

- Arizona Agricultural Chemicals Association, Annual Meeting, Arizona Biltmore Hotel, Phoenix, Ariz., Oct. 12-13.
- Industrial Weed Control Conference, Texas A&M University campus, College Station, Tex., Oct. 22-24.
- New England Agricultural Chemical Conference, New Hampshire Highway Hotel, Concord, N.H., Oct. 24-25.
- National Agricultural Chemicals Association, Annual Meeting, Holiday Inn, Palm Springs, Calif., Nov. 5-8.
- American Society of Agronomy, Annual Meeting, Sheraton-Park and Shoreham Hotels, Washington, D. C., Nov. 5-10.
- Texas Fertilizer Association's 1967 Agricultural Exposition, KoKo Inn, Lubbock, Nov. 9-10.
- Fertilizer Industry Round Table, 17th Annual Meeting, Hotel Mayflower, Washington, D. C., Nov. 15-17.
- Entomological Society of America, Annual Meeting, Hotel New Yorker, N.Y.C., Nov. 27-30.
- National Fertilizer Solutions Association, Annual Convention, Denver-Hilton Hotel, Denver, Colo., Nov. 28-30.
- National Aerial Applicators Association, Annual Conference, Marriott Hotel, Dallas, Tex., Dec. 3-5.
- North Central Weed Control Conference, Civic Auditorium, Fargo, No. Dak., Dec. 5-7.
- Illinois Turfgrass Conference, University of Illinois campus, Urbana, Ill., Dec. 7-8.
- Ohio Turfgrass Foundation Turfgrass Conference, Sheraton-Cleveland Hotel, Cleveland, O., Dec. 11-13.
- Northeastern Weed Control Conference, Hotel Commodore, New York, N. Y., Jan. 3-5.
- Virginia Turfgrass Conference, Virginia Turfgrass Council and V.P.I., Golden Triangle Motel, Norfolk, Va., Jan. 23-24.
- California Weed Conference, 20th Annual, El Rancho Hotel, Sacramento, Calif., Jan. 22-24.
- Weed Society of America, 1968 Meeting, Jung Hotel, New Orleans, La., Feb. 6-8.
- American Sod Producers Association, First Annual Meeting, In conjunction with Golf Course Superintendents Assn. Convention, San Francisco, Calif., Feb. 18-23.

ISTC Report

(from page 20)

whipped up by passing traffic. Because such problems do not fit the general pattern of pathogenic symptoms which plant pathologists and arborists normally seek, they are sometimes difficult to diagnose. Therefore, he urged arborists to keep records of weather, or at least the unusual weather conditions, of spray applications of pesticides and wood killers, of the use of wood preservatives on fences near shade trees, of the laying of gas or water lines, and the use of salt on roads near trees. Such records help since many times the non-pathogenic factor which caused the problem occurred earlier than the resulting damage. There is an answer to every tree problem, Professor Nichols said, if the clues are carefully sought out and used for diagnosis.

Woody Species Are Now Problems

Woody species which are resistant to the standard stem foliage spray of 2,4-D and 2,4,5-T have become problems on utility rights-of-way during the past few years. J. W. Kirch, Amchem Products, Inc., Ambler, Pa., discussed steps his company has taken to develop prescription vegetation control. Kirch said that with species susceptible to the standard stem sprays largely killed out, that resistant perennials such as milkweed, horsetail. and chickory, along with woody vines such as honeysuckle, kudzu and trumpetvine have taken over. Several new compounds, he said, have been found effective on these hard to kill species. Small amounts of the new compounds mixed with 2,4-D or 2,4, 5-T will clear the right-of-way without substantially adding to the cost.

Cold hardiness in plants is a subject of great importance to the arborist, especially injury during the winter period. Dean R. Evert, horticultural graduate assistant at the University of Minnesota, St. Paul, Minn., reviewed physiological changes which occur as plants harden during the fall. Changes occur during a 2-stage process in the fall season. The first stage of cold hardiness begins in late summer, triggered by the decrease in day length. The second more intense stage comes with freezing temperatures. Spring growth then breaks the period of hardiness. Since little is known about winter injury, Evert reported that no strong recommendations can be made to guarantee freedom from winter injury. However, he did say that it is important to use materials which are known to be locally hardy. When this is not possible, Evert suggests selecting materials from a similar geographic area or from one which has a more severe climate. In all plants, he said, because energy is needed by the plant to harden, it is necessary to maintain a good level of food reserves during hardening. This means as much light as possible and adequate water. Finally, Evert said that the fertilizer program should be such that late fall growth is discouraged by keeping the levels of nitrogen and phosphorus low during hardening.

Dr. Philip L. Rusden, plant pathologist at Bartlett Tree Research Laboratories, Stamford, Conn., reports that his company has been expending considerable effort on drought effects. How this problem which has been common in eastern sections of the nation for the past several years can best be handled is of considerable economic importance to the industry. Drought can breed drought, Dr. Rusden said, the same as we can expect a series of wet seasons to breed wet seasons. Not only do the records prove these points, but meteorologists have established a scientific basis for this natural phenomenon.

To bring the problem into focus, Dr. Rusden reminded arborists that an acre inch of water weighs about 100 tons. An inch of water on one square mile amounts to about 65,000 tons. In an area such as the Northeastern U. S. where foliage normally enjoys an average rainfall of 44 inches per year, a drop in rain-

(continued on page 28)