



WHY USE PJC ORGANIC?

PJC Organic's all-natural fertilizers and soil conditioners work to create a symbiotic relationship between soil biology and turf plants. Good soil includes a balance of air, water, minerals, and organic matter. It is a living system full of activity with plant roots, fungi, bacteria, protozoa, molds, insects, earthworms, and even small animals. The basic principle with organic fertilizers is to feed the soil and let the soil feed the plants.

PJC's Organic Fertilizers provide the organic materials and nutrients in balanced rations so that indigenous soil microorganisms can thrive and proliferate. As a result, these microbes break down organic materials and nutrients into a form which allows them to be stored in the soil. Then, in response to a signal of specific need from the plant, they release the appropriate nutrient in a form and at a rate which allows the plant to take it up. After the nutrients are consumed or stored, the husks of organic matter remain, helping to improve water retention and soil tilth. Water Insoluble Nitrogen (WIN) doesn't run off or pollute groundwater. Through this biological mechanism nearly 100% of the nutrients are taken up by the plant.



UNDERSTANDING THE UNDERLYING SOIL CONDITIONS IS THE FOUNDATION FOR AN EFFECTIVE ORGANIC TURF CARE PROGRAM.

THE KEY: SOIL TESTING

A successful All-Natural Organic Turf Care Program requires the right products in combination with proper cultural practices—one without the other is a setup for failure. The choice of fertilizer, soil amendments, and application rates should be dictated by routine soil testing. This approach is not hard, although it differs in some aspects from conventional turf care practices of the past few decades.

Soil can get out of balance for the following reasons:

- Construction (e.g. foundation soils being used as top soils and disturbed sites).
- Compaction from heavy use: sports, events, walkways, and equipment.
- Over-irrigation from shallow, frequent watering that compacts soils and helps weeds.
- Depletion of nutrients by removing plant material without the addition of organic matter.
- Long-term use of synthetic fertilizers that have killed microorganisms and flushed nutrients from the native soil.
- Soil types that may not be favorable for plant growth.

THE 4 COMPONENTS OF HEALTHY TURF

The following must be addressed in a successful Organic Turf Care Program:

1. SOIL CHEMISTRY—Create and maintain a hospitable environment for growing turf (Maintain pH 6.5-6.8 and calcium to magnesium levels).
2. SOIL BIOLOGY—Feed the microbes in the soil so they in turn can feed the plant (All-Natural Organic Fertilizers).
3. SOIL STRUCTURE—Promote the porosity and nutrient holding capacity of the soil to sustain aerobic life, improve root development, and increase air/water flow. (Improve Organic Matter, CEC, & Calcium levels).
4. CULTURAL PRACTICES—Proper mowing, aeration, over-seeding and irrigation practices will have a BIG impact on the overall success of your program!



ISSUES WITH SYNTHETICS

Synthetic (chemical) fertilizers and pesticides have an adverse effect on the health of people, pets, and our environment. Synthetic fertilizers contain mostly water-soluble nitrogen (WSN) and can release nutrients faster than the plant can take up or the microbes can break down for storage in the soil. Consequently, the excess chemicals leach and run-off, which is wasteful and harmful to the water supply. The salts from the chemical fertilizers also adversely affect the organisms in the soil that provide the healthy environment your plant needs to grow. In addition, pesticides don't distinguish between undesirable and beneficial organisms – effectively killing off the biology which resets the soil life cycle after each application. Lastly, most herbicides have antibiotic and carcinogenic chemicals, making them unsafe for applicators, users, and the environment.

While chemical fertilizers can meet some nutrient needs of the plant - that is all they can do. If you grow with chemical fertilizers long enough without putting organic matter back into the soil, eventually you will be growing the plant hydroponically with soil as the medium. The plant becomes completely dependent on the chemicals to grow rather than getting its nutrients from the soil.

PJC Organic formulates fertilizers and soil amendments that are effective, benefit the soil, and are not harmful to the environment.