

# Fire Ant Solutions during Droughts

By Patricia Byrne

With the droughts we have been experiencing the last few years it has become important to conserve water. People are beginning to realize that maintaining a strong root system of the grasses in their lawns means less water is used to maintain it. That is done by using organic soil amendments and not using the old chemical method of fertilization. It has become clear that when chemical fertilizers are used year after year the roots of grass become shallow and the minerals of the soil are leached out. This leaves your lawn susceptible to burn easily in drought conditions and causes you to use more water while trying to save it.

I saw a commercial on TV yesterday about a chemical fire ant treatment that you put down at the same time you put the chemical fertilizer on your lawn because they are combined. My first thought was if chemical fertilizers are damaging to your lawn over time, what would be the results of the added fire ant chemicals? If chemicals from the fertilizers build up in the soil what does the chemical ant killer do? Another question is what effect do these chemicals have on your pets, children or you when you walk on the grass barefoot? You and your pets absorb through the skin. Pets often eat grass and soil. Letting fire ants take over your lawn also makes it dangerous for you, your family and pets.

Thankfully, there are alternative natural ways to rid your lawn of fire ants without making it toxic or damaging the soil and roots of your lawn. It is difficult to rid a lawn of fire ants permanently because they move. You may have to treat a lawn several times to get the hatching eggs and the queens. There are many tunnels in a fire ant nest and many exit holes. The question is, "do you want to treat your lawn several times with a toxic chemical or a natural safe product?"

The Fire Ant Insecticide D-20 by Perma-Guard is one of the safe alternatives to the harsh chemical insecticides. It can be used as a mound drench and broadcasted. The formulated part of this product is added to a base of a very pure fresh water diatomaceous earth. This fresh water diatomaceous earth has about 89% amorphous silica in it. This pure form of diatomaceous earth is commonly used as an anti-caking agent in soil amendments, animal feeds, and foods. Perma-Guard did not use the diatomaceous earth that is used in swimming pool filtration and other such commercial filtration. That type of DE has been heated and the silica has become crystallized. Crystallized silica can be deadly.

Since Perma-Guard as a company had a goal of making a safe alternative to harmful insecticides it chose to use a food grade fresh water source of DE for the base of the formula. There are two reasons to use this type of DE.

The amorphous silica in this type is not harmful to us but is effective in killing insects. The microscopic fossilized diatom that this deposit is comprised of is tubular with tiny holes along the walls. When an insect's underbody comes in contact with the tiny holes of the fossil it lacerates the insect causing them to lose bodily fluids and die. Insects can not become immune to this. It is not harmful to us because our cell walls are much thicker than the exoskeleton of an insect. A very small amount of two other plant derivatives is added. One to make insects that may not be active move around and come in contact with the DE and the other to keep the first active for up to three months. All three ingredients will not harm you, your family or pets. The DE that remains after the other ingredients are no longer active will continue to deter fire ants from returning, and improve your soil and lawn as the silica returns to the soil.

It would be best to broadcast this product over the entire surface of your lawn by dusting with a tube duster (Spritzer) or Dustinmizer first. This kills the ants on the surface and prevents you from being bitten while drenching the mounds. Put a thin circle of the product around the surface of the mound and dust the surface. Mix four table spoons of Perma-Guard's Fire Ant in a gallon of water and one tablespoon of a mild detergent. Pour this solution down the hole until it overflows. The small pressure sprayers with long metal probes are useful in forcing the product into the hole reaching the Queen. Since the ingredients stay active up to three months the hatching ants will also die. Ants do communicate and will eventually move on to an area that does not pose a danger to the nest. I choose to treat my lawn with Perma-Guard products.

Silica is a very important mineral to add to soil. When this mineral is available to a plant it assists the root system in taking up nutrients from the soil. Silica has been shown to improve a plants resistance to drought and insects. Insects do not like to eat plants with silica in them.