Plant propagators eye faster, regional production

Ornamental plant producers at the 29th Annual Meeting of the International Plant Propagators' Society, Eastern Region, were clearly interested in ways to speed up production of new, improved cultivars and to bring propagation back to the local nursery. Questions following a number of papers actually took more time than presenting the papers.

Propagation by tissue culture, by cuttings, and by a British method known as chip budding received close attention from the audience. Grafting problems and dependence upon the Northwest for most liner material have Eastern growers searching for more closely controlled propagation techniques. Many hope developments in asexual methods will enable them to quickly and accurately develop their own regional cultivars.

Energy conservation and environmental control of propagation houses were topics also receiving attention by the audience. Producers were encouraged to look at construction characteristics and alternatives to keep a handle on energy costs. Dr. Bob McNeil of The University of Kentucky Department of Horticulture described a project using cave air as a source for ventilation.

Bruce MacDonald, Hadlow College of Agriculture and Horticulture, Kent, England, described developments in British propagation and production. One major development is called chip bud grafting in which a bud only is placed in a chip cut into root stock. MacDonald said the buds take better than normal whole grafts.

Doug Chapman, horticulturist for Dow Gardens in Midland, MI, discussed his work with maple cuttings. *Acer rubrum*, *Acer nigrum*, and *Acer platanoides* cuttings grew very rapidly under controlled conditions. Chapman also indicated some success using benomyl as a root stimulant, or perhaps as a deterrent to root rot.

Eight horticulturists spoke on their work with tissue culture. In this process, terminal meristem of terminal buds is removed in minute quantities, placed in special media in petri dishes, and five to ten stems ¼-in. to ½-in. long develop. Under this process vast numbers of individuals can be produced in less than three years.

By using tissue culture and cuttings, space needs for production become more in reach with the local or regional grower in the East. Many growers suspect that regionally developed and propagated cultivars would have better success than imported liners, that are grown to size at regional nurseries.

Large scale use of such methods is not likely, however, in the next few years. The interest is there, as evidenced by this IPPS show, and these methods will figure in the future of nursery propagation.

TURF
Ohio show grows with lawn care

It's not that there is less interest in golf turf, it is that interest in lawn care oriented material has skyrocketed and made the Ohio Turf Foundation Show a major lawn care event.

The 1979 show was held in Cincinnati and attracted more than 1,600 turf professionals and 50 exhibitors, especially exhibitors with lawn care modified equipment.

A broad program provided delegates from Ohio and many other midwestern states with usable information for next season's challenges. The new Professional Lawn Care Association of America was a leading topic of conversation and PLCAA President Jerry Faulring was there to answer questions and to pro-
New ALCA officers nominated for 1980

Wally SaBell will head the Associated Landscape Contractors of America in 1980 and Allen Keesen, also of Colorado, will be president elect. Keesen is also chairman of the annual meeting in San Diego this winter.

Ritchie Skelton of Duncan Landscape Assoc. in Ohio and Ray Gustin III were nominated for vice president. Dave Pinkus of Dallas has been nominated as treasurer and Landon Reeve of Chapel Valley Nursery in Maryland as secretary.

The new officers will be elected and installed at the San Diego meeting.

NLA helps sponsor management clinic

The National Landscape Association and allied associations have put together a four-day Landscape/Garden Center Management Clinic for Feb. 10-13 in Louisville, KY. The clinic will cover such topics as liquidity, break even, building a cash budget, inventory management and managerial attitude. Interested persons should contact NLA immediately at 202-737-4060.

Dennis DiSanto dies of cancer

Active Ohio landscape contractor Dennis DiSanto died in December after a ten-month battle with cancer. Active in ALCA, NLA, and the Ohio Landscape Contractors Association, DiSanto and his brother George took their father’s business and built it into a multi-service company, with indoor plant service, lawn care, and their own nursery.

DiSanto was a friendly and unselfish advisor to Weeds Trees & Turf and will be missed greatly.

Moving a 30-year-old Banyan tree down the Intercoastal Waterway near Miami Beach to its new home two miles away was the challenge of Ralph’s Tree Service and landscape architect Jerry Peters. The tree was moved to the home of singer Julio Iglesias.

