

Build Your Own Soil
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Recently, I talked about the importance of using wood mulch in your planting bed areas. The reason I emphasize the addition of organic matter is for improving the marl soils. We do this because invariably when we talk with individuals who are having problems with their plants, we find that perhaps three out of four times the difficulty can be traced back to the soils that have degraded to poorly aerated, marl clays.

To keep your marl soil aerated, at planting time add organic materials out to the edge of the planting hole. Then reapply the mulch annually to the edge of the plant's dripline, which is where the major portion of tree or shrub's feeder roots are located. Mulch can be applied two to three inches deep and should be kept at least six inches from the tree trunk.

In the Keys, mulching materials used are organic materials (leaves, grass clippings, pine needles, seaweed, bark chunks, bark chips, and shredded bark) and pea rock or river stone. Which materials are best?

We do not advise placing pea rock and river stone within the plant's dripline. The reason being that the Keys' marl soils generally have a high pH that makes the minor elements (zinc, copper, iron, boron, manganese, and magnesium) needed for healthy plant growth insoluble in water. This is of concern since unless something is dissolved in water, it cannot be absorbed through the plant roots, even though it may be present in the soil at high levels. Therefore plants show symptoms of minor element deficiency, such as yellowing leaves.

Therefore, I recommend the use of organic matter, especially within the plant's dripline because it will lower the soil's pH. Over a period of time (two to five years) the mulched area should create an environment for the minor element fertilizer to remain soluble and for the plant roots to absorb the fertilizer.

Over time, mulches will weather and decompose. If you prefer a more uniform look to your landscape that holds its color, you can freshen the free mulch with a thin layer of purchased colored mulch.