the soil so the roots can take up the product and move it about the tree. The time to do this is really in March and possibly the earlier the better. The other thing to keep in mind is to use this product at the maximum allowed on the label. For imidicloprid that will probably be 1 ounce of concentrate per inch of tree diameter. For dinotefuran it will be 2/3 of a cup per inch of tree diameter assuming your product is the 2% granule. For a small tree this won't be too bad, but a larger tree may get pricey and you may have to ask yourself if the tree is worth it. And it needs to be done every year in March. For me, and the ash tree in my front yard, it's very important and I will be doing it every year, in fact I started treating three years ago already, just in case! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Coldframes for a jump on spring

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Cold frames have long been used by gardeners to get a jump on the growing season. A cold frame is nothing more than a low mini-greenhouse that you can place flats of seedling plants in. Think of a box usually 5 to 6 feet deep and 6 to 12 feet wide but only about 18 inches tall at the back and 12 inches tall at the front. These are often made with old storm windows on hinges and are best situated in a sunny spot on the south side of a house. In decades gone by, gardeners would mix manure with straw and bury this under a couple inches of soil under the cold frame. AS the manure and straw started to compost it would create heat and this would supply additional heat, or you can lay heating cables in the soil under the cold frame and make your cold frame into a hotbed. As small plants are germinated inside your home and start to grow, they can be set into the cold frame to provide more sunlight for stronger plants. As the sun heats the soil under the cold frame, this residual heat will help keep the plants from freezing at night, although if you have warm sunny days, like we'll probably soon see, you will need to prop open the top and let cooler air get in during the day or it will get way too hot for most plants. There are devices that use temperature sensitive gasses to automatically open and vent cold frames if you really get into this. You can also use a cold frame to help overwinter semi hardy plants in pots. Cold frames are a great way to harden off early transplants I've got some plans for coldframes that are a bit dated, but they will still work just fine! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Improving Soils

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Our soils can be extremely variable and extremely may be a kind word. Soil texture can vary from sands to heavy clay. Nutrient levels in our native soils are going to be low in nitrogen and phosphorus and high in potassium. Soil pH can vary from moderately acid in some of the better river and creek bottom alluvial soils to quite alkaline up on top of some of the hills. All of this can make it a real challenge for home gardeners or just getting landscape plants and lawns to grow and thrive. With gardens and flower beds we are usually working on a small enough scale that we can do some serious modification. Before you start to add ANYTHING to the soil, you need to start with a soil test. Bring a representative sample taken from several spots in your garden or flower bed in to the Extension Office so we can get it analyzed at the K-State Soils Testing lab. Then we will know soil pH, organic matter, nitrogen and phosphorus levels and what we need to do. Adding organic matter or composted manure is often a good thing, but don't go overboard. You really can add too much and then you've got even bigger problems. Adding organic matter and lowering pH are often the two most important things you can do for your garden soil. Most plants will grow better in slightly acid soils than neutral or alkaline soils. To do this you sulfur and work it into the soil. As organic matter breaks down in the soil over time it will also help acidify soil. And if you have a pin oak with iron chlorosis, lowering the pH with sulfur is the best long term solution. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.