

## Mulch Volcano – What it is and Why it's Bad

A mulch volcano is pretty much what it sounds like. It is piling mulch high against a tree trunk, as shown in the photo on the left, that can cause the type of damage shown in the photo on the right. While properly placing mulch around a tree has many benefits, the drawbacks of mulch volcanoes are numerous.

Mulch under trees should be kept less than 4" deep. Roots need oxygen to live and if the mulch depth is more than 4 inches, oxygen exchange between the soil and the tree roots becomes restricted. A mulch volcano can encourage the roots of a young tree to grow into the mound of mulch rather than into the soil.

Mulch should not come in contact with the tree trunk. It should be kept at least 5 inches away from the tree trunk to maintain a healthy environment for the tree bark. Mulch in contact with the tree trunk creates an unhealthy, moist environment that can lead to cracks in the bark. Insects and fungal growths exploit these cracks to invade the tree. Rodents also find these conditions ideal for chewing the bark and damaging the tree.



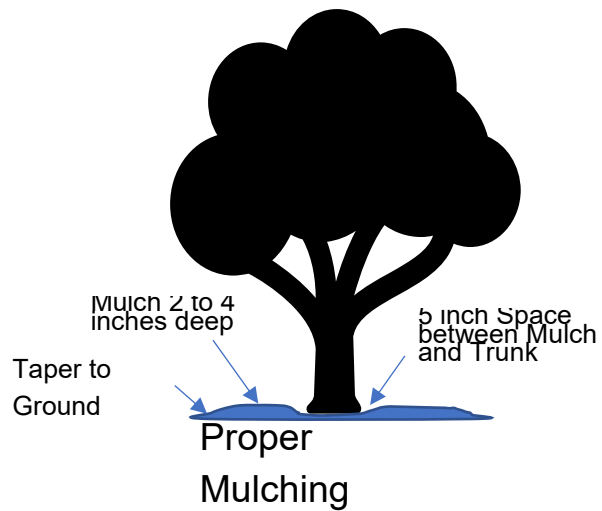
Mulch Volcano



Damage resulting from Mulch Volcano

Proper mulching, shown in the picture below, should be no more than 2 to 4 inches deep. Limiting the mulch depth allows efficient soil oxygen exchange for healthy tree roots. Mulch should be spread out around the tree, as far as the tree branches extend, and tapered to the ground level at the outer edge.

Mulch selection is critical for a healthy landscape. Plastic mulch inhibits water from reaching the soil and should be avoided. Wood chips, bark chips or other natural materials are best for mulching. Pine needles or oak leaves are not recommended, as they can change the pH of the soil to a more acidic level.



Avoid volcano mulching. Proper mulch application and maintenance makes a healthier tree.

#### Photo Credits:

Photo 1 (volcano mulch against tree) - <https://www.flickr.com/photos/99758165@N06/19835696056/in/photostream/>

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Photo 2 (tree damage) – DCMGA member Bernadette Gilbert

Diagram – created by DCMGA member Reagan Branstetter