

trimmings

UNDERSTANDING PESTICIDES is a new brochure published by the National Agricultural Chemicals Association. Coming at a time when the nation has passed through several years of environmental debate on chemical protectants, the brochure quickly points to the new "common sense" approach now in vogue. It then reviews pesticide industry research. Other topics include pests and pesticides; how chemical protectants work; the government's role; food at acceptable prices; and, the future. Here's an interesting brochure that puts it all together for easy understanding. Write: National Agricultural Chemicals Association, 1155 Fifteenth Street, N.W., Washington, D. C. 20005.

SOME of THE TREES in Washington, D. C. will be without birds and bird residues for about four months. That's just the way the presidential inaugural committee wanted it. They hired Frank and Joseph Fink of National Bird Control Laboratories, Inc., Skokie, Ill. to make sure the parade route for the recent inauguration would be free of starlings for at least one day. Fink treated the trees with a repellent he developed. He said that it (repellent) gives the birds "a type of hot foot" when they land in the trees. The repellent is non-toxic.

SPEAKING OF TREATMENT, the U.S. Department of Agriculture now reports newly developed treatments to make mattress covers and fillers fire retardant. The methods used inhibit cigarettes from igniting mattresses. It's a violation to smoke in bed, anyway. One method involved coating the back of the mattress ticking with a polymer capable of dissipating heat. Another method involved treating the cotton batting mattress filler with boron or phosphorus containing compounds to make it flame and smolder resistant. The coating is designed to form a shield to prevent the batting from reaching 7500°—the temperature at which batting begins to smolder.

DON'T LET YOUR HIGH SCHOOL FOOTBALL HERO ON ARTIFICIAL TURF. That's the word from Karl Klein, University of Texas researcher. He's found that the younger player and his knee, in terms of strength

and ligament, are "just not ready for the added traction and speed that can be produced on such surfaces." Klein compared the development of the high school athlete's knee with that of the average college player. He found that the strength relationship between the quadriceps (group of muscles in front of the leg responsible for knee joint support) and the hamstrings (on the back of the leg) is 2:1 in the high school athlete and 10:6 in the average college varsity player. This difference, although not large, is responsible for increased accidents in the younger player.

PINE TUSSOCK MOTH destruction on the west coast may be second only to Gypsy Moth on the east coast. Estimates of nearly 200 million board feet of fir lumber were ruined by this pest last year near La Grande, Oregon. Untold thousands of stately fir trees turned a rusty brown early in the summer. Like the pines in the eastern states, when the green needles go, you can kiss the fir tree goodbye.

"ALL OF US ARE FOR HEALTH AND SAFETY" says Congressman Wilmer Mizell (R-North Carolina), "but I think you can have health and safety without some of these ridiculous requirements which are coming down. I understand the regulations on the Occupational Safety and Health Act have grown to about 50 feet high right now. It always seems to happen when the I's aren't dotted and the T's not crossed in the regulations. It's the result of bureaucratic regulations that have been handed down and many times you have men writing them who have little practical experience in the field. Hopefully, the Congress will be looking at these regulations and try to offer guidance through legislation and restore some reason."

GENE FROSETH has turned to the Green Industry and the result is an increase in his custom application business. Previously he applied chemicals to cropland, only. Now he sprays 192 miles of roadside near Garretson, South Dakota for profit. His highway rights-of-way spraying fits nicely between early crop sprays and later post-sprays. Another benefit from roadside spraying is that farmers get to know you. It has opened up a lot of new business for us, says Froseth.

THE ACTION ARMY has invaded the Green Industry, or so it seems. Check the latest ad for the Army

Reserve in the news media and it shows an infra-red aerial photo of elm trees in Denver, Colorado. The army is working to spot Dutch Elm Disease with modern photographic methods. If you want to stay in the Green Industry but have a military obligation, the Army can work out the details.

INNER CITY ENVIRONMENT IS AS TOUGH on trees as it is on people, according to Russell J. Seibert, director of Longwood Gardens, Kennett Square, Pa. He proposes that city trees should be selected from "... nurseries in the inner cities—not out in the country." The objective is to find out which plants do best under adverse conditions. Trees grown away from city pollutants are subjected to tremendous stresses when brought to the city. Many may not make it.

Natural Antibiotics Help Fight Tree Decay

Michigan State University plant doctors have been trying to find why some injured trees can resist diseases caused by invading germs while others are susceptible.

According to MSU plant pathologist Dr. John Hart, the non-living wood (heartwood) in the center of the trunk and limbs often shows greater resistance to fungi and other wood-attacking organisms than does the living portion (sapwood). Also, some tree species show more resistance to sapwood injury than other species.

By locally injuring sapwood portions of trees, Hart has been able to compare decay resistance between different tree species and obtain a better understanding of the resistance mechanism. "These experiments showed that resistance to invasion by disease organisms is related to change in the sapwood cells located next to the injury," says Hart.

He and his colleagues also found that the changes occurring near an injury are similar to the events that occur during heartwood formation. "As the cells break down and die, certain chemicals are formed. Some of these chemicals act as antibiotics and prevent disease organisms from getting a foothold in the tree," says the plant pathologist.

"Now we would like to study how the living cells produce these natural antibiotics in response to injury, and to isolate the individual compounds for more study and comparison to similar compounds found in heartwood."