Ohio now has a local needs label for Pirimor 50W for greenbug aphid control which will aid considerably in control of this pest in 1980. The product is manufactured by ICI Americas. Dr. Harry Niemczyk was able to derive the needed data in a matter of months with cooperation of ICI and Ohio turf professionals. Pirimor’s effectiveness against the greenbug aphid is higher than others currently available.

To help lawn care applicators solve drift problems, Dr. Partyka of Chemscape showed the changes which occur in nearby ornamentals when they are damaged by phenoxy herbicides. The veins in new leaves are closer together and parallel. Also, some leaf cupping and stunting is found.

On the seed scene, Bob Petersen of E.F. Burlingham & Sons, gave delegates a rundown on the status of seed supply. A worldwide shortage of bentgrass was the major news due to rains at harvest time. This year’s harvest of Kentucky bluegrass was also poor because of weather, but growers had good conditions this fall for planting the 1980 crop. Perennial ryegrasses were also effected by long rains to an extent, Petersen said, with a possible 40 percent reduction in the harvest. Fine fescues are in good shape, although Canadian growers have cut acreage on fine fescue recently. Petersen said there will be a great deal of pressure to get fine turfgrass seed harvested, cleaned and in the marketplace next August. Backstock of some seed types is very short he added and replenishing this backstock will take time.

OTF goes back to Columbus next year under new leadership since Dave Martin has moved over to ChemLawn’s Detroit office. Bob Barley, associate publisher of Lawn Care Industry magazine, was elected a trustee for his efforts in promoting the lawn care market.
Payroll changes take effect this month

The wage base for Social Security and the Minimum Wage increase this month. Minimum wage is now $3.10 per hour and the wage base for Social Security has risen to $25,900 from $22,900. Check with your payroll people to assure compliance.

Benomyl gets conditional approval

Benomyl made it through Rebuttable Presumption Against Registration with two additional conditions; that a cloth face mask be worn during mixing and that large volume users mixing five or more lbs. at a time must be provided the product in water soluble bags. The valuable fungicide sold as Benlate, is manufactured by E.I. du Pont de Nemours & Co.

Occidental fights groundwater dispute

The Lathrop, CA, facility of Occidental Chemical Co., a subsidiary of Hooker Chemical, has been named in a suit by the California attorney general for contamination of groundwater as a result of waste disposal practices.

Hooker President Donald Baeder denies any wrongdoing and promises to resist the “unwarranted” suit. No injury has been traced to the Occidental plant where DBCP was once made.

EPA grants to help urban lakes

Ten grants of $100,000 are being awarded to U.S. cities as pilot projects in an urban clean lakes program. EPA estimates that there are another 3,700 urban lakes which need help to avoid further deterioration. Decaying algae and aquatic plants are major targets of the program.

The target projects are:
Spy Pond, Arlington, MA
Weequahic Lake, Newark, NJ
Lake Roland, Baltimore, MD
Lake Maggiore, St. Petersburg, FL
Park Lagoons, Milwaukee County, WI
Lake Pine Bluff, Pine Bluff, AR
Forest Park Lakes, St. Louis, MO
Slans Lake, Denver, CO
Lake Merritt, Oakland, CA
Green Lake, Seattle, WA

Park air quality subject of enforcement

EPA has promised to crack down on air pollution sources which hinder use and enjoyment of parks and wilderness areas. Any source of air pollution near national parks of 5,000 acres or more should check ways to comply and avoid prosecution by EPA.

EPA calls for industry to induce own cleanup

The EPA has issued a “bubble” policy which should help industry cut costs by allowing it to figure out the best way to clean up air pollution at individual plants. Overall clean air requirements must still be met.

EPA Administrator Douglas M. Costle predicted that “This new, flexible approach to regulation will both stimulate the discovery of new control techniques and reduce the cost of regulation substantially. In the long run, both these results are critical environmentally.”

PLANTS

Researcher recommends plastic for cold plants

A University of Maryland scientist believes nurserymen should roll out the plastic carpet if they want to make life easier for their plants during winter.

Dr. Francis R. Gouin, professor of horticulture, thinks the best way to pamper container-grown plants and prevent their delicate roots from being ravaged by frigid temperatures is to bed them down in a snug thermoblanket of synthetic polyethylene or polypropylene.

The process, which results in substantial energy and money savings for commercial plant growers, is much more effective than and only a fourth the cost of conventional techniques.

