

# ASK THE EXPERT

DR. BALAKRISHNA RAO



## Fertilization at planting

**Problem:** How long should we wait to fertilize newly-planted trees? Is there a problem with fertilizing at planting? (New York)

**Solution:** Most plants can tolerate and benefit from fertilizers at planting. But you should preferably use a slow-release source of nitrogen with low burn potential and salt indexes. Slow-release fertilizers containing a ureaformaldehyde have been used at planting time by arborists without apparent injury.

Fertilizing after planting can be done any time. Even in this case, I would use a slow-release nitrogen source. A sub-surface liquid injection method is preferable to obtain distribution of nutrients throughout the rootball. However, some arborists believe that nutrients applied on the rootball surface, at the top of the rootball, will be readily available to roots. Fertilizer applied with the backfill soil may leach and may not be available to rootball roots.

Phosphorus, which does not move in the soil, is better applied in the planting hole and/or mixed with backfill soil at planting. Phosphorus is beneficial in the root initiation and development. Surface application of phosphorus may not be very beneficial to trees.

Fertilizer practices have received a lot of attention recently as arborists attempt to maximize plant health while minimizing environmental concerns. More research is needed to determine the most effective treatments.

## Reader response: weed control fabric

These comments from an "Ask the Expert" reader:

"In an issue last year, you gave advice on controlling weeds around trees. I thought you might be interested in some research and field experience that suggests that Biobarrier Root Control System fabric, which is designed to stop roots from damaging hardscapes, will control surface vegetation for up to 10 years when covered with one to three inches of rock, mulch or soil.

"Biobarrier works by releasing very small amounts of trifluralin over an extended period of time. Trifluralin in very minute concentrations—15 ppm and less—stops root cell division and therefore prevents successful germination of seeds."

The information that I received suggests that Biobarrier provides good weed control, no vegetation at the tree skirt seam, and no surface roots. The report said that "the greatest weed control was obtained with a combination of geotextiles/pre-emergence herbicide (trifluralin) disk, indicating a possible new method of weed control in containers."

We are not familiar with this practice. Should you be interested, try it on a small scale. For further information, contact Reemay, the maker of Biobarrier, at (800) 284-2780 in Tennessee.

## Tree root pruning

**Problem:** How do you remove and prevent tree roots from growing inside sewer pipes? How do the roots get inside the pipes? We

run into a few problems of this nature every year. Any comments? (New York)

**Solution:** Tree roots often enter sewer pipelines through cracks or joints. Cracks may result from freezing and thawing, or from expanding roots pushing against the pipe, creating small openings that allow fine roots to enter pipes. Inside the pipes, moisture, nutrients and air are favorable for the roots to grow. Continued growth results in clogging the pipes. This would warrant corrective measures.

If the pipes are clogged, we suggest using a mechanical router or snake to clean the lines. Reports indicate that a combination of metasodium (Vapam) and dichlobenil (Casoron) which comes as either a liquid (Vaparoot Plus) or a foam (Vaporoot) formulation can also be used. Since Vapam is a Restricted Use product, trained professionals with special equipment are needed for application. Also, make sure to follow good handling procedures.

Another option is to use copper sulfate to unclog sewer lines, but it is toxic and may affect the sewage treatment. To prevent future clogging problems, a product such as Biobarrier wrapped around sewer pipe joints when they are installed may be beneficial. For pipes already installed, it would be very expensive to use a barrier because of the need to expose the pipes before wrapping.

Consider all these options and discuss with professionals who provide remedial services for sewer pipe clogs. Read and follow label specification for best results.

## Dealing with subsoil

**Problem:** Can limestone or similar clay-base soil be used over a slate or shale subsoil for a prospective turf area? This situation has been known to cause turf to burn up and dry out. Sometimes, avoiding the problem can be inconvenient and costly. (Pennsylvania)

**Solution:** Mr. Richard Rathjens, senior agronomist for the Davey Company, suggests:

"A favorable rootzone for turfgrass growth can be constructed above a slate or shale subsoil. Commonly-used materials for this purpose include organic materials such as peat, mineral soils (loams or sandy loams) or sands. Depending on the existing soil, a partial modification or complete replacement may be necessary. You may wish to consult with turfgrass specialists in your area to determine the best strategy."

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*Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.*