Keep Garden Tools Clean, Ready To Prune

Leimone Waite, Master Gardener, Feb. 2, 2019

Q: I have attended several pruning demonstrations over the past couple of years. One presenter said only to use a 10-percent bleach solution to sanitize pruning tools, while another said they use Lysol because bleach is too corrosive. Yet another says they use alcohol spray. Can you tell me which is better? I'm pruning fire blight out of my trees and I don't want to spread it.

A: Pruning tool sanitation between trees or shrubs is very important so as not to spread disease. In the case of a tree that is infected with fire blight you may want to sanitize tools between each cut. Besides fire blight, which is a bacterial cancer disease, there are several other diseases that can be spread by pruning tools, such as bacterial spot, Cytospora canker and some viruses.

I was trained to use a 10-percent bleach solution as a sanitizing solution, and then to clean and oil tools as soon I am done pruning.

Several Cooperative Extension fact sheets recommend using either 70-percent isopropyl alcohol or a dilute bleach solution to sanitize pruning tools. They also recommend leaving them to soak for 2-5 minutes between trees, especially when you see evidence of disease or decline in the trees.

I didn't see much information about Lysol used to disinfect tools so I thought I would look into this question further.

Keep garden pruning tools in good condition. (Photo: Central Valley Farmworker Foundation)

I came across an article published by Prof. Chalker-Scott from Washington State University, a respected scientist and known for her horticultural myth busting. In writing this article she had complied and reviewed research done on the spread of plant disease and various disinfectants. The disinfectants tested by various researchers were alcohol (ethanol and isopropyl alcohol), chlorine (bleach and monochloramine), household cleaners (Listerine, Lysol and Pine-Sol) and trisodium phosphate (10-percent solution). Most of these were shown to be effective but with differing advantages and disadvantages. One of the studies also examined the corrosiveness of several products and found that Lysol was least corrosive; bleach was most corrosive.

Chalker-Scott's conclusions from this literature review were:

- Know your pathogen and its life history and use common sense.
- Disinfect your tools when working in areas where there are known viruses, viroids, vascular fungus or bacteria.
- Avoid cutting active oozing cankers. Wait until they dry or dormant.
- If you're pruning irreplaceable plants, always disinfect your tools, even if no signs of disease is present.

- Choose a disinfectant treatment that's been shown to be effective through published research. Chalker-Scott went on to say that she would probably not use alcohol, but one of the common household cleaners at full strength.

Another finding from the research was that tools needed to be left at least five minutes in the sanitation solution to be effective; longer if you're working with a tree that's badly infected.

Given this research, it doesn't look like what you use to sanitize your tools matters as long as you're sanitizing them between trees.

The Shasta Master Gardeners Program can be reached by phone at 242-2219 or email mastergardener@shastacollege.edu. The gardener office is staffed by volunteers trained by the University of California to answer gardeners' questions using information based on scientific research.