



John Rector, left, talks to one of his California customers about the importance of quality care at Pacific Sod.

## JUST RUST?

Pacific Sod personnel worry about plenty of turfgrass pests infecting their product. But, since 1982, the agronomic staff has not had to worry about rust.

**O**range-brown rust pustules are as common on bluegrasses in Ventura County, Calif. as three-foot breakers and white sand beaches.

Listed as one of the 10 most liveable climates in the world, Ventura also provides an ideal climate for hearty strains of rust.

John Rector, agronomist for Pacific Sod, knows.

He's responsible for cultural practices and quality control at Pacific Sod's 500-acre Camarillo facility, which includes cool season, heat-tolerant and drought-resistant varieties. New plots of Tifgreen hybrid bermuda, Dichondra, tall fescues, Kentucky bluegrass, Excalibre, St.

Augustine and Santa Ana hybrid bermuda grow vigorously in the pleasant Ventura climate which boasts an average yearly temperature of 70 degrees Fahrenheit.

"We're not here to admire grass," says Rector. "Our objective is to bring in a field from seed to sod as quickly as possible. We're concerned with quality at the outset.

"Diseases set a field back. And rust is potentially our No.1 turf disease on bluegrasses. Rust is something we have to deal with eight to nine months out of the year from September to June."

### Caused by spores

Rust is the common name for a group

of turf diseases caused by spores.

These tiny spores alight on healthy grass blades where they germinate by sending hyphae (tiny roots) into the grass leaf and disrupting the plant's ability to grow. Rust-infected grass looks thin, chlorotic, and is orange to brown in color. If examined under a microscope or magnifying glass, the rust pustules are raised on the leaves.

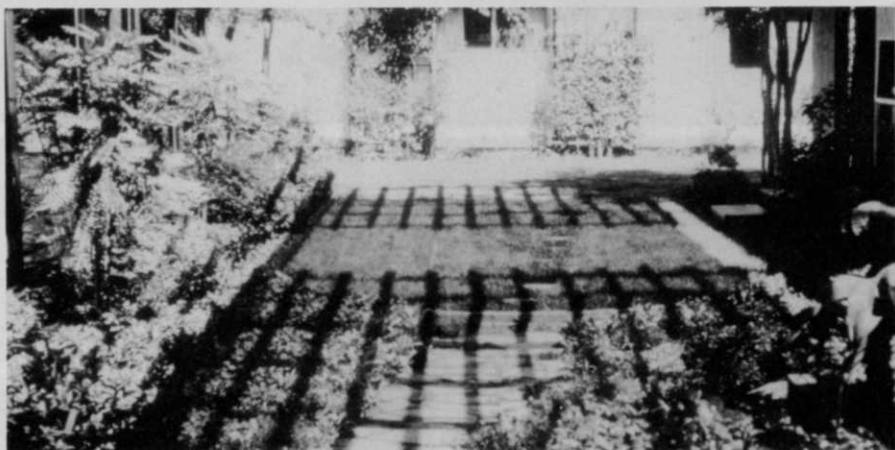
Mild temperatures make rust a persistent problem, encouraging the disease to thrive as much as nine months out of the year.

When climactic conditions are right, these orange/brown pustules appear and erupt in about 10 days, releasing millions of spores which, in turn, infect other susceptible grasses.



A nylon netting is put down to help the natural meshing of the grass, cutting production time to three to four months.

Pacific Sod's 500-acre facility includes cool season, heat-tolerant and drought-resistant varieties.



These spores may turn shoes, machinery and field crews a lovely shade of orange. It not only makes the grass difficult to sell to Southern California buyers, but—if left untreated—can be fatal to the turf.

"When you spray, you're playing with big dollars," notes Rector. "Each decision to spray must be carefully weighed. Spray programs—especially preventative sprays for rust—are generally based on field history, time of year, bluegrass variety and other field conditions. There's only so many dollars you can throw at a field before you've eliminated its profit.

"There are times when you can see rust in the sprinkler patterns," Rector continues. To battle it, Pacific Sod used to spray a contact fungicide three to four times each month. Then came 1982.

#### A wipe-out?

"That year, we had a severe infesta-

tion that we couldn't get a handle on," remembers Rector. "Ten acres were bright orange. Mowers, field equipment—everything that went into that field—came out orange.

"We applied Bayleton fungicide, a brand new product at that time. The area distributor gave us a sample for testing, and we had nothing to lose. In one month, the turf was back to first quality.

"Since then, we've reduced the number of applications to one every four to six weeks, and we've achieved more consistent control and better overall quality."

Dr. Art McCain, extension plant pathologist at the University of California/Berkeley who recommends Bayleton, stresses the importance of other preventative measures:

- Correct timing of overhead irrigation so water doesn't remain standing on the turf overnight.
- Mowing and trimming infected

plants regularly.

● Picking up clippings so surviving spores don't travel to neighboring plants and reinfest.

#### Tough competition

According to Rector, rust control is vital to achieve a reputation for top-quality bluegrass products.

"Competition in California, which is nearly 99 percent of our market, is especially tough with quality of product leading the way. A bad reputation here would quickly cut us out of the market.

"We are one of the largest sod growers in the western United States, yet being the largest isn't important—being the best is."

And Pacific Sod's grass will pass muster among tough California customers who love Ventura's climate, three-foot breakers, white sand beaches, grass bright and green, and free of ugly rust patches. **WT&T**