

TURF TWISTERS

HOW TO W.I.N.

Question: What do the letters "W.I.N." mean on the fertilizer bag label and how do I use them? (Illinois)

Answer: "W.I.N." stands for Water Insoluble Nitrogen, i.e., nitrogen not readily available. If, for example, you have a 50-pound bag of 16-4-12 fertilizer with 4.8% W.I.N., you may find the total amount of water insoluble nitrogen by multiplying 4.8% by the 50 pounds or 2.4 lbs. W.I.N. To find the percentage of W.I.N. in the fertilizer, divide the 4.8% W.I.N. by the 16% total nitrogen or, in this case, 30% of the total nitrogen is W.I.N.

WITH WINTER

Question: What is winter desiccation and how can it be controlled? (Colorado)

Answer: Desiccation is basically a wilting or drying phenomenon of the grass plant and is one of the primary types of winter injury to turf. A grass plant must rely on an internal water supply for respiratory activity even during the winter months. When soil moisture is limited, the supply of water within the plant diminishes to a point where transpiration is greater than that amount of water being replaced by the root system. The turf plant desiccates or dries out.

Desiccation can be held to a minimum by applying several hundred gallons of water to the problem area *before* it comes under stress. Several applications are normally required. Light to moderate top-dressing in the late fall will also help reduce damage.

If desiccation has occurred, power spike, overseed, topdress and syringe frequently to encourage recovery and germination of the damaged turf in the spring and early summer. Play should be restricted until the damaged area has recovered sufficiently to withstand traffic.

TURFGRASS PROBLEMS

Question: Can there be mechanical injury to turf in winter? Is this injury serious? (Ohio)

Answer: Turf can be mechanically injured by both foot and vehicular traffic. This type of injury to the grass plant can be very serious. On frosted playing areas, ice crystals within the grass blades distort and rupture the living cells, causing death. Syringing greens in early morning, before traffic is allowed on the course, will help solve the problem by melting the ice crystals. When the upper portion of the soil has begun to thaw during the early spring, foot traffic will cause severe compaction and tearing of the grass roots at the point where they penetrate the still frozen area. Visual damage may not be noticed at this time, but is one of the primary causes of trouble during summer stress periods.

Snowmobile damage to turf is becoming more apparent each season. A snowmobile can create a five to six inch deep track and can cause a glazing or icing effect with resulting development of toxic conditions.