Dr. Gouin has pioneered the use of foam plastics (commonly used in packaging and shipping furniture) to prevent winter injury to container-grown ornamental plants. He has spent the last 15 years studying winter hardiness of ornamental plants and a decade ago came up with the notion of insulating them in a plastic blanket.

Dr. Gouin inadvertently learned of the insulation value of microfoam, a polypropylene packaging substance manufactured by Du Pont De Nemours & Co., when he wrapped some ice cubes in it one day and forgot about it. Hours later, he found surprisingly little had melted. Gouin estimates that the use of the plastic packaging foam, which costs about 4 cents a square foot, results in wintering cost of about 6 cents a plant as opposed to about 25 cents a plant using conventional approaches.

PARKS

Volunteers can help Ohio directors told

Volunteers in the Hamilton County Park District (Cincinnati, OH) have learned about all aspects of park maintenance and functions and contributed a tremendous amount of help to the park system.

Continues on page 50
Dottie Krantz and James Williams from the park district told participants at the Ohio Parks and Recreation Association annual conference, held in Cleveland Nov. 26-28, that in a six-month period 63 volunteers gave 5,000 hours of their time. This figured into a savings of $15,000-$30,000 after a training expense of $400-$500.

Park personnel asked volunteers to fill out two cards—one with basic information and the other with hobbies, interests, and prior volunteer programs. Through the special information from registrants, the park found people with a variety of useful talents. Volunteers were then placed in the best position for their skills. One person designed the park's brochure and others helped out in some extraordinary ways.

The park gave each volunteer a manual explaining about the park, its wildlife and vegetation, along with guidelines for work. All volunteers wore "V.I.P." (Volunteer-Inactive-Park) badges on them at all times.

After 10 weeks of training, volunteers were given a certification of achievement. At the end of the full session, they had a graduation picnic. A questionnaire about the program asked if they would continue and most said "yes."

Not only is their time and effort profitable to the park district, said Dottie Krantz, but their public relations."As they go out, they're selling the park to others with their enthusiasm."

Other sessions on the program dealt with minority recruitment, team leadership in management, public relations for the media, the Urban Park and Recreation Recovery Program, safety and security, computers as management aids, and maintenance and conditioning of athletic fields.

**ENERGY**

**Forest fires destroy vast amounts of energy**

Forest fires in the U.S. annually burn the energy equivalent of 447,000,000 barrels of oil—or more than 12 percent of the oil we import, says Norval Morey, president of Morbark Industries Inc.

Morey says that if we would thin our forests and use the wood for energy we would help solve our forest fire and avoid most of this loss.

A forest virtually without dead wood to kindle extreme temperatures.

Our forests are in deplorable condition today, with a vast amount of dead, dying, diseased, overmature, and undersized trees as well as trees that are of species not in demand for such things as lumber, pulp, paper, and other conventional wood product uses, Morey says. The forest should be properly managed and used to power industries across the nation that now burn imported oil to make steam heat and electricity.

In countering arguments of studies showing a high degree of air pollution in areas where wood is burned in wood stoves, Morey points out that burning wood in industrial boiler systems represents one of the cleanest fuels available today.

Industrially burned wood, for example, has very low sulfur content, a tenth that of the lowest sulfur coal. There is very little particulate emission. The proportionately small amount of ash generated can be collected and sold as a fertilizer ingredient. Industrial wood-fired boilers easily control nitrous oxide emissions.

**FORESTRY**

**Forest chief: we need wise management in 80's**

Efficient management of small, privately-owned commercial forests and careful planning of government-owned forest wilderness areas are major concerns of the U.S. Forest Service in the 1980's, its chief says.

Speaking to faculty and students at Michigan State University, R. Max Peterson, chief of the U.S. Forest Service, discussed various issues in natural resource development for the next decade.

He said the forest service would like to do more to provide the owners of small, private forest operations with information on how to manage their forests for more and better uses of the wood they produce.

"Many people think of forests as the property of state and federal governments for the most part," he says. "Actually, more than 60 percent of the commercial forestlands in this country are operated by small, private owners."
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News from page 50

SOIL EROSION

Builder receives laboratory contract

Geupel DeMars, Inc., Indianapolis, IN, has been awarded a contract for construction of the U.S. Department of Agriculture's National Soil Erosion Laboratory. The Laboratory will be on land made available to the U.S. government by Purdue University in West Lafayette, IN.

