Starting your own transplants

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. In recent weeks I've been periodically talking about starting your own transplants but haven't really addressed HOW you start your own transplants. I'm sure over the years many of you have tried to start a tomato or something from seed and wound up with this tall leggy gangly sad looking plant. Right there is the eternal problem of starting your own transplants. If you have your own greenhouse then starting plants isn't a problem. But most of us don't have our own greenhouse. Light is ultimately the critical factor for starting plants. Specifically, not enough of it which explains why many of your past attempts were met with a tall spindly plant! Successfully growing your own transplants, flower or vegetable comes down to just a few simple things. Start with standard greenhouse trays with either 18 or 24 cell inserts (you can get these at greenhouses or greenhouse supply stores.) Fill these will seed starting mix or soil less potting mix. Never ever use "dirt" in containers. Now the real biggie - light. You can design a wooden frame or a PVC plastic frame to hold one or two four foot long 2 bulb fluorescent light fixtures on light chains to allow you to change the height of the lights. You can fit four standard greenhouse trays under a four foot long light fixture. Plant your seeds in the trays and put them in a warm location to get the seeds germinated. Once most of the sees are germinated, move them under the lights and put the lights literally right down on top of the trays. As the plants grow, move the lights to just above the leaves. Water regularly, then plant. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Are there any transplants I can start now?

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Following up yesterdays program about starting your own transplants, there is bound to be a follow up question of what can I start now for transplanting later. There is no single set time that you can start everything from seed. Different vegetables have different germination rates. Some plants, like cucumbers and melons, will be transplantable size in 4 weeks or less. They are a big seed that germinates and grows very quickly. Many other vegetables will go from planting to transplantable size in 6 to 8 weeks. On the other hand, many flower species take 8 to 10 or 12 weeks or even longer to go from planting to transplantable size. Then we also have to take into account what's the proper time for planting these transplants outdoors. If you were to start tomatoes inside this week, they'd be ready to transplant about the middle of March. I think both of us know you have no business planting tomatoes out side the middle of March. That's a good 6 to 8 weeks too early! So figure out when the proper transplanting time is, then back off of that date the appropriate number of weeks to get the seeds germinated and up to transplant size and that's when you want to start them. For the record, we recommend starting peppers inside about March 18th for a May 13th transplant date and tomatoes on March 25<sup>th</sup> for a May 6<sup>th</sup> transplanting. But fear not! If you've got your artificial lights ready to go, you can plant cabbage, broccoli, cauliflower and lettuce this coming weekend for transplanting around April 1st. If you want more information on this, give me a call! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

What kind of tomato should I plant?

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I've said it many times before and I'll say it again. Tomatoes are THE most popular vegetable that people grow in their gardens. In fact people without gardens will often grow a tomato plant or two just to have fresh tomatoes. I am convinced that the varieties that people grow have as much to do with tradition as any scientific method of selecting one. But obviously, with over 1300 varieties of tomatoes out there it can be a bit overwhelming as you start looking for varieties to plant. So first of all break it down as to what kind of tomato you want. Do you want big tomatoes for slicing? Do you want cherry, grape or patio tomatoes to just eat like a snack? Do you want to make salsa or do a bunch of canning? This can be important in deciding if you want determinate or indeterminate vines (a bunch of fruits all at once or a few here and a few there over the course of a summer.) Some varieties have big fruits. Amana Orange, Brandywine Pink, or giant Belgium have fruits that are well over a half pound each! Or do you want a variety that is a heavy producer? For that, maybe you need to look at a variety like Ultrasonic, Chef's Choice, Mt Majesty, or even Jet Star. So what you do is decide first what you want your tomatoes for. Fresh eating, preservation, salsa or snacking. Then start wading through the catalogs and web pages. Come up with a list of maybe a half dozen to a dozen varieties and then ask me if there's any of them you shouldn't be growing. Then, when you head to the garden store, you've got several options of what to look for once you get there! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Cloning apple trees

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. We've talked before that it's pretty much a waste of time to try to keep seeds from an apple and plant them out to get a new apple tree. You've got a 1 in 80,000 chance of getting something as good or better, but it will likely be different! If you really want an apple tree exactly like the one you enjoy so well, you're going to have to graft it. Grafting is simply taking a cutting from an existing tree and then graft that or those cuttings onto a root stock. Root stock is a special type of tree that has a dwarfing or semidwarfing effect on the final product. A dwarf tree will be smaller, easier to prune and work with and will usually start bearing fruit sooner. Dwarf rootstock doesn't make the fruit smaller, just the tree. Early in the season you take cuttings, or scion wood, from the parent tree and then put them on the rootstock. You cut the scion wood into a wedge, split the rootstock branch and put the scion wood in there and then seal it up with pruning wax and pruning tape. Don't worry though, I've got a bulletin here at the office that outlines just how to do this. Rootstocks can be a challenge to find nurseries just don't carry them, but I do have information on a couple of nurseries that do sell rootstocks at a reasonable price. Now a word of warning to you. Technically, many of the newer popular varieties of apple are protected by plant patents and grafting these without paying a royalty fee is illegal. Will they ever catch you? All I'll say is it has happened in the past. But for that 40 year old tree on grandma's farm that is starting to die - don't worry, there's no problem with that! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

My garden didn't do well last year

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Oft times folks bring in soil samples from their garden, or yard, and when we ask them if they are having problems they just say, "it isn't growing well" or "my garden just didn't do very good last year." So we run the analysis on the soil, and it comes back with no real major problems. Often the soil pH is higher than it should be and we can work on that but quite often the problem isn't with the soil nutrients. So what are some other causes of poor garden production. Plain and simply the weather is quite often a big factor. If it's dry, we can irrigate. But if it's dry it's often also hot and while we can irrigate we can't fix low humidity and high temperatures. Timing of irrigation can be very crucial as well. Insufficient irrigation can be a problem that is best fixed with drip irriation. Often, over the course of time, trees have grown up and started to overtop the garden spot which is often also accompanied by increasing numbers of roots in the soil. Gardens, especially vegetable garden crops, need nearly full sunlight and by that I mean at least 8 hours of direct sunlight per day in the middle of summer. You may not think that light shade is a big issues, but you would be amazed at how much this reduces light energy to the plant. It may mean trimming or removal of a tree, or possibly moving the garden! Finally, you may need to add a bunch of organic matter to the soil to improve soil quality and soil health. Most of our soils are very high in clay and while some clay is good, too much creates many other problems. So one problem may have many causes. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.