

Because of the vast amount of stress imposed on much of our intensively managed turf it is plagued with incessant attacks from pathogenic agents, (e.g., fungi, bacteria, virus, etc.).

In addition to incessant attack by pathogens we are faced with ease of pathogen entry into the turf due to frequency and severity of cutting and low cutting heights. This is particularly true in the case of golf greens and tees. When we have mechanically induced entry points from mowing the turf simply cannot be expected to seal off those entry points through internal calcium pectate production.

Plants do have biomechanisms (Systemic Acquired Resistance--SAR), that help them thwart off some of the effects of pathogen attack, but in the care of low cut turf, the plants need a little help in thwarting off pathogens. By definition systemic acquired resistance, (SAR), is necessarily endogenous, (i.e., from within). Let's now explore the concept of **COAX**.

**COAX** is a proprietary formulation of phosphorus acids, amino acid derived nitrogen, and Salix Alba L. extracts. It also contains a proprietary low molecular weight carbon synergist for very rapid plant uptake. It is further fortified with "cytokinin like" phytohormones (biostimulants) to help to mitigate senescent tendencies of turf under pathogen attack.

## HOW DOES COAX WORK?

When any plant is under stress it begins to produce components of Systemic Acquired Resistance to help the plant overcome invaders such as pathogenic bacteria and fungi.

In many/most cases if the plant is mechanically compromised, (i.e., low frequent mowing, etc.), this effect is limited due to the low photosynthetic capacity of the plant. <u>COAX ALLOWS THE TURF TO</u> <u>COMPENSATE IN THE FOLLOWING WAYS.</u>

- Contains phosphorus acid as its (P2O5) component. Phosphorus acid forms have been used not only for plant nutrition, but for plant disease suppression as well.
- Nitrogen component uses long chain amino acid protein in origin. Disease organisms cannot metabolize long chain proteins thus a food source has been eliminated. In addition, the plants biological objectives is met, (i.e., long chain proteins), and it no longer draws in more and more nitrogen which further compromises the turf.
- Salix Alba L. extracts incite the Salicylic Acid response necessary for the turf to engage its systemic acquired resistance mechanisms.
- Carbon Synergists insure very rapid uptake of all components.

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