

MULCH CORNER

COMPOST AS A MULCH PART II

By John Ferguson

We were talking this week with one of our landscaping customers whom uses compost as a mulch, so let's explore this topic.

Compost makes a good mulch when applied 3 inches deep around most plants. A good compost has a high nutrient content, it rapidly improves soil fertility, it stimulates plant growth and general health and does not wash out in rain. If made properly compost is weed free, has a fair resistance to compaction and excellent resistance to blowing away in wind. Good compost contains and stimulates the growth of beneficial soil life (microbes, worms, good insects, etc.), it naturally suppresses the growth of many weed species (often better than dangerous chemical herbicides). Research at Ohio State University has found that a one inch thick layer of good compost is as effective a disease preventer as any synthetic chemical on the market.

More and more people are mulching their lawns with compost, a process that is often referred to as "topdressing". One of the best ways is to apply a good organic fertilizer like Microlife 6-2-4 first and then top dress with compost. Compost is applied from 1/4 inch to 1/2 inch thick layer at one time (never more than this at one time or it may smother the grass). When one uses this approach, they often see a 50% reduction in water requirements the first year alone and much more in future years as the process is repeated and the soil gets healthier. Turf diseases like brown patch, take -all, and St. Augustine decline become rare. The good microbes in compost decompose thatch so it never becomes a problem. The money ones saves on water, fungicides, insecticides, etc. pays for the compost. In addition one has lush green turf grass to enjoy, and since no toxic chemicals are used it is safe for children and pets to play on.

There are several ways to apply the compost from manually to equipment designed for this process. Since I have a cul-de-sac lot with only a small patch of grass in the front yard, I topdress it myself as the exercise is good for me. I also love the scent and feel of good compost. I use a



wheelbarrow to move the compost to a given area. I take a shovel full of compost and sling it into the air scattering it over the grass. I then take a leave rake and even it up and settle it into the grass.

For larger areas, there are blowers and spreaders available. One can rent a spreader (still limited availability in the Houston area) or one can hire a company like Green Pro (http://www.greenprotexas.com/) to do the work for you.



Photo courtesy of Jim Faulk of Green Pro

For large areas, blowers can apply compost 300 feet from the truck and apply 40-50 cubic yards per hour. The picture below is from the Finn company, a manufacturer that makes blowers in several different sizes.





Good compost can be expensive but well worth it as the cost is recovered many times over by savings its usage generates. Good compost is in limited supply in some areas and there are large swings in quality from excellent to very poor. Many products are labeled and sold as compost that are not.

For use as a mulch, a green or partially decomposed (immature) compost is best. More composting time or maturity is effective when mixing into a soil layer. Good compost is mostly free of plastic, rocks, trash and other contaminants. Compost should have an index of at least 5 on the Solvita compost maturity test for use as a mulch.

Note: Mushroom Compost - Not a true compost. It is technically known as spent mushroom substrate. Often use the word "compost" to help sell and get rid of the waste products from mushroom farms. We will talk more about this product when we do a series of articles on compost.

Certain types of mulches suppress weeds better than other types, and research is starting to evaluate these weed suppression properties. Research at the University of Connecticut has found that compost suppresses weeds almost as well as leaves and straw. However, weeds that made it through a compost layer were very healthy.

A recent study at the University of Maryland has found that the insect pest known as "Azalea Lace Bugs" are attracted to Rhododendron's (Azaleas) that have received supplemental synthetic nitrogen fertilizer. Many other studies have found that pest insects are attracted to plants that have received



synthetic fertilizers. So, one of the best (and cheapest) methods of reducing insect problems is to fertilize naturally using compost as a mulch.

The results of a two year study released by the Texas Transportation Institute in 1997 (Texas A&M University) found that using compost as a mulch was as good or better than all other erosion control methods and much cheaper (Research

Report 1352-2F). Similar results were found by the EPA (United States Environmental Protection Agency) and FHWA (Federal Highway Administration) when comparing "yard trimmings compost" to hydro mulch for erosion control and vegetation establishment. The results showed that compost outperformed the hydro mulch with synthetic chemical fertilizer added. Several other studies have found the same results, that compost and native mulch outperforms alternative methods and at lower cost.