

2009 Aug 5 Alamosa Trees column: Alamosa Valley Courier

**Alamosa Trees: Hybrids -- I'm Not Talking about Cars  
by Marilyn Loser**

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Hybrids – And I'm not talking about cars

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Alamosa City will be trimming and replacing some of the downtown trees. Four Oak-leaf Mountain Ash and four crabapple trees will be planted this month. Another downtown change will be the removal of the seven, large trees on the north and east sides of SLV Federal Bank. According to Heinz Bergann, Director of Parks and Recreation, the bank is removing trees because an inspection found that all of them have a bacterial/fungal growth that is causing them to rot from the inside out. The grand old trees will be missed, but they are becoming a hazard. The bank plans to replant with fruitless crabapples next spring.

Not being familiar with the Oak-leaf Mountain Ash (*sorbus x thuringiaca*), I did a little research. The name is a bit confusing. Mountain ashes aren't really ashes (*fraxinus*), but derived their name due to the similarity of their leaves to ash leaves. However, in this case, the leaves are similar to oak leaves. Whatever its name, this hardy hybrid should do well here as it is known to tolerate heat or cold, strong winds and low humidity. It is very disease resistant, grows to 25 feet tall and 20 feet wide, has orange-red fall foliage, and is cold hardy to zone 3 (-40 to -30 degrees F). It is used as a street tree in many parts of the world including Western Europe, England, and Belfast.

We hear the word hybrid a lot these days, but I wasn't really sure what it meant in relation to trees and other plants. One biological definition of hybrid is an offspring resulting from the cross between parents of different species or sub-species. Hybrid names typically have an "x" between the two parts of the name. This mountain ash is a hybrid of Rowan (*sorbus aucuparia*) and Whitebeam (*sorbus aria*). Apparently, it is self-fertile without pollination so is able to reproduce from seed without any variation.

Why would you want a hybrid? The goal is to develop plants better than any that exist in the foundation species or varieties. Desired attributes may be improved fruits, flowers, hardiness, or disease resistance.

So how do you get a hybrid? One approach is to pollinate one species or variety with pollen from another species or variety. The offspring of cross pollination is known as a hybrid. I see this in my garden, especially with penstemons. I planted tall red penstemons near blue penstemons and now have some tall magenta penstemons. Of course, not all resultant hybrids are desirable. Luther Burbank is well known for developing new varieties of fruits, potatoes, tomatoes, and ornamental flowers including one of my favorites, the Shasta daisy (*leucanthemum x superbum*). He cross-pollinated the flowers

of plants by hand and planted all the resulting seeds. He then selected the most promising plants to cross with other ones.

Grafting, a process that fuses plant material from two different plants, is often used with hybrids. Hybrid tree seedlings may take ten or more years to flower and fruit with their own roots. Therefore, they are often grafted onto root stock which can reduce the time to flowering and shorten the breeding program. One of the most common reasons for grafting is the propagation of hybrids. Many hybrids, fruit trees especially, will not breed true. That is, the seeds of a hybrid fruit tree will produce fruit trees, but the fruit trees will not resemble the parent.

A tip on planting grafted trees: position the tree so that the graft union is facing away from prevailing winds and/or sun. This helps protect the wound area.

“The secret of improved plant breeding, apart from scientific knowledge, is love.” Luther Burbank