

## Sanitizing Tools to Prevent Disease

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### Preventing Pathogens

Fighting diseases in the landscape can challenge your sanity. One way to combat this is by implementing sanitizing procedures into your operation. Sure, we can build landscapes that have better drainage and airflow to reduce or prevent diseases. Yes, of course we can use fungicides and other protective chemicals to reduce pathogens. However, what other steps can we take to protect our plants?

Pruning, shearing, hedging and edging are all common practices in the landscape. Protecting our power tools with routine care and maintenance makes our jobs easier. Whether that is making sure the oil is right or our mower deck is at the proper height, we rely on our blades to maintain the site. A dull blade causes all sorts of problems in the landscape. A sharp blade allows cuts to be made more uniformly, faster and efficiently; however, unseen pathogens and diseases may still lurk on your landscape tools. Incorporating a simple, strategic plan to sanitize your shearing equipment will make you the sharpest tool in the shed.

### Chemical Options

**Isopropyl alcohol:** One of the easiest, readily available and inexpensive options for sanitizing blades is using alcohol. Simple rubbing alcohol can be found in most drug stores and retailers and can be used immediately without any mixing or dilution required. There is no need for a prolonged soak, as wiping the blade or giving it a quick dip in solution will effectively sterilize your pruning equipment. Alcohol is very flammable, so proper care should be taken in the storage and use of this sanitizer.

**Bleach solutions:** Regular household chlorine bleach can be used as a sanitizer if it is diluted. Typically, a 10% solution (nine parts water, one part bleach) will be effective in sanitizing blades. Mix the solution and use within a couple hours of preparation before the blend loses its effectiveness. Bleach loses its bite when mixed with water



*Spray bottle for isopropyl alcohol.*



*Sanitizing bucket for multiple stakes or tools. Photos by Damon Abdi*

or exposed to prolonged sunlight. Soak blades for at least ten minutes – the contact time is necessary for the bleach to effectively kill pathogens. Make sure to rinse the solution off the blade with clean water to prevent corrosion.

**Household cleaners:** A range of regular household cleaning agents and products, such as wipes and sprays, exist to sanitize indoor surfaces; however, their efficacy in eliminating pathogens on outdoor equipment has been minimally evaluated. While some of these products are very likely to kill off the pathogens, the effects that the formulations and active ingredients have on the pruners is less understood. Exercise caution in selecting what cleaner to use.

## General Tips

Make sure the blades are cleaned before sanitizing. Dirt, vegetation or other debris can limit the effectiveness of the sanitizing agent. Make sure that the blades are fully exposed to allow the chemicals to kill pathogens.

If soaking your sharp edges in a disinfectant, be sure to not let it linger for too long. Extended stays in sanitizing solutions can lead to corrosion of the blades. Make sure

to give the blades a quick rinse with clean water after they have been sanitized.

Don't just think about the blade when selecting a sanitizer. Think about the rubber, plastic or other materials that also make up the pruners or tools and consider the effects of the sanitizing agent on those parts.

## Practical Applications

For the homeowner and landscaper alike, a spray bottle with undiluted 70% isopropyl alcohol is a good tool to keep on hand. A quick spray before switching sections of the garden or when jumping between job sites can help slow the spread of disease. Make sure to store the solution out of sunlight.

Signs and stakes that were set in soil for long periods of time may harbor disease. For gardens and growers that have large quantities of signs and stakes scattered throughout their operation, a soaking bucket can be an effective way to sanitize them all at once before repurposing. A diluted bleach solution is likely to be the most effective way of treating objects like this.

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## Sources

[Clean and disinfect gardening tools and containers | UMN Extension](#)

[Microsoft Word - Disinfecting Pruning Tools.doc \(ufl.edu\)](#)

[How do I sanitize my pruners to prevent the spread of disease? | Horticulture and Home Pest News \(iastate.edu\)](#)

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For more information on sanitizing tools, please contact your local LSU AgCenter extension office or visit [www.lsuagcenter.com](http://www.lsuagcenter.com).



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