



Installing a New Lawn

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John from Niu Valley writes,

I currently have what looks like a zoysia-type grass that my father told me is similar to templegrass but it is not templegrass. I want to replace it because although the zoysia is decent looking, the leaves are very sharp and I prefer a grass that is softer. We have tried to replace it twice in years past but it keeps coming back and eventually chokes out the replacement grass.

Also, some people that my parents hired to maintain our lawn spread sand to try to level it out but have only succeeded in creating large sandy areas where the zoysia grows very sparsely. I believe that to remedy this, I need to dig up and remove the sand as much as possible and then mix in some topsoil to level it out. Since this will be almost half of the yard, I might as well start all over and try to replace the grass one more time.

I am thinking that seashore paspalum would be a good choice and would like to know how to eliminate the zoysia from my lawn so that it does not come back. When would be a good time to start this project? My thoughts are to begin killing the zoysia with RoundUp about the beginning of March and try to have the area ready for the seashore paspalum plugs by the beginning to middle of April.

Dear John,

Your present grass is probably a zoysia hybrid called 'Emerald', which has been used for home lawns here in Hawai'i for many years. The grass blades can become stiff and pokey, particularly under dry conditions in full-sun areas. However, Emerald has a moderately high

tolerance to partial shade and if adequately watered and mowed at a height of about 1 inch in these areas, it will often become softer and easier on the bare feet.

If you absolutely want to replace it, choose a grass that is well adapted to your set of environmental conditions. If you have full sun most of the day, then any of the warm-season turfgrasses will do well. Your choice of seashore paspalum does have a softer leaf texture and will tolerate some shade but not as much as zoysia. Be aware, however, that paspalum has its own set of maintenance issues which may eventually become a problem.

Several factors may enter into your decision on when to start the renovation. I would treat this as a "last time" effort and put plenty of work and time into the ground preparation. The existing zoysia will be very difficult to completely eliminate. Since you have the added problem of the sandy areas to deal with, a complete soil reconditioning is called for and will also help in the zoysia elimination process. The problems caused by the use of sand to level out the low spots in a clay-based soil points out the importance of not using sand in that situation but rather using a soil mix that is close to the texture and composition of the existing soil.

Give yourself at least several months for the entire preparation process. Start with two Roundup® applications, the second 2–3 weeks after the first. This will take out most of the existing grass but will not completely kill all of the roots and rhizomes. When most of the present lawn is brown, start on the soil conditioning. You do not have to remove all of the sand that was brought in, but try to evenly re-distribute it over the entire area. Bring in enough of a 50/50 mix of topsoil and compost to cover the lawn to a depth of 2 inches. One cubic yard of mix will cover about 150 square feet to a depth of 2 inches. This is locally available from Hawaiian Earth Products and possibly other sources. Finish off by spreading 5 pounds

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per 1000 sq feet of 10-30-10 fertilizer. Rototill the entire area to evenly incorporate the soil and compost mix to a depth of 5–6 inches. Level the entire area to eliminate any of the preexisting low spots and roll it with a water-filled lawn roller to help settle the loose soil. Rototillers and lawn rollers are available at most equipment rental shops. The rototilling will bring up weed seeds and some surviving grass rhizomes, which will begin to grow over the next few weeks. Treat any new growth with Roundup for one or two more applications until you are confident that most of the old lawn is dead.

This entire process may take as long as two months, but it will be well worth the effort. Start planting the new grass in mid-April. Depending on your choice of grass and method of planting, your new lawn should be grown in by midsummer. In the meantime, spend some time researching the qualities of different species of grass and the available methods of planting them. Also find out about the required maintenance and mowing equipment for the different species of turf grass.

See also . . .

Calculating the amount of fertilizer needed for your lawn
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/TM-9.pdf>

Common lawn grasses for Hawaii
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/II-22.pdf>

Seashore paspalum
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/TM-1.pdf>

Turf fertilizers for Hawaii's landscapes
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/TM-13.pdf>

Zoysiagrass
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/TM-8.pdf>

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