

WORLD'S WORST WEEDS, not necessarily a best seller but certainly an informative publication, is being written by Drs. LeRoy Holm, Juan Pancho and Donald Plucknett, senior fellows at the University of Hawaii's East-West Food Institute. About 200 species of about 5,000 weeds surveved are considered acute problem weeds. Thirty weed species have wide geographic distribution and may be an important economic threat to 10 or more of the world's major crops. What's the worst weed? Purple nutsedge. It is found in almost every crop in nearly every country with tropical agricultural areas.

**MISTER YUK** is the latest euphemism for the skull and crossbones that adorns containers containing poisonous substances. Results of a study conducted for the Poison Control Center at Pittsburgh Children's Hospital revealed that the skull and crossbones may actually attract children's attention. The new symbol is a nauseous green face with a tongue hanging out. While it may be effective in warning of danger, it connotes a rather vivid impression of Saturday morning cartoons.

A COLLISION COURSE was cried 30 years ago when it was discovered that the U.S. harvested 20 percent more trees than it grew each year. Today we grow 61 percent more wood than we harvest or lose to fire, insects and disease.

DANVILLE JUNIOR COLLEGE, an Illinois school, has developed a three-prong system of education and training in landscape horticulture, turf management and commercial floriculture. Since 1965 there have been 175 participants in the twoyear programs. The triad approach features technical classroom training and instruction, practical laboratory experience and supervised occupational experience with on-thejob training. Among the many facilities are 43,000 square feet of turf plots, a golf course green constructed by former sudents and maintained by present students, two acres of nursery stock and a 500 square foot lath house.

When surveyed, 57.9% of WTT readers use irrigation commercially in their business or service operation.

## Penn State Bulletin Features Pollution Solutions

A special issue of "Science in Agriculture" the research quarterly of the Agricultural Experiment Station at Penn State University features solutions to several problems of wastes and pollution.

Describing research findings and studies underway by scientists of the Experiment Station, the 24 page publication is free of charge and is available in large quantities for use by schools as well as organizations dealing with pollution abatement and environmental improvement.

"Science in Agriculture" opens with an article stressing the need to develop corrective systems to curb environmental pollution. This is followed by 15 articles describing solutions to pollution abatement and improvement of the environment. The 15 topics describe reclamation of coal mine refuse banks, milkhouse wastes, liquid cattle manure, organic wastes, cheese whey, poultry manure, and sew age effluent and sludge. Protection of the environment is described as one longtime objective of the College of Agriculture.

One article shows that stream qualtiy influences recreational expenditures and regional income level. Problems with septic tanks on certain soils of Pennsylvania are stressed. Possible use of a "dry phosphoric acid" to deactivate herbicides in soils is featured. Soil chemists state a need for a new approach to soil testing, a method to provide minimum soil pollution with economical crop yields. And potential hazards endangering foods are described.

For more details, circle (724) on the reader reply card.

## Major Turf Diseases

## By DR. HOUSTON B. COUCH

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There are a great number of turfgrass diseases. Fortunately, however, not all are capable of causing extensive damage, and the more destructive ones are fairly easy to recognize.

Four of the major turfgrass diseases—snow mold (Fusarium nivale), leafspot (Helminthosporium spp.), dollar spot (Sclerotinia homoeo carpa), brown patch (Rhizoctonia solani)—are identified from various degrees of closeness on the adjacent chart. The chart also illustrates which months the four diseases are active.

Brown patch, for example, may become a significant problem during the hot, humid months from mid-May to mid-September. The cool, moist weather from November through March often brings an attack of snow mold. Dollar spot may occur during hot, dry weather while leafspot, one of the most destructive turf diseases, is active during the spring, early summer and fall when moist conditions exist.

EDITOR'S NOTE: An 8½ x 11-inch color print of the disease chart shown at the right is available, at no charge, by writing to: O. M. Scott & Sons Company, Marysville, Ohio 43040.