

# PROBLEM SOLVERS

by Balakrishna Rao, Ph.D

## Winterization via deep watering

**Problem:** *Because of the problem we had experienced last winter, we would like to consider winterizing valuable ornamental plants, particularly evergreens, by deep watering. Is there a real advantage from this practice? If so, when should we do it? I'd appreciate your comments. (Michigan)*

**Solution:** Watering the woody plants to reduce winter injury, particularly evergreens, prior to soil freeze-up to replace water loss by foliage during winter is a good practice and a valid recommendation. Reports from the University of Minnesota indicate that plants subjected to water stress during late August and early September had lower water content in the plant tissue. However, the water content decreased as the temperature dropped and was found to be equal in stressed plants as well as plants maintained at optimum soil moisture.

Watering the stressed plants during late August, early September or in November prior to soil freeze-up did not increase the water content in the plant tissue. These plants showed considerable winter injury of foliage than the plants maintained as optimum soil moisture.

Therefore, fall watering following stress from dry weather in late summer and early fall has little advantage. Based on these findings to prevent injury, the plants should be watered before water stress becomes severe.

## The best time to prune

**Problem:** *In a number of our clients' properties, the hedges with deciduous plants, like forsythia, privet or Spirea, show extensive winter kill and thinning. It looks pretty bad. When would be the best time to prune? Is there some way we can maintain decent looking hedges without going through the re-planting process? Appreciate your comments. (Ohio)*

**Solution:** Over the past several years, winters have been very severe and we have seen winter injury on a number of sensitive plants. The deciduous hedge plants, like the ones you mention, are some of the more seriously affected plants. The best thing to do with winter injured plants is to wait and see how the plant will recover during the season. Then, lightly fertilize and water the plant to encourage new shoot development.

In general, most hedge plants should be pruned in such a way that the hedge is broader at the base than at the top. To have a desirably shaped hedge, it is important to start pruning and shaping when the plants are very small and continue throughout the life of the plants. Depending upon the rate of growth, it may be necessary to prune them two or three times from April through September.

Often, hedges may become too thin without much leaves, particularly from the bottom up. This could be due to several factors such as winter injury or simply that they are getting old. If this happens with

cane-type plants such as the three mentioned above, cut the hedge back to ground level. The new growth develops from the cut stubs, begin shaping the hedge. Remember to shape broader at the base than at the top. This type of pruning is called rejuvenation and should be done in late winter or early spring before new growth starts.

Plants liked winged euonymus or viburnum should not be cut back at once as discussed above. Instead, they respond better to a gradual cut-back method.

During the first year, remove one-third of the oldest branches near ground level to encourage new growth. The second year, use this thinning technique to cut back an additional one-third of the old growth. This will promote more branching. The third year, remove the remaining old stems. This method of gradual cut-back will renew hedge plants like euonymus or viburnum.

## No general programs

**Problem:** *Is there a general herbicide and fungicide preventative maintenance program for landscape contractors to use on all clients' turf and plants? (Pennsylvania)*

**Solution:** No, there are none. These materials are designed to do certain specific functions in the plant health management practice. Each product has its own strengths and weaknesses.

For example, selective herbicides, such as pre-emergent materials, are designed and used primarily for controlling annual grasses as they emerge, while post-emergent materials, like Trimec containing 2, 4-D, MCPP and dicamba, are used for broadleaf weed control. Non-selective herbicides such as Roundup are designed to be used as a total vegetation management tool to get rid of many different kinds of plants.

Similarly, some diseases can only be controlled with contact fungicides, while others can be controlled by systemic fungicides.

It is important to properly identify the specific pest problem and then select the proper materials, method and timing for managing the problem. Always read and follow label specifications.



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Questions should be mailed to Problem Solver, Weeds Trees & Turf, 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Please allow 2-3 months for an answer to appear in the magazine.