Future Of Nursery Industry May Lie In A Greenhouse

COLUMBUS, Ohio — On to do the same. the Ohio State University agricultural campus sits two new buildings that university horticulturists are banking will change the face of nursery stock production in Ohio.

With roll-up end walls and sidewalls and plastic curtains for a roof, the buildings look anything but a typical greenhouse. But the structures, known as retractable roof greenhouses, have helped nursery operations in the south, southeast, and Pacific Northwest become more profitable and efficient, and has increased the industries' sustainability. Hannah Mathers is helping Ohio nursery growers

"Retractable roof greenhouses make a lot of sense for container and nursery stock production," said Mathers, an Ohio State University nursery and landscape specialist. "It gives you the flexibility of allowing the building to be a greenhouse or an outdoor environment. Sometimes you want your material in a greenhouse and other times you don't."

Construction of the buildings, one with a flat-roof and the other with a peaked-roof, began last summer with the help of a \$10,000 grant from the Ohio Nursery and Landscape Association. The re-

tractable roof greenhouses are the first of their kind to be used for nursery production in the Midwest.

The idea of natural ventilation is the driving innovation behind retractable roof greenhouses. The design allows a grower to retract up to 90 percent of the roof, guaranteeing that temperatures never rise above ambient. The ability to retract the roof and roll-up the sides allows for better temperature and humidity control and improved wind and light conditions.

Stephen Myers, chairman of Ohio State's department of horticulture and crop science, said retractable roof greenhouses would not only benefit the nursery industry, but would also be useful in other agricultural areas.

"It think the application of retractable roof greenhouses will expand into other crop industries like vegetables and fruit, as well as interfacing with pest management programs," said Meyers. "For example, hail is a problem for crops. You can just hit a button and close the roof. If birds are a problem with cherry trees, close the roof. If it's too hot, close the roof. You can really do a lot of things with it that can be to a grower's advantage."

The justification of retracta-

ble roof greenhouses in Ohio is already being met with some skepticism in the nursery industry, but Mathers is looking to change public opinion by demonstrating their usefulness, efficiency, and affordability through a series of research studies.

One that is generating the most attention is a project funded by a \$58,000 16-month USDA/Ohio Department of Agriculture (USDA/ODA) Specialty Crop Block grant to develop an Ohio tree liner production system. Mathers and Dan Struve, an Ohio State horticulturist, are the authors of the grant and applied with the Ohio Nursery and Landscape Association to obtain the USDA/ODA funding.

The study analyzes the feasibility of growing tree seedlings to "whip" height — four to eight feet tall and a ½ inch to 34 inch in diameter — to be sold as tree stock to other nurseries in Ohio and other parts of the nation. The Ohio nursery industry does not grow its own whips because the growing season is too short. Nurseries obtain whips from the Pacific Northwest,

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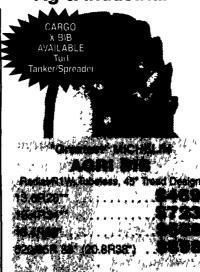




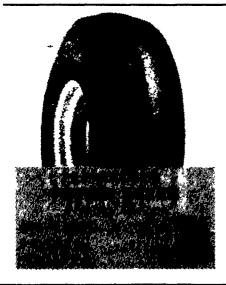




















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