Home-study courses in horticulture?
Problem: Are there any schools offering home-study courses in horticulture and landscape design for which a degree can be earned? (Pennsylvania)
Solution: I am not familiar with any schools offering home-study courses in horticulture and landscape design for a degree and/or no degree program. I will update you if I hear from our readers or other sources.

Earthworms and golf greens
Problem: How can I eliminate earthworms from penetrating my greens? The worms bore holes up through the turf, causing little mounds of dirt. When the greens are mowed, the mounds are left flat. This causes an uneven putting surface and an unattractive green. (New York)
Solution: Generally, most people—particularly those who deal with turfgrass management and farming—consider earthworms to be beneficial as their feeding activity enriches the soil. In addition, their burrowing improves soil aeration. The soil they ingest with their food becomes a good source of natural fertilizer when excreted.

The problems they create—as you indicated—are mounds of soil in the turfgrass area which can be unsightly. In your situation, this presents an uneven soil surface for playing. Also, a large number of earthworms may be found crawling or dead on sidewalks, driveways, etc. during heavy rains or saturated soil conditions.

Although these activities can be a nuisance, or objectionable to a number of people, there is no pesticide registered to manage earthworms. Reports indicate that certain soil-applied insecticides on lawns may have some adverse effects on earthworm population and activity. If any of the readers have suggestions or comments, I will pass them on in this column.

Read and follow label specifications for better results.

Ever see an ‘umbrella’ tree?
Problem: Are you familiar with the “umbrella” tree? If so, do you have any idea where I can locate one? What is its botanical name? (Pennsylvania)
Solution: In reviewing the literature from our library, the specific name of the umbrella tree to which you are probably referring is *Magnolia tripetala*. In addition to this, the following names of trees were also included under that umbrella tree name:

- Australian: *Brassaia actinophylla*
- Ear-leaved: *Magnolia fraseri*
- Queens: *Brassaia actinophylla*
- Queensland: *Brassaia actinophylla*
- Texas: *Melia azadarach*

Among the above names and tree species, the umbrella tree most commonly refers to umbrella magnolia (*Magnolia tripetala*). It gets its name from the characteristic arrangement of large leaves. Unlike many other plants on which the leaves are normally arranged along the branches, the umbrella tree’s leaves are crowded at the ends of the branches, giving an umbrella effect.

The umbrella magnolia tree can be a large shrub or small tree seldom more than 40 feet tall. It is found near streams or in moist soils along the coastal plain and Piedmont plateau from Virginia to Georgia. It may also be found in mountains.

The tree has large (10- to 20-inch) broad elongated leaves, cream-colored, 10- to 12-inch wide flowers with three sepals and six or nine petals with unpleasant odor and fruits which are rose/red-colored and two- to four-inches long. Its bark is light gray and smooth.

With the above unique characteristics, it may not be very difficult to locate the tree in its growing regions, which are Pennsylvania to Alabama and Mississippi.

Nutsedge control tips
Problem: We are having problems controlling nutsedge in our clients’ properties. We have used Basagran with mixed results. Is there a better product or method of managing nutsedge on warm-season grasses? (Texas)
Solution: In Texas, you are probably dealing with two types of nutsedge—the yellow and purple varieties. Of the two, purple nutsedge is reportedly common in your area. The Basagran herbicide that you used is primarily for yellow nutsedge control. You would obtain mixed results if purple nutsedge is the predominant problem, since Basagran doesn’t work well in managing this.

If purple nutsedge is predominant, try using Image herbicide. This herbicide is by far the best product for purple nutsedge management. The manufacturer claims 80- to 100 percent control. It will also help control yellow nutsedge.

Image can be used on warm-season established turfgrasses like bermudagrass, centipedegrass, St. Augustinegrass and zoysiagrass. Labels say not to use on tall fescue or mixed stand of tall fescue and bermudagrass. For better results, apply Image on actively growing weeds. It can be tank mixed with other herbicides, but check the label specifications for mixing guidelines and compatibilities.

According to the label information, Image will also help manage quite a few other monocot and dicot weeds. Refer to the label for more information.

Image is a systemic herbicide which can move throughout the foliage and roots and starve weeds by affecting plant protein production. Reportedly, weed growth stops within two weeks of application. With continued mowing and good plant health care practices for desirable turfgrass, the weed problem disappears.

Read and follow label specifications for best results.

Dr. Balakrishna Rao is Manager of Research and Technical Development for the Davey Tree Co., Kent, Ohio.

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.