## Calcium can help in many ways!

alcium, the forgotten nutrient! Yes, calcium is getting more and more respect now than in years past. It used to be that NPK were the only fertility things on the minds of turf managers, but in recent years, calcium has become the "fourth" nutrient and is beginning to be seen nearly as important as NPK. Especially at key times of the year, such as spring, mid-summer and fall.

## Why so much calcium?

On our soil tests, we see calcium taking up most of the room on the soil colloid. This is the natural cycle in the soil. Calcium is dominant and the soil colloid will want to bond with it. This calcium is rarely available as a feeding/amending nutrient to the plant or soil structure. To properly amend the soil and feed the plant, more calcium must be applied.

The key to amending the soil properly, which basically means conditioning salts in the soil, you must apply the proper volume of available calcium in the proper form for the type of soil and conditions that exist at your facility.

## VERDE-CAL Products can provide the proper calcium source.

pH can fluctuate due to many reasons in the soil structure. Low pH (low calcium) due to the excess of hydrogen and aluminum in the soil will need to be amended very carefully. This excess hydrogen and aluminum need to be released from the soil colloid and must be done so with a calcium carbonate source (typically High Cal Lime).

A product like VERDE-CAL, enhanced Calcium Carbonate, will provide immediately available calcium in a carbonate form to properly amend and condition high hydrogen and aluminum levels in the soil. The result is a quick and long lasting pH adjustment. The beauty of a product like VERDE-CAL is that it will penetrate the soil profile due to its soluble calcium characteristics and product design. VERDE-CAL does not need any mechanical incorporation at all. It is designed to break down quickly with irrigation and move into the root zone. All while utilizing less product and less labor to achieve great results.

Effluent water, high sodium, high magnesium, high pH and tight soils require proper amending as well and require a calcium sulfate source. Typically gypsum (calcium sulfate) will be recommended for these issues in the soil.

A product like VERDE-CAL G, enhanced Calcium Sulfate, allows the proper volume of soluble calcium sulfate to penetrate the soil profile. This will condition the soil and flush/balance salts that may have become harmful to your turf growth and plant health.

VERDE-CAL G breaks down with irrigation and moves into the soil profile with no mechanical incorporation required. This results in a long lasting effect of thoroughly conditioning soil of harmful salts such as sodium and bicarbonate. Tight soils also begin to loosen and oxygen and water start to balance. VERDE-CAL G allows for less product, less labor and quick longer lasting results vs. traditional forms of calcium sulfate.

## It's all about volume!

Volume of available nutrient is the key to properly amending and conditioning any soil.

Traditional forms of calcium,

such as lime or gypsum require high rates, excess labor, and incorporation into the root zone. These old time sources also are very messy to your golfers and to your equipment. They work great on the farm, but not on the golf course with existing finely manicured turf.

Products like VERDE-CAL's line provide the proper volume of essential calcium in sulfate or carbonate form. VERDE-CAL products are very cost effective, budget friendly and user friendly. No mess, no incorporation and great soil tests are the result of using VERDE-CAL products. If particle size is important, you will find that the VERDE-CAL products homogenous particle sizes work great with the lowest height of cut up to fairway height as well.

Products like VERDE-CAL's line will allow any turf manager to successfully accomplish all three of these needs to the turf and root zone. Do this successfully and the end result is better, stronger, healthier turf!

Many products today simply do not contain enough soluble calcium to provide adequate conditioning of the soil. The end result is that these inferior products become expensive to use and simply "maintain a problem in the soil." They cannot be expected to release enough calcium in its proper form to overcome a soil problem!

Understand your soil tests. Compare the last several tests and look at your product choices. Are they working?

Finding a great product like VERDE-CAL's line up of calcium products allows you to utilize budget dollars better and provide outstanding results in your soil and turf.