

Aspirin and Growing Orchids –

By Dot Henley

Besides the fun, the good thing about teaching biology for years was learning more. The bad thing is now explaining everything to adults as pitifully explicitly as though they were 16 to 18 year-olds.

When I taught, I started the school year with a lab where students diluted aspirin (325mg adult dose) in water and then poured the solution on radishes, oats or other quick-growing vegetables. The lab never failed. The strong (1 part aspirin to 1,000 parts water) stunted the seedlings; the medium (1/10,000 dilution) groups grew remarkably better than the water control group; and the weak (1/100,000 dilution) grew no better than the water control group.

Students learned that aspirin contains salicin, which is found in the bark of willow trees. Native Americans chewed on willow twigs to relieve headaches, and later botanists found that duckweed and other aquatic plants that grew in willow-edged streams grew better and matured faster due to the salicin. Turn salicin into salicylic acid and voila! aspirin is made. Recent literature indicates that aspirin is also an effective agent in treating some human fungal infections.

About a year ago, armed with all this information, I began treating our orchid collection to a weekly dose of aspirin. I found that I could approximately duplicate the good 1/10,000 dilution by adding three quarters of one aspirin (325 milligrams) to 4 litres of water. We have about 2,000 orchids and I used 15 aspirin in a 75 litre hose-end sprayer. In the growing season, I added 6 tablespoons of solid fertilizer and a squirt of Whisk or Dawn. In winter, I used 3 tablespoons of fertilizer. (Forgive the teacher repetition, but one whole aspirin per 4 litres of water will stunt growth and you may not want to use this system if you have acid water. Our water has a normal pH of 9.0 and the aspirin lowered the pH to 8.6). Of course, the orchids receive rainwater or tap water as needed during the week.

To make 45 litres of fertiliser solution, combine 9 aspirin with 45 litres of water; for 15 litres, add three aspirin to 15 litres of water; and for only 4 litres, dilute one aspirin in a cup of water, discard 1/4 cup of this, and then add enough water to make 4 litres.

Our plants have more flowers, bigger growths and fewer fungal problems since aspirin became part of our culture. The only changes in culture have been the addition of aspirin once a week. Maybe it is the lower pH, or perhaps the magic that thins our blood and stops our aches and pains can also help us grow better orchids.

The other thing I learned that I have used for several years came from a science project done by one of my students. It was not applied to orchids, but the six or so varieties of garden plants tried showed that the highest metabolic rate occurred at 11 am by the sun and that fertiliser and weed killer were best applied at that time. Even half-strength worked as well as full-strength. Fewer chemicals can't be all bad.

Two additional comments from the author:

1. Do NOT exceed the amount given.
2. Do not skip adding aspirin to your fertiliser for more than a couple of weeks. The orchids seem to become addicted to aspirin and pop up with fungal and bacterial spots without their fix. (Found that out after I didn't fertilise or add aspirin after my knee surgery.)