TURF TWISTERS

COST COMPARISON

Question: We have been offered a liquid fertilizer for use on our golf course. We are told that each gallon contains 1 pound of nitrogen, 1 pound of P_205 equivalent, and 1 pound of K_20 equivalent. How can we compare the cost of this with a conventional dry fertilizer? (MISSISSIPPI)

Answer: A formula such as you describe is roughly equivalent to a 10-10-10 dry inorganic fertilizer. This is based on the assumption that a gallon will weigh about 10 pounds. You must calculate the nutrients on the basis of actual percentage. Two hundred gallons of the fertilizer you describe would weigh a ton. It would yield 200 pounds of N, 200 pounds P_205 equivalent, and 200 pounds K_20 equivalent. A ton of dry 10-10-10 fertilizer would yield similar amounts of nutrients. If prices are comparable on a "per ton" basis then you should consider costs of application and transportation.

ESTABLISH WINTER GRASS

Question: We have Tifgreen bermudagrass greens. Each winter we have a heavy infestation of *Poa annua*. Can we use one of the new pre-emergence herbicides to prevent germination of *Poa annua*? What would you recommend? (MISSISSIPPI)

Answer: The pre-emergence materials will prevent germination of *Poa* annua. However, they will also prevent the establishment of your overseeded winter grass. The best recommendation we can offer at the present time is that you try to get your winter grass established early and strive for a good dense stand. Occasionally, by a happy accident of timing, an early herbicide application will kill the young newly germinated *Poa annua* and then winter grass can be established. However, this is sort of a "hit-or-miss" matter and such an approach is not dependable.

RETARDS GROWTH

Question: Maleic hydrazide has been recommended to us to be used as a growth retardant. Will this eliminate or reduce the need for mowing? (PENNSYLVANIA)

> Answer: Maleic hydrazide will retard the growth of plants. However, dosages are rather critical and a small over treatment will sometimes discolor plants. We do not recommend it for intensively maintained turf. It is useful however, in areas such as ditch banks or around fixed objects where mowing is difficult. In such an area slight discoloration is of little consequence. This is another useful tool if one doesn't try to "stretch" its usefulness too far.