

Will Pa. have high tech greenhouse industry?

UNIVERSITY PARK — Pennsylvania can become one of the leading greenhouse centers of the U.S. or can go the way of the dinosaurs, in the opinion of Richard Craig, plant breeder with the College of Agriculture at Penn State.

Craig said recently that sales of Pennsylvania-grown greenhouse products can increase 20-fold or more. Addressing a meeting of the Pennsylvania Flower Growers' Association, he predicted development of regional auctions for wholesale flower marketing. One good location would be Harrisburg, he suggested, because of its central location and excellent transportation. Such a location could serve the surrounding states — Ohio, West Virginia, Maryland, Delaware, New Jersey, and New York.

"It is even possible that a wholesale auction could be developed within a computer," he declared. "Greenhouse plants would stay in place, while buying and selling would be done by computer."

He claimed the key to an expanded greenhouse industry will be high technology related to people, facilities, crops, growing schedules, and marketing. He added that commercial florists will

use new scientific discoveries, new crops from genetic advances, and improved growing schedules and marketing strategies.

High technology growing systems will include greenhouses with energy conservation systems to save fossil fuels. Greenhouses of the future will be constructed of space-age coverings. They will be heated by waste water from power generating plants. Natural sunlight will be supplemented by unique lighting systems.

Computers will monitor not only the environment, he predicted, but also the occurrence of disease and insects, the growth of crops, plant nutrient status, and crop quality. He foresees widespread use of the computer in planning and marketing decisions as well as financial analyses.

"The Age of Robotics will come to the greenhouse industry," he stated. "Most repetitive tasks will be carried out by robots, with plants grown and transported in remote-controlled modules or trays."

Greenhouse growers will be connected by computer to both university and commercial laboratory personnel. Plant problems will be diagnosed by television-computer connections. This could include both nutritional

and pest problems

"Greenhouses of tomorrow might have crop rotations considered unusual today — poinsettias, lettuce, geraniums, and strawberries," he suggested. "Since greenhouse operators presently have the courage to force lilies to bloom at Easter-time, considered a difficult task, growers should accept the challenges of growing fruits, vegetables, and herbs under glass."

The Penn State plant breeder claimed that new crops will be developed by fusing cells of various species. Genes will be isolated or synthesized and will be inserted into present cultivars or varieties.

"High technology advances can be predicted in plant propagation, in developing new flower colors, and in vastly improved keeping quality," Craig affirmed.

"At the retail level, I see drive-in flower stores. There will also be computerized, television-assisted shopping by consumers. This latter

system will also allow commercial growers to buy their supplies from distributors," he added.

The Penn State plant breeder claimed geraniums from cuttings will be ready for sale in three weeks instead of the present six to eight weeks. Bright red African violets might be available.

Growers will specialize in plants resistant to insects and diseases.

He predicted that commercial growers of the future will be quite specialized — responsible for only one phase of production. He said this means that the present growth of specialist propagators and producers of prefinished plants will continue.

Lebanon cites conservation plan

LEBANON — The Lebanon Conservation District Directors recently released its long range plan - "Resource Conservation Agenda". With the completion of the plan, the district is guided for the next decade in its role of conserving the soil, water, and other natural resources of the county, according to Donald Bollinger, Lebanon Conservation District Board Chairman.

The new plan addresses natural resource management problems and issues facing both rural and urban residents of Lebanon County. "Problems such as urban

and rural agricultural non-point source pollution of our water resources, waste management, water supply and allocation, agricultural land preservation, erosion control, and many others will require mutual awareness, concern, and action by all county residents if they are to be resolved," added Bollinger.

Copies of Resource Conservation Agenda are available upon request by calling the district office at 272-3377, from 8:30 A.M. to 4:30 P.M.

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