## **TURF TWISTERS**

## CHELATES

Question: We read about chelates, iron chelate for example. What is it and how is it different from iron sulfate? (New Hampshire)

Answer: In the simplest terms, chelating refers to the bridging of a metal ion, in this case iron, that protects its from being precipitated by carbonates, phosphates and other soil fertilizer components. When so protected, the ion remains mobile, allowing it to move freely in soil solutions for uptake by grass roots. This is most important on calcareous soils where the iron sulfate forms are quickly immobilized; chelated forms offer far better chance for the iron to make it into the plant through the soil solution. Chelates are more expensive than iron sulfate and, in turfgrass work, have shown mixed responses.

## CONTROL ORGANIC MATTER

Question; In one short sentence, how would you relieve an organic buildup in a bermudagrass green that has accumulated over the past 5 years? (Alabama)

Answer: During the most active growing period, aerate once per month, top-dress lightly using low content organic matter in soil mixture, vertical mow very lightly once per week, keep as good a putting surface as possible and apply hydrated lime at 2 pounds/1,000 square feet three or four times a year during the cooler months: all in one sentence.

## IN A FROG'S EYE

Question: What can I do to control Fusarium roseum (frog eye) that is attacking my bluegrass fairways? (Illinois)

Answer: Fusarium roseum requires a high temperature (around 65°-70° night temperature) to become really serious. The presence of nematodes adds to the degree of severity. The systemic fungicides Benlate (Tersan 1991) or Cleary's 3336 at six to eight ounces per 1,000 square feet have been effective in control. Water in thoroughly.