# Ask the Expert: Moss in the turf

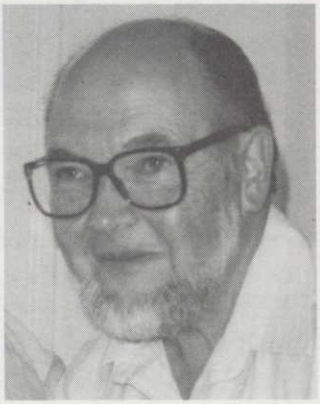
*Professor Richard J. Hull*, Plant Sciences Department, University of Rhode Island, Kingston, RI

**Question:** Are there products that will kill moss in turf without lowering soil pH? Don Barry, Weed Free Lawn, 1196 Torbay Rd., Torbay, NF, Canada

**Answer:** Moss is a serious problem, especially in cool, moist northern regions. The problem is aggravated on golf courses by low cutting heights and the reduction of nitrogen fertility to increase green speed.

Moss becomes a problem when turfgrasses are stressed and the stand thins. Stressed grass cannot resist its encroachment; and once it's established, moss is difficult to control.

The secret to moss management is to alter conditions so grass is favored and moss is not. This involves adding lime to increase soil pH, raising mowing height to make grass more competitive, increasing soil aeration to improve drainage, increasing nitrogen nutrition to stimulate grass growth, and thinning adjacent vegetation to provide more light and ventilation. Use of a high magnesium (dolomitic) limestone is also recommended. Dr. Norman Hummel at Cornell found high moss populations associated with high Cal/Mg ratios in the soil. He also noted that deep spiking or core cultivation followed by sand topdressing significantly reduces moss density by draining the free water moss requires to complete its life cycle.



Dr. Richard J. Hull

Once established, moss may be difficult to remove solely by changing cultural practices. Chemicals can damage it, but they tend not to be as persistent or selective as many herbicides. As a nonvascular plant, with green tissues lacking a well-developed cuticle, moss is susceptible to desiccation. Salts such as ferrous sulfate or ammonium sulfate will consequently burn moss, facilitating grass growth. Salts cause only contact injury to moss, however, so it recovers if turf competitiveness is not enhanced. Hydrated lime applied to moss at 3 to 5 lb/1000 sq ft in early spring will burn it during its growth. And unlike ferrous sulfate, which just adds to soil acidity, hydrated lime neutralizes it.

Herbicides have been used in research trials to suppress moss and allow grasses to become reestablished. No chemical will provide long-term moss control, however. Environmental conditions must be altered to make turfgrasses more competitive.

TurfGrass TRENDS

1775 T Street NW
Washington, DC 20009-7124
ADDRESS CORRECTION REQUESTED

FIRST CLASS
US POSTAGE
PAID
WASHINGTON, DC
PERMIT NO. 8796

8/95