



Question of the Week

Q. “Help, all my plants are dying! My landscaper spread mulch around them yesterday and today they are scorched, wilted, and some are losing leaves. Besides that, my lawn is yellowing alongside the mulched bed. What can I do?”

A. Known as *sour mulch*, this problem occasionally shows up when hardwood mulch has been stockpiled in very large piles. High moisture and lack of oxygen towards the center and bottoms of these piles leads to anaerobic fermentation, producing by-products such as alcohol, ammonia, and organic acids that can harm plants. Storing mulch in long, low rows no more than 10 feet high and turning it frequently to expose it to oxygen will keep it from souring.

Landscapers often detect sour mulch by its pungent or ammonia-like smell, although these odors dissipate quickly once the mulch has been spread. It may also feel hot to the touch. The pH of sour mulch is very low, ranging from 2.2 – 3.5, a good diagnostic test if you suspect you have sour mulch.

Once sour mulch is spread, plants show symptoms within a day. Sometimes they recover and other times they die. A wide range of plants, from herbaceous perennials and annuals to newly planted trees and shrubs, can be affected.

The harmful compounds in the mulch will volatilize and/or leach out fairly quickly once the mulch is spread in a shallow layer. Landscapers who suspect they have piles of sour mulch should check the pH and, if in doubt, spread the mulch and turn it to provide aeration. Apply lots of water to leach out the toxins and apply an ample amount of lime to bring the pH back up. After a few weeks, the mulch should be safe to use.

The sour mulch occurrences this year have been limited to *black* mulch. We haven't had complaints about problems with other-colored natural mulches. We weren't able to trace the black mulch back to a common source, however. – *Cathy Neal, UNH Cooperative Extension nursery and landscape specialist.*

Got questions? UNH Cooperative Extension's Family, Home & Garden Education Center Info Line offers practical help finding answers for your lawn and garden questions. Call toll free at 1-877-398-4769, M-F, 9:00 a.m.-2:00 p.m., or Wednesdays, 5:00 p.m.-7:30 p.m. You can also email us at answers@unh.edu

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