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# The Emperor's Soil: The Naked Truth

he turf industry is obsessed with soil. Millions of research dollars are spent each year to explore the physical and chemical aspects of soil. For example, the United States Golf Association (USGA) has spent millions simply on understanding and refining specifications for putting green construction.

The search for the "right" soil, sand or amendment has spurred many new industries. Sand companies, organic and inorganic amendment companies, blenders, and testing labs have all flourished in this soil-obsessed world.

### **Nailed by Specs**

USGA specs are used as a guide to "ensure" success, but they can easily double as a hammer with which to nail blame should greens fail. In general, it is widely agreed that the specs focus on drainage with little regard for chemical properties.

The increased number of sand-based rootzones has raised questions on proper fertility that are understood by researching soil chemistry. Private soil chemical testing companies have a network of consultants that promote testing, interpret the numbers and make recommendations.

Though soil chemical analyses often are informative and accurate, consultants sometimes complicate the data with their interpretations, or opinions, in an effort to help turf managers better understand the research. By

putting "spin," as it's referred to in political parlance, on the data, leaps of faith are taken without supportive research that calibrates plant response to soil nutrient level.

### **Favoring the Emperor**

When I ask turf managers what they know about certain agronomic practices and chemical treatments, they often regurgitate what they have been told by consultants—though they don't understand the information. When this happens I am reminded of the story entitled "The Emperor's New Suit" by Hans Christian Andersen. In the story, written in 1837, two swindlers persuade an emperor with an obsession for fine clothing that "they could manufacture the finest cloth to be imagined, but the clothes made of their material possessed the

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