



## MULCH CORNER

### WHY ORGANIC MULCHES

*By John Ferguson*

This week I had a customer ask me why we recommend organic mulches over shredded tires or gravel. These have their place and will be discussed in future articles.

Why Organic Mulches:

Organic mulches offer the most benefits, often at lower cost, and improve the fertility and health of the soil.

A three inch layer of organic mulch can lower soil temperature about 25-30°F which reduces plant stress and water requirements. Bare soil can easily reach 100-135 °F which speeds evaporation and dries out the soil, stresses the plant resulting in wilting, causes insect and disease problems and in most plants eventual death.

The higher soil temperature reduces a plants roots ability to absorb moisture (even if it is there) and the higher temperature kills beneficial microbes that help feed, water and protect the plant's roots. In addition, soil nitrogen (N) decreases as soil temperatures increase. For every 100°C increase in soil temperature, soil nitrogen (N) will decrease 2-3 times.

Studies in Austin and San Antonio Texas during the 1990's found that lawns mulched with 1/2 inch of compost each year, saved \$50-\$200 per month on their water bill. See photo below.

Plants grown in organically enriched soils suffer far less disease and insect problems than plants grown with synthetic chemicals. Thus good organic mulch helps build up the soil, naturally increasing a plants pest and disease resistance.

Two studies from Ohio State University have confirmed that plants grown organically in organically enriched soil suffer far less disease and insect problems than those grown with synthetic chemicals. Therefore good organic mulch helps build up the soil, naturally increasing a plants pest and disease resistance.

USDA studies on several species of plants have found that mulched plants were often 3 times as large and produced 3 times the yield of un-mulched plants after several years.

In January of 2011 the yard on the right went organic using leaf mold compost as a mulch and the Microlife organic fertilizer. Both yards were under water restrictions during the severe drought. The photo was taken by T. Polk, owner of Mother Nature Landscapes, whom did the work.