The $3,930,000 contract, which provides for construction of a one-story building and basement, was awarded by the department's Science and Education Administration (SEA). Plans call for the addition of a second floor as funds and authorization become available.

With about 21,000 square feet of usable floor space, the one-story laboratory is designed for multidisciplinary studies by about eight SEA Agricultural Research scientists and 10 support staff. The second floor could provide enough space for an additional seven scientists and 12 support staff. There also will be accommodations for cooperative studies with Purdue researchers and graduate students.

PESTS

U.S., Canada seek spruce budworm cure

The Canada/United States Spruce Budworm Program (East) is accepting proposals for research contributing to the protection of eastern spruce-fir forests from damage by the eastern spruce budworm (Choristoneura fumiferana). Limited funds for grants have been provided for 1980, 1981, and 1982.

CANUSA is an international research and development program sponsored by the USDA Forest Service and the Canadian Forestry Service to promote the development of integrated management techniques for minimizing the impact of spruce budworm infestations. For more information, contact: Melvin E. McKnight, Program Leader, Spruce Budworm Research and Development Program, USDA Forest Service, Rosslyn Plaza E, 1627 No. Kent Street, Rosslyn, VA 22209 or Daniel M. Schmitt, Program Manager (East), Canada/United States Spruce Budworms Program, USDA Forest Service, 370 Reed Road, Broomall, PA 19008.

SEEDS

Punch planting helps establish seeds

In experiments to establish grass from seed under drying conditions in the Southern Great Plains, punch planting produced a satisfactory number of seedlings when there were very few from conventional planting.

Plant punching, a method of placing seeds in small diameter holes punched in the soil and left open to the atmosphere, made no difference where water was adequate. Optimum depth of punch planting was related to seed size and seedling vigor. Small diameter holes (¼ inch) produced best plant emergence, because the bottom of small holes dried slower than the bottom of large holes.

The tests, conducted by scientists with the USDA-SEA-Agricultural Experiment Station, offer a possible solution to the problem of seeding failures in the Plains area. The conventional planting practice for perennial grasses is to place grass seed about ⅜-inch deep in the soil, but that soil layer often dries quickly and prevents plant establishment.

TURF

Turfgrass group honors Cornell prof

The New York State Turfgrass Association has honored professor emeritus John F. Cornman of the N.Y. State College of Agriculture and Life Sciences at Cornell University.

Cornman, a specialist in turfgrass management and an authority in this field, received the Association's Citation of Merit given annually during its turfgrass conference.

In another event at the college, A. Martin Petrovic has been appointed assistant professor of turfgrass science and an authority in this field, received the Association's Citation of Merit given annually during its turfgrass conference.

Petrovic recently completed his doctoral degree in the department of crops and soil sciences at Michigan State University. His research is in the areas of turfgrass management and soil physics.
In Europe, engineering thermoplastics can be expected to continue to rake market share away from metals, despite oil price increases that would seem to hurt hydrocarbon-based plastics, according to a report by Frost & Sullivan, Inc.

The report says, "Steel, aluminum, zinc, copper, and most other metals are more energy expensive on a cost per unit volume basis than plastics." The 286-page report, entitled "European Market for Engineering Thermoplastics," says, "The competition between engineering thermoplastics and zinc and aluminum diecastings has been won in almost all applications by plastics."

And it adds, "Pending legislation (to lessen automobile weight and improve safety) will also stimulate the use of more thermoplastics in automobiles, in particular." What this leads up to is that European consumption of 13 selected thermoplastics will increase from 0.5 million tons in 1976 to 1.25 million tons in 1981.

**HERBICIDES**

**Devrinol gets label for use on ornamentals**

Devrinol, a surface-applied herbicide, has been federal registered for weed control in ornamentals, field-grown nursery stock, liner stock, ground covers, and dichondra. The Stauffer Chemical Co. makes it.

Devrinol is labeled to control eight annual grasses including barnyardgrass, bبيضly foxtail, and large crabgrass, as well as 12 annual broadleaf weeds, including common purslane, lamb`squarter, and redroot pigweed. It can be applied as a broadcast treatment over young nursery stock or as a directed spray to larger stock either as a band or broadcast application. It is recommended on several different container potting soil mixtures.

**ARBORISTS**

**Arborists to meet for week in Florida**

The National Arborist Association will hold its annual meeting at the Orlando Hyatt House in Kissimmee, FL, from February 17-21.

