

Cutting-Edge Research Featured At Ag Progress Days

UNIVERSITY PARK (Centre Co.) — Hairy alfalfa, living mulch and "bug maps" are among the cutting-edge research projects that will be highlighted in guided tours of the Russell E. Larson Agricultural Research Center during Penn State's Ag Progress Days, August 18-20.

The free 30-minute bus tours, which leave every 20 minutes throughout each day, will take visitors through Penn State's horticulture, plant pathology, agronomy and entomology research farms, as well as the USDA Pasture Systems and Watershed Management Laboratory research farm.

On the horticulture farm, visitors will see an experimental orchard where apple trees are growing on wires, trellises and poles. The Penn State Low Hedgerow Trellis System is part of an effort to grow smaller dwarf and semi-dwarf trees, which can eliminate the need for large equipment, make labor more efficient and reduce the amount of pesticides needed to protect the crop.

Other horticulture projects include a study comparing the effects of red, black and silver plastic mulches on potato and onion production, research to adapt the tropical Savory Pepper to growing conditions in the Northeast, and variety trials for sweet corn, tomatoes, peppers and eggplant.

On the plant pathology farm, the tour will feature studies aimed at helping growers eliminate, manage or reduce crop damage from diseases. Several experiments are under way to combat the destructive late blight fungus. This disease, which attacks potatoes and tomatoes, has cost Pennsylvania

growers millions of dollars in crop losses in recent years.

The agronomy farm portion of the tour will feature research on the use of crownvetch and other legumes as a "living mulch" in corn and soybean crops. Scientists have found that these legumes can provide ground cover and reduce soil erosion, as well as provide nitrogen to the main crop, potentially reducing the need to apply fertilizer.

Other agronomy research focuses on breeding and management trials for a variety of crops, including corn, soybeans, alfalfa, wheat, barley and forage grasses. Visitors also will see a study on how various tillage systems affect runoff and research on how different crop rotations influence corn yield.

At the USDA Pasture Lab, the tour will include research on clover varieties that are resistant to clover root curculio, an insect pest of clover and alfalfa; and studies to improve the establishment and management of switchgrass, a warm-season grass that can be used for livestock grazing and for wildlife habitat.

A project to evaluate alfalfa varieties for Colorado potato beetle resistance will highlight entomology research on the tour. Some of these new varieties have small glandular hairs that may prevent the insect from feeding or laying eggs on the plant.

Other entomology studies discussed on the tour will include research on the use of global positioning satellites and related technology to monitor pest and beneficial insect populations. By mapping insect "hot spots" and spraying only those

areas of the field, scientists hope to reduce the amount of insecticides needed to control crop damage.

Penn State's Ag Progress Days features more than 500 acres of educational and commercial exhibits, tours and

machinery demonstrations. It is held at the Russell E. Larson Agricultural Research Center at Rock Springs, nine miles southwest of State College on Route 45. Hours are 9 a.m. to 5 p.m. Tuesday and Thursday, with extended hours of 9 a.m. to 8

p.m. on Wednesday. Admission and parking are free.

For more information, call (800) PSU-1010 toll-free through August 20 or visit the Ag Progress Days site on the World Wide Web at <http://apd.cas.psu.edu>



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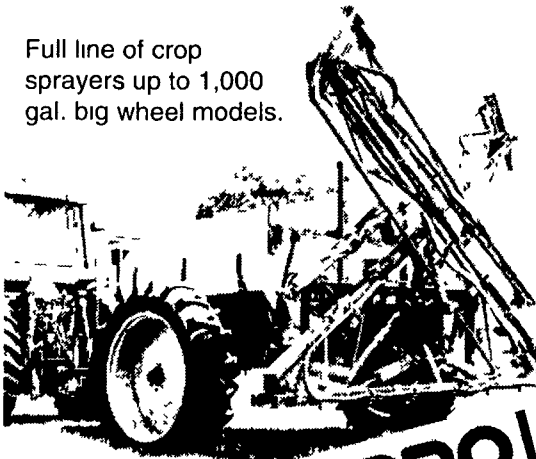


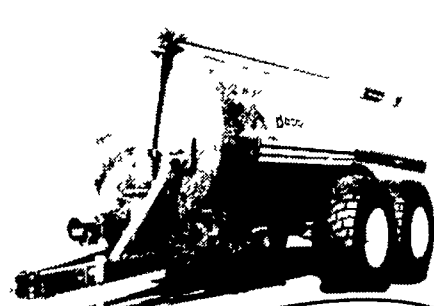
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