Garden Myths

By Valerie Rose
March 30, 2012

Are you a gardening know-it-all? Think you are as well informed as a Master Gardener? Got some whipped cream ready to go on a big slice of humble pie? While wiping crumbs of piecrust off my shirt, I admit to being very surprised by the results of research carried out on some widespread garden myths.

This myth-busting information comes from Linda Chalker-Scott, Ph.D, Horticulturist and Associate Professor at the WSU Extension Puyallup Research Center. She promotes sustainable gardening practices that are research-based and tested. Chalker-Scott's findings may surprise you – I've had to revise some of my assumptions about sound gardening practices.

- **The Myth**

Xeriscaping, or landscaping with drought-tolerant trees, shrubs and perennials, is an easy way to conserve water. Just replace your lawn with drought-tolerant plants (called xeriphytes) and watch them thrive!

- **The Reality**

All plants, even xeriphytes, need water at least until their root systems are well established. Linda Chalker-Scott says, "By definition, xeriphytes are adapted to drought; this does not mean that they don't like water. In fact, xeriphytes are particularly adept at taking up and storing water when it's available.

During the transition from moist to dry conditions, xeriphytic species often shed their leaves to reduce moisture loss and enter dormancy. For "water-wise" landscapes to be truly effective in conserving water, homeowners and other landscape managers need to develop a different philosophy of landscape aesthetics.

No plant will grow vigorously without adequate moisture, but drought-tolerant species will survive prolonged droughts. We need to be able to accept the bad – the leaf shedding and reduced growth – with the good."

- **The Myth**

After pruning trees, apply wound dressing to prevent insect or fungal invastion.

- **The Reality**

Linda Chalker-Scott says, "For some inexplicable reason, some people are compelled to "manage" a process that plants have evolved over millions of years. Wounds left from branch breakage are callused over and compartmentalized." Healthy trees will also grow

calluses where branches have been pruned. Wound dressing may actually interfere with this healing process.

Wound dressings do not:
- prevent entrance of decay organisms
- stop rot

Wound dressings do:
- seal in moisture and decay
- sometimes serve as a food source for pathogens
- prevent wound wood from forming
- inhibit compartmentalization
- eventually crack, exposing the tree to pathogens

Optimal pruning time for insect- or disease-prone species is in the fall or winter when temperatures and infection rates are lower. Try sterilizing pruning tools. Such measures can help reduce the transmission of certain plant diseases to healthy plants. Control disease spread through preventative management practices such as disposal of contaminated organic material and use of disease-free compost and mulch."

Left: Deborah Smeltzer of La Conner applies finished compost at the Discovery Garden **(Photo by Christine Kitch / WSU Skagit County Master Gardeners)**
Above Right: A Fall Pippin heirloom apple tree in the Western Washington Fruit Research Foundation display garden at the Washington State University research center near Mount Vernon shows a fresh cut next to an older one that has healed. Sealing a pruning cut traps moisture, encouraging rot and insect damage. A cut left bare will dry more quickly, and the bark will grow over and 'heal' the cut. **(Photo by Scott Terrell / Skagit Valley Herald)**

- **The Myth**

Compost is always a safe, chemical-free source of nutrients for gardens.

- **The Reality**

Chemical-free? Really? Impossible. Even a garden product labeled as "natural, organic, chemical-free" is made up of chemicals. Every physical substance is composed of chemicals – you, me, a cup of herbal tea. Many products would be much more accurately labeled as containing "No synthetic chemicals."

Chalker-Scott says, "Compost is great stuff. Under ideal conditions it is a safe, environmentally friendly way of recycling yard waste and returning nutrients to the soil. There are other contaminants, however, whose presence is unexpected, subtle, and injurious to plant and human health. I am particularly concerned with two classes of compost contaminants: pesticides and heavy metals."

Research has shown some agricultural compost to be contaminated with clopyralid and picloram – two broadleaf herbicides. Chalker-Scott says, "Compost contaminated with these herbicides can injure or kill broadleaf ornamentals and vegetables. While the source of this particular contamination problem was agricultural, these broadleaf weed killers are also used for lawn care. If treated lawn clippings are composted either at home or elsewhere, they will contaminate the compost and kill or injure susceptible plants. The long-term impacts of these herbicides on human health are not yet known.

Heavy metals, such as lead, arsenic, and mercury, are less problematic for plants than they are for humans. If ingested, these metals disrupt biochemical pathways and cause a number of health problems, particularly in children. Lead is the most commonly found heavy metal in residential urban soils, primarily as a remnant of lead-based paints and fuels. There were frighteningly high levels of lead, chromium, cadmium, manganese, and other EPA-regulated heavy metals reported in a recent, world-wide study of compost. Sources of toxic heavy metals include sewage sludge, industrially-contaminated soil, and the previously mentioned lead problem. It's not a bad idea to have your soil tested for lead, especially if you grow produce for human consumption. The cost is minimal and the information invaluable."

RESOURCES:

- Horticultural Myths, Linda Chalker-Scott, PhD, www.theinformedgardener.com

- The Truth About Garden Remedies: What Works, What Doesn't & Why, Jeff Gillman, Timber Press, 2006.

- The Informed Gardener Blooms Again, Linda Chalker-Scott, University of Washington Press, 2010.