

EPIDEMIOLOGY

Summer patch is most severe during hot, wet years and on poorly drained, compacted sites. Although heat stress plays an important role in disease development, drought stress is usually not a predisposing factor. Under ideal conditions, the causal agent can spread along roots, crowns, and stem tissue at a rate of up to 3 cm per week. Symptom expression has been shown to increase with the use of arsenate herbicides, quick release nitrogen fertilizers, and several contact fungicides. The disease is frequently stimulated when turfgrass is maintained under conditions of low mowing height and frequent, light irrigation. Soil pH, a major factor in the development of take-all patch, apparently does not affect the incidence of summer patch.

CONTROL

Because summer patch is a root disease, cultural practice that alleviate stress and promote root development will reduce disease severity. Since low mowing enhances symptom expression, avoid mowing turf below recommended heights, particularly during periods of heat stress. In the Northeast, symptoms are less apparent when lawns are maintained at a height of 5 to 7 cm, respectively. Fertilize turf with a slow release nitrogen source such as sulfur-coated urea. Irrigate deeply and as infrequently as possible without inducing drought stress. Syringing to reduce heat stress, aerification, improving drainage, and

reducing compaction are other practices that will aid in the control of this disease.

Overseeding affected areas with L. perenne, F. arundinacea, or resistant cultivars of P. pratensis represent one of the most cost-effective means of controlling summer patch. Use mixtures or blends of resistant turf cultivars or species for best results. Conversions of golf areas from Poa to Agrotis spp. will also reduce disease incidence.

Fungicides are available that can effectively control summer patch. Applications should commence on a preventative basis in late spring or early summer when soil temperatures stabilize between 18 and 20C. Systemic fungicides have proven to be most effective but must be applied at high label rates and repeated two to three times at 21-28 day intervals. Efficacy is enhanced when products are applied in at least 1600 L of water per hectare. Certain contact fungicides may stimulate symptom severity when used repeatedly at high rates.

Article seen in Connecticut Clippings, January 1992.

TURFGRASS MANAGEMENT FOR PROFESSIONALS

Current techniques and research results pertaining to turfgrass integrated pest management are the focus of this two-day course. It should be of special interest to golf course superintendents, park and recreation site managers, cemetery and sports turf managers, horticultural consultants, turf and seed sod suppliers, landscape managers, pest control advisors and other professional turf and landscape managers. Ten hours of CDFA continuing education credit pending.

Topics of discussion include: Turf Selection; The first step in pest management; Insect turfgrass pest management; Pre-emergent turf weed management and control; Post-emergent turf weed management and control; Rodents and other turf animal pests; Turfgrass nematode diseases; Turfgrass management to reduce diseases; Low and high temperature turf diseases.

This class will be held on March 24, 25; 9 am to 4 pm at the University Club, UC Davis. For more information call (916) 757-8899.

THANKS RICK

Many thanks to our host **Rick Keyfor** hosting the February meeting at Ridgemark Golf and Country Club. The luncheon was great and we all found Jeff Kollenkark from Ciba-Geigy presentation on plant growth regulators and their application on golf courses very informative.



Don Naumann

510 Salmar Avenue • Campbell, CA 95008 • (408) 374-4700
(800) 827-TURF Mobile (408) 234-4571 Fax (408) 374-4773



GOLF COURSE RENOVATION



**Jim Duhig Terry Stratton
(415) 229-1060**

CONTRA COSTA LANDSCAPING, INC.
P.O. BOX 2069 • MARTINEZ, CA 94553

830 LATOUR CT.
NAPA, CA 94558

(707) 255-2828
(800) 252-6660

INTERNATIONAL SEEDS, INC.
Breeders and Marketers of World Class Turf Seed
"Seed - the Gift of Life"®
Halsey, Oregon