Backyard Briefs

A weekly column
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Perhaps you have noticed that your garden or yard is not fairing as well during drought as the vegetation in a natural landscape? One reason may be that you do not have very many of the beneficial fungi, I told you of last week, called mycorrhizae (*mycor* meaning fungus, *rhiza* meaning root) living in your soil. Tilling, heavy use of fertilizer, use of pesticides and fungicides, removal of topsoil and construction can deplete or eliminate these beneficial fungi.

The plants we buy are usually grown in sterile soil and are heavily fertilized, and watered to grow quickly. Then, we place these plants in our yard. In many cases either our soil does not have the right fungi to aid the plants we introduce, or the mycorrhizae are depleted due to the factors noted above. As a result these nursery plants will continue to require substantial amounts of fertilizer and water in order to survive.

There are alternatives however. The best way to encourage beneficial fungi already present in your soil is to use compost instead of fertilizer to feed your plants. Compost nourishes the fungi so the more compost you use the more mycorrhizae you will have. Such beneficial fungi are plant specific. The types present in our soil are here because they are compatible with the plants that naturally grow in this region. So the best way to utilize the mycorrhizal fungi that are present in your soil is to use native plants.

The spores of beneficial fungi however, can also be purchased. Different mixes are available for different types of plants, so one can introduce mycorrhizae spores that are compatible with the specific plants you place in your yard. Scientists have learned that by dusting the roots of pine tree seedlings, for example, with the right mix of mycorrhizal fungi can greatly improve seedling growth and survival rate.

The fungi enhance plant root systems so they can cope with drought, breakdown minerals in the soil increasing plant nutrition, and fight diseases that try to attack plants through their root system. In return the fungi receive food from the host plant in the form of sugar. This web site has additional information on these beneficial fungi and a list of suppliers (suppliers are listed first so be sure to scroll down to “Educational: Leaflets, Articles, Reviews”) at: http://ncatark.uark.edu/~steved/mycorrhizae.html