



Awards Chairman John Gallagher, Amchem, Ambler, Pa., left, presents certificates for outstanding papers to Henry Wilson, Virginia Truck Experiment Station, Painter, Va., center, and Oscar Schubert, West Virginia University, Morgantown.

Scientists Present New Findings At 23rd Northeast Weed Conference

Chemical residue from crabgrass control efforts may also kill dandelion and chickweed. This is a finding of John A. Jagachitz, University of Rhode Island, Kingston. Speaking at the 23rd Northeast Weed Control Conference, a major weed control report session held every year at the Hotel Commodore, New York City, Jagachitz said that residues kill dandelion and chickweed plants as they grow from seed.

In his University research, he said that several chemicals were applied to the soil surface. Weed seeds which were sown in these treated soils at time intervals were killed up to eight weeks after chemical use. Establishment of dandelion and chickweed was greatly reduced. Two chemicals in general used for crabgrass control, he said, gave excellent results. These are siduron (Tupersan) and Dacthal. Another chemical which produced excellent results was picloram (Tordan). Tests are being

continued under actual lawn conditions, Jagschitz reported.

On hand for the early January Conference were 636 registrants. Eighty-three papers were presented. A new feature this year was a special program for biology teachers in the metropolitan New York area. Appealing to this group was Dr. Charles C. Drawbaught, Rutgers University.

He suggested subject matter be taught in the classroom on weeds and weed control. He pointed to the value of teaching weed science from an ecological approach through the use of scientific principles. Learning experiences, he said, could be functionally helpful to students and their families.

Dr. Boysie Day, California Ex-

Outgoing president of NEWCC, John A. Meade, Rutgers, center, visits with W. B. Ennis, Agricultural Research Service, USDA, Beltsville, Md., left, and Mason W. Gross, president, Rutgers University, New Brunswick, N.J.



periment Station and president of the Weed Science Society of America, challenged opponents of herbicide use to examine the facts. Dr. Day stated that the public is unduly alarmed over use of herbicides. Popular generalities are not based on fact, he stated; the only thing that all herbicides have in common is that they kill weeds. Those that are toxic to anything else are few and little used, he said.

Careful Herbicide Use

Herbert J. Cran, Jr., landscape architect for The Connecticut Light and Power Company, reported that his company had contributed to a clearer understanding of the need for the judicious use of pesticides and herbicides in utility operations.

He said that CL&P conserves desirable low-growing woody plants along its rights of way and is now placing 242 acres of red pine trees around its hydroelectric generating stations in the northwestern part of the state under a forest management

program. Under this program, he stated, undesirable deciduous plants are being controlled by the use of selective oil basal herbicides.

Desirable plants, such as mountain laurel, members of the dogwood, viburnum and berry species, juniper, witch hazel, shadbush and native azaleas are preserved since they are good colonizers, provide refuge and food for wildlife and blanket out the growth of trees potentially harmful to power lines, Cran said. He told the group that CL&P's operations cover about 75 percent of the state's area and that the company maintains more than 11,500 miles of pole lines.

Charles J. Slatt, Bonneville Power Administration, agreed with Cran that there are some very worthwhile and special benefits from "esthetic right-of-way clearing."

Slatt said that some of the benefits from BPA's esthetic right-of-way clearing include (1) the amount of land taken out of use-

ful timber production is considerably decreased, (2) the efforts against erosion and stream pollution due to sudden periodic run-off are dramatically improved, (3) the areas that have to be treated with herbicides are reduced, (4) situations where irreparable damage is done at the time of original construction are avoided.

Slatt said that selective herbicidal treatment properly programmed and managed offers the most promise with respect to initial and future brush control measures. "We believe there is real merit in this matter of appearance," he stated, "and that it is truly significant when treated as a total concept. We are a utility dedicated not only to serving the region's low cost power requirements, but we are also dedicated to the conservation of natural resources."

