Apples & Most Fruit Are Not True to Seed

My fellow Extension Educator Jim Hruskoci of Grand Island is one of our focused Horticulture Educators. I was telling him the other day how my uncle used to start apples from seed then whack off the top of the tree. He wrote much of this column as part of the Acreage Owners Newsletter. Apples do not come true from seed. Actually about 1 in every 80,000 apple trees grown from seed is quality factors good enough to even be considered for evaluation. Most of the time you end up with a tree with small or inferior fruit and its nothing at all like the parent.

Apples, pears, must peaches, some plums, apricots and cherries are vegetatively propagated to insure that the genetics of the parents will be preserved. The nursery company starts with a selected root stock. When the tree is a two-three foot whip and well rooted, they chip graft in a scion bud collected from trees of the desired variety. Then the whip is cut above the bud. The bud grows out and becomes the top of the new tree. While this is easier than T-bud grafting, the window of opportunity is only a couple of weeks long. If you wan to do your own, you might also be aware that any of the varieties developed in the past twenty years are protected by trademark of plant variety protection.

Most fruit trees you buy from the nursery will have a crook in them which is about 3 inches above the root ball. It is important for two reasons that your fruit tree be planted at the same depth as it originally grew. One is that the oxygen level of the soil around the roots is critical. Just a few inches adjustment in depth can be harmful to the health of the tree. The second reason is the graft scar needs to be above ground. If it is below ground it could root out provide seedling of a total different type. We often see this in roses which have died back from the winter then come back as a very different plant.

I would recommend selecting semi-dwarf trees for apples, crabapples (including flowering types) and pears. The dwarf rootstocks inhibit growth because they are not as vigorous and hardy. Being a little less hardy in Nebraska can be risky. Select trees with MM111, MM106, or Bud-118 rootstocks. These produce trees with 60-70% of full size, but still have adequate root activity to handle Nebraska. Apple scab and Cedar Apple rust are very active diseases in Nebraska. Make sure varieties you select are resistant to there diseases.

Cherries, apricots, peaches plums, etc. should be selected with full sized rootstocks. Avoid dwarf rootstocks in Nebraska as these fruits need to be as hardy as possible to handle the weather swings in the plains.

If you want to grow your own fruit trees, peaches would be a great choice. The average life of a peach tree in Nebraska is 5 to 7 years. This is a nurseries dream and a gardeners frustration. Peaches readily started from seed. Take a chance. Even if the fruit is not exactly like the parent, it might be more fun than paying the constant bill for a dream.

Paul C Hay, Extension Educator
University of Nebraska-Lincoln Extension in Gage County ● 1115 West Scott Street, Beatrice NE 68310
(402) 223-1384 ● FAX: (402) 223-1370 ● email: phay1@unl.edu