USDA awards Virginia Tech $3.8 million to stimulate eastern U.S. wine industry

BLACKSBURG, Va., October 27, 2010 — The USDA's National Institute of Food and Agriculture (NIFA) awarded $3.8 million to researchers in the College of Agriculture and Life Sciences at Virginia Tech to lead a multistate effort to further improve grape and wine quality in the eastern United States.

According to Tony Wolf, professor of viticulture and project director, the five-year project seeks to create, refine, and encourage industry adoption of grape and wine production practices that integrate research-based recommendations with key market drivers to achieve a robust and sustainable grape and wine industry in the region.

"In order to increase wine sales in the eastern United States, including Virginia, wine grapes and wines must be of consistently high quality, and they must be produced on a cost-competitive basis," said Wolf.

Virginia currently ranks fifth nationally in wine grape production, and its grape and wine industry has a total economic impact of more than $362 million per year. In addition to strengthening rural communities through employment and spin-off benefits to the service sector, the state's vineyards and 180 wineries attract tourism and help preserve green space.

Wolf, who is also the director of Virginia Tech's Alson H. Smith Jr. Agricultural Research and Extension Center in Winchester, Va., explained that the underlying research addresses unique challenges of quality grape and wine production in the East, including unpredictable but often excessive rains during the growing season, frost and winter injury problems, unique grape varieties, and the high costs of grape production that result from the relatively small scale of most Eastern vineyards. The research also explores consumer buying preferences and perceptions about regional wines relative to other domestic and foreign brands.

Research conducted in Virginia will focus on what Wolf describes as vine "balance" — achieving a desirable combination of leaf area and crop to promote optimal grape quality and wine quality potential. "Balance is an elusive goal in environments that have unpredictable, but often surplus

moisture," explained Wolf. The research explores practical means by which growers could more predictably measure and attain balance, while reducing the amount of labor and other vineyard inputs.

Virginia Tech's Center for Geospatial Information Technology (CGIT), under the direction of Peter Sforza, is also involved with the project. The CGIT will expand and further refine a new Web-based, interactive geographic information system (GIS) platform that allows users to evaluate their property for vineyard suitability and match the property's location to appropriate grape varieties. "Not only will users be able to review the climatic and physical attributes or liabilities of their site, but we'll be able to offer recommendations on which grape varieties could be grown at the property, based on length of growing season, summer heat, and winter low-temperature considerations," said Wolf.

Other partners in the project include North Carolina State University, University of Maryland, The Ohio State University, Pennsylvania State University, Cornell University, and the Connecticut Agricultural Experiment Station.

In addition to coordinating a broad research agenda, the grant provides major funding of Extension and outreach tools to ensure that research-based recommendations are adopted by the wine industry. "One of the four objectives in our project is a detailed plan for benchmarking current industry practices and charting adoption and satisfaction of recommendations that are delivered over the life of this project," said Wolf. A broad range of media and teaching methods will be employed to reach producers, including Web-based and print media, eXtension Community of Practices, workshops, and regional short courses.

The National Institute of Food and Agriculture awarded more than $46 million through the Specialty Crop Research Initiative, which was established by the 2008 Farm Bill to support the specialty crop industry by developing and disseminating science-based tools to address the needs of specific crops. Specialty crops are defined by law as "fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture." Funded projects address five focus areas: (1) improve crop characteristics through plant breeding, genetics, and genomics; (2) address threats from pests and diseases; (3) improve production efficiency, productivity, and profitability; (4) develop new innovations and technologies; and (5) develop methods to improve food safety.

Nationally ranked among the top research institutions of its kind, Virginia Tech's College of Agriculture and Life Sciences focuses on the science and business of living systems through learning, discovery, and engagement. The college's comprehensive curriculum gives more than 2,400 students in a dozen academic departments a balanced education that ranges from food and fiber production to economics to human health. Students learn from the world's leading agricultural scientists, who bring the latest science and technology into the classroom.

###