Brush Control

Both liquid and pelleted herbicides, applied to low-grade white oak trees, are effective in

Officers and executive committee chairman for 1969 for the Northeastern Weed Control Conference, left to right: Joe Cialone, Rutgers, program committee; Richard Otten, Amchem, education committee; Charles Middleton, Asplundh, sustaining committee member; John Ahrens, Univ. of Connecticut, vice-president; Homer LeBaron, Geigy, president; John Meade, Rutgers, outgoing president; Richard Feeny, American Cyanamid, publication relations committee; Richard Schwartzbeck, Gulf, representative to Weed Science Society; Arthur Bing, Cornell, secretary-treasurer; and George Bayer, Agway, research coordinator.



killing such unwanted "weed" trees in central Pennsylvania forests according to Dr. Robert D. Shipman, Pennsylvania State University.

Dr. Shipman described methods and costs for removing undesirable trees. He claimed removal of low-grade "weed" trees will increase the growth and vigor of desirable hardwoods. The most effective herbicide, he said, measured in terms of total defoliation at least cost, was liquid 2,4,5-T plus 2,4-D, he reported. Although pelleted fenuron killed trees equally well as 2,4,5-T (87 percent), the average cost per tree was five times greater with the fenuron. Bromacil pellets and liquid picloram produced 67 and 66 percent kill, respectively.

Pelleted herbicides were applied by hand to the soil surface at the base of each tree. The liquid chemicals were injected directly into the tree bole using a tree injector tool. Herbicides were applied in June, 1968, and were evaluated about three months after treatment.

All four herbicides used in these trials, when applied according to the manufacturer's recommendations leave only slight soil and plant residues. "In fact," Dr. Shipman stated, "they are capable of being 'tailored' to specific soil, water, plant and wildlife situations with negligible contamination in our forests."

Dr. Arthur Bing, Cornell, New York reported on some of the methods he found to be safe and effective for controlling annual weeds in ground cover plantings. Granules of trifluralin (Treflan) raked into the soil before planting Carpet bugle (Ajuga), English Ivy, Japanese spurge (Pachysandra), myrtle (Vinca), and stonecrop (Sedum) gave good control of annual weeds, he said. Treatment after planting with granules of diphenamid plus simazine is also very effective



Panel on pesticide registration policies and trends, left to right, are: Warren C. Shaw, ARS, USDA; Robert E. Hamman, Geigy; Fred H. Dale, Div. Pesticides Registration, Dept. of Interior; L. L. Ramsey, Bureau of Science, Food and Drug Administration; and H. W. Hays, ARS, USDA.

for controlling annual weeds.

Quackgrass Kill

Oscar S. Johnson, Massachusetts County Agent-Manager and Regional Nursery Agent reported that experimental plot work at three nurseries in Massachusetts, controlled quackgrass in certain established plants for one year or more through an application of Dichlobenil (Casoron).

Six pounds per acre of actual ingredient (150 lbs. of 4% granules) applied just prior to freeze up in early winter on the weed stubble, on established nursery stock, gave control. No injury to any of the nursery species tested was observed. Grower applications on large acreages have been equally successful, Johnson said.

Two scientists from the National Marine Water Quality Laboratory, West Kingston, Rhode Island, reported that it is unlikely that sulphate, phosphate or nitrate in seawater normally limit winter blooms of *Skeletonema costatum*, the most abundant unicellular algae of North American coastal and estuarine waters.

Drs. J. C. Prager and R. L. Steele demonstrated that by us-

ing pure laboratory cultures grown in chemically synthetic seawater, these microscopic plants responded to less nitrate and phosphate than is present normally in inshore waters.

The Federal scientists believe that more subtle chemical factors, such as the activity of trace metal ions in seawater, play a more important role in determining whether nuisance algae or species beneficial as food organisms for fisheries will dominate a bay or estuary. Their studies are part of a Federal program to identify and measure chemical factors which govern the abundance and distribution of important plankton species in normal and polluted inshore marine environments.

The West Kingston Laboratory, a newly established Department of Interior—Federal Water Pollution Control Administration research station, is responsible for gathering information which can be used to set water quality criteria for the protection of fish and other aquatic life in the marine environment. The West Kingston Laboratory is staffed by some 40 biologists, chemists, biochemists and technicians.