The major focus of the meeting will be on electronic data processing for tree service firms, labor relations, integrated pest management, and safety. As usual, there will be a general session, as well as a concurrent alternate session. The latter is particularly geared for additional members of the management team.

The four days previous to this program, February 13-16, the American Society of Consulting Arborists will convene at the same place.

Topics for the ASCA meeting include working with engineers, assistance to park personnel, trees on the golf course, value of trees from the shade they cast, the skill of arboriculture, casualty loss, appraisals for large trees, and tree injections.

**HORTICULTURE**

**Volunteer program will help gardeners**

A group of volunteer gardeners will be spending several winter weekends in classrooms studying the latest developments in watering, seeds, pest management and control, fertilizers, planting, and other gardening practices. Their goal: to become certified "Master Gardeners" and help community and family gardeners next spring.

This pilot program through the University of California's Cooperative Extension Service is operating in Riverside and Sacramento counties and plans for expansion to other areas are being developed. The program will identify and select local residents with experience in gardening and put them through a training program with the help of Cooperative Extension specialists and advisors.

These citizen volunteers will receive certification as "Master Gardeners" when they complete their training, and will become a part of Cooperative Extension's effort to help backyard, family, and community gardeners.

Master Gardeners have been used in 20 other states to be advisors at gardening clinics set up in libraries, shopping centers, or fairs. They also have become coordinators and teachers at community gardens; managed local Cooperative Extension public service telephone systems; and have written horticulture service announcements and booklets distributed through Cooperative Extension offices.

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istence of these various associations, I have to admit that our AAN activities were primarily aimed at the needs of the wholesale nursery grower. Now it is my privilege as Executive Vice President to meet at least twice each year for many hours with those who govern these associations. In addition, at least one of our staff members who is responsible for administration of the association involved also attends these meetings which are really brainstorming sessions designed to develop the needs and ways to fill them of each segment represented. Every staff member meets with the AAN Board of Directors because that association in the final analysis represents all of the segments which operate separately in the so-called "family" of associations administered by our staff. In this way the "parent" is continually aware of the problems and needs of other members of the "family" and, as in any family, when a special crisis develops with one member, each of the others draws together using the assets of all to answer the need.

Over the years very fine organizations have been developed, representing other branches of this great industry. You mentioned the National Arborist Association, the Professional Grounds Management Society and even the brand new Professional Lawn Care Association of America in your Viewpoint article. These and others are doing a wonderful job of representing the needs of each segment of this environmental industry. It is our privilege through the Landscape Industry Advisory Committee to work closely with most of them, and we highly value the experience. Certainly we have learned that the American Association of Nurserymen does not have all of the answers nor is it capable of relating to all of the problems of this rapidly becoming vast industry. We have learned that, in addition to serving those organizations that are our direct responsibility, we can sometimes help a great deal with areas of concern to others. We stand ready to do that and proud to be able.

We appreciate your suggestion that members of LIAC cooperate together in every way possible, and I am sure, speaking for all of us, we intend to do just that. Based on the obvious will of this industry, each of the managers of the various groups involved, I think, carries a mandate to do everything possible for the segment of this industry he represents, protecting its separateness, but dedicated to accomplishing our overall goals with the least possible investment of association dollars required from our members.

There is very great strength in our separateness, and there is very great sense in our togetherness. I think, along with the industry we represent, the management of each association is learning that lesson well.

Robert F. Lederer
Executive Vice President
American Association of Nurserymen

Oak spit spot causes

In the November issue Dr. Funk was asked a question about the cause of oak spit spot and he asked for suggestions from readers as to the cause of this disease.

I have observed this problem in newly transplanted scarlet oaks on the Purdue University campus in West Lafayette, IN. During the summer following the late fall planting of these 2-3 in. caliper trees, wet spots (sometimes foamy) began to appear at random places on the trunks. Almost always there was a small fissure or crack in the bark at the top, center of the wet spot. Using a sharp knife, I cut a small (1 in.) square of bark out of the trunk and almost always found a small white flat headed borer. After removing the square of bark and the borer, I covered the wound with a good wound dressing and to my knowledge the trees are alive and healthy today (7 years later).

James Ross, Technical Foreman
City of Reno Park Div.
Reno, Nevada