



FIGHTING DOLLAR SPOT

*Studies indicate
combination treatments most effective*

Tolerant strains of turfgrass should be of less concern next season. That's the encouraging outlook on a number of golf courses in the northeast where a special test effort was underway in 1976 to measure new ideas in handling turf disease challenges in both normal and difficult weather. Treatments with combination products proved effective in halting tough disease.

The tests were established by Pat

Nelsen, a Du Pont field development specialist, who concentrated on a program to handle tolerant strains of dollar spot (*Scelerotinia*). Pat Nelsen established a series of turf trials on fairways and greens of eight golf courses in Pennsylvania, New Jersey and Delaware. Her objective was to measure disease control under "normal" field conditions.

Tolerant strains of disease have

aroused increased attention during the past several seasons, but the Nelsen trials indicate that timely protective treatments with the right products will deliver good control. Where tolerant strains exist, contact fungicides (i.e. Daconil, "Tersan" 75) used in combination with "Tersan" 1991 will control disease.

At first, when the weather was good, Pat Nelsen had trouble finding the tolerant strains of disease in

the field. Later, under more difficult weather, she demonstrated that there were simple, practical ways to deal with tolerance even in areas where turf plots had been inoculated with these disease strains.

Pat Nelsen undertook the 1976 turf trials as a field assignment with Du Pont. A native of North Dakota and a biology graduate from Concordia College, she received her master's degree in entomology and applied ecology from the University of Delaware in 1976.

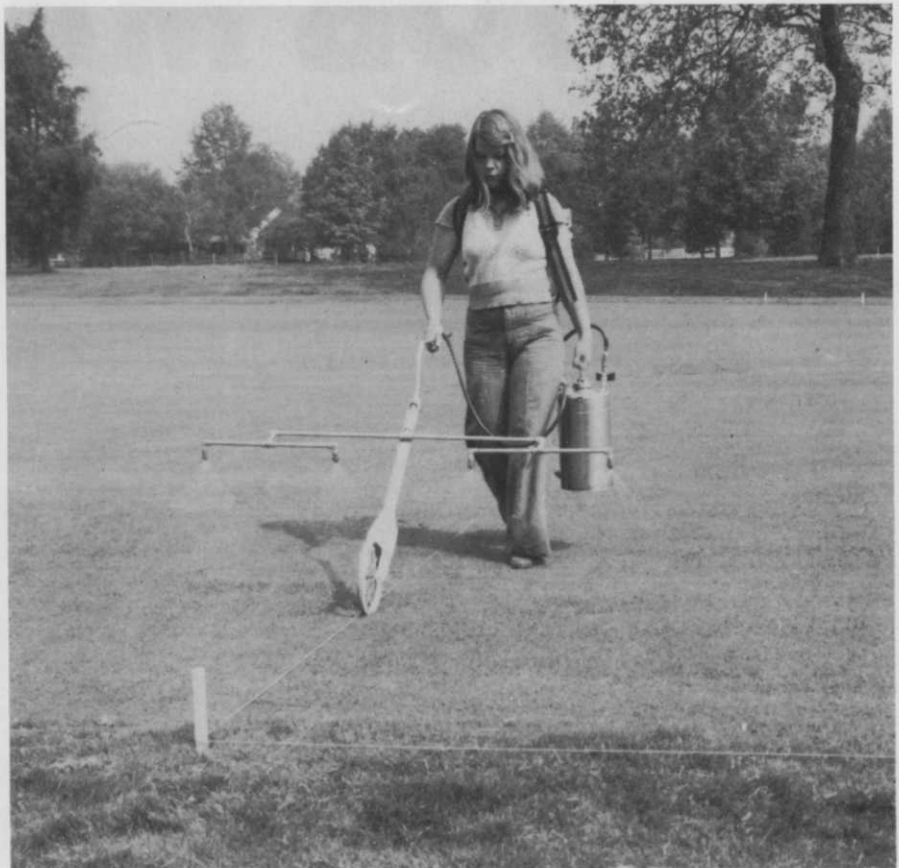
In her Northeast turf disease control trials this past season, Nelsen treated plots on a regular 10-14 day schedule that matched disease control programs of many area golf courses. Half a dozen different spray treatments were included in a typical series of fairway and greens trials such as those she ran at Tavistock Country Club in Haddonfield, NJ.

Chemicals for each treatment were carefully pre-measured and packaged in plastic bags for mixing in the two-gallon hand-carried spray tank. A 4-nozzle, wheel-mounted boom delivered a precise 6-foot swath of chemicals, with pressure coming from a back-pack cylinder of carbon dioxide.

In past years dollar spot disease had been experienced regularly at the courses involved in the Nelsen tests. Disease pressure, of course, has always been variable, depending on the weather. But several weeks passed this season, before Tavistock Agronomist Rich Hurley was troubled by disease problems — even in untreated check areas.

When a tiny patch of *Scelerothia* finally appeared on a green, Nelsen pulled a plug for a laboratory test. Promptly she had confirmed that the disease was tolerant to standard treatments of "Tersan" 1991 alone. Sprays of "Tersan" 1991 in combination with "Tersan" 75 or Daconil 2787 offered protection against the tolerant strains of dollar spot.

Altogether, Nelsen's field studies confirmed the fact that precision full-rate applications of turf fungicides are basic to good disease control. To prevent pressure from tolerant strains of disease a superintendent should plan on combination treatments. □



Fairway trial of fungicide combination is applied by development specialist Pat Nelsen, using a 2-gal. tank, a 4-nozzle 54-inch boom mounted on a wheel.



Equipment adjustment was handled in the field by Pat Nelsen, who used a 5-pound CO₂ tank to provide pressure for even application.