

SERA014 Progress Report 2005

VITICULTURE PROGRAM UNIVERSITY OF KENTUCKY

Dr. S. Kaan Kurtural (contact)
Assistant Professor - Viticulture Specialist
N308D, Agriculture Science Building-North, University of Kentucky
Lexington, KY 40546-0091
Telephone: (859) 257-1332 Fax: (859) 257-2859

skkurt2@uky.edu

Dr. Thomas Cottrell
Extension Specialist - Enology
N322, Agriculture Science Building-North, University of Kentucky
Lexington, KY 40546-0091
Telephone: (859) 257-0037 Fax: (859) 257-2859

tom.cottrell@uky.edu

Research Cooperators:

Dr. John G. Strang
Extension Professor
N318, Agriculture Science Building-North, University of Kentucky
Lexington, KY 40546-0091
Telephone: (859) 257-5685 Fax: (859) 257- 2859

jstrang@uky.edu

Dr. Joseph Masabni
Extension Horticulturist
N318, Agriculture Science Building-North, University of Kentucky
Lexington, KY 40546-0091
Telephone: (270) 365-2741 Fax: (859) 257-2859

jmasabni@uky.edu

Dr. Dan A. Potter
Entomologist
S-225 Agriculture Science Building-North, University of Kentucky
Lexington, KY 40546-0091
Telephone: (859) 257- 7450 Fax: (859) 323 – 1120

dapotter@uky.edu

Dr. Imed E. Dami
Assistant Professor - Viticulture Specialist
Department of Horticulture and Crop Science
Ohio Agricultural Research and Development Center
1680 Madison Avenue
Wooster, OH 44691-4096
Telephone: (330) 202-7676

dami1@osu.edu

Dr. Bradley H. Taylor
Associate Professor - Pomologist
Department of Plant, Soil and Agricultural Sciences
Southern Illinois University
1205 Lincoln Drive
Carbondale, IL 62901-4415
Telephone: (618) 453-2496 Fax: (618) 453-7457 hbtaylor@siu.edu

Christopher Smigell
Extension Associate for Small Fruits and Vegetables - Blue Grass Region
N318, Agriculture Science Building-North, University of Kentucky
Lexington, KY 40546-0091
Telephone: (859) 257-1601 Fax: (859) 257-2859 csmigell@uky.edu

Dena C. Fiacchino
Extension Resource Educator - Small/Tree Fruit Specialist
Cornell Cooperative Extension
3288 Main Street
Mexico, NY 13114
Telephone: (315) 963-7286 Fax: (315) 963-0968 dcf25@cornell.edu

Status of the Grape/Wine Industry

The interest in viticulture and enology in the Commonwealth is growing. The number of acres planted in vineyards continues to grow. There are 431 acres of vineyard planted in the state with 101 growers, up from 282 acres and 72 growers in 2002, respectively. Several new plantings are being established as site preparation begins in the fall of 2005. Most new plantings are comprised of French-American hybrids and vinifera cultivars with a renewed interest in 'Norton'. However, wider than recommended in-row spacings, and closer than recommended within-row spacings continue in the Commonwealth. There are now 39 wineries in the Commonwealth where the tank capacity far exceeds the grape production.

The growing season of 2005 started with a late spring frost in the last week of May which caused fruit losses in vinifera and some of the cold-tender French-American hybrids. The growing conditions were cool and humid until mid-June. Phomopsis and poor vine nutrition caused fruit losses in majority of the vineyards. The Commonwealth experienced a prolonged drought through much of the summer. In 2005, yields were lower; however fruit composition values were exceptional. Japanese beetle feeding on thin-leaved cultivars continues to be a problem. Grape root borer populations are on the increase in vineyards more than four years old. Deer are causing excessive damage and commercial loss in Northern Kentucky vineyards. Netting of vineyards to mitigate bird damage was an acceptable practice for the 2005 growing season.

University Activities

Research Projects:

Vineyard Site Selection Using GIS: The University of Kentucky in cooperation with the Ohio State University, Southern Illinois University and Cornell Cooperative Extension is using climatological, and topographical raw data to select suitable vineyard sites in the Commonwealth to expand the viticulture industry. The study area includes the Bluegrass Region of Kentucky, southern Ohio, and southern Illinois. The study is partially funded by the Viticulture Consortium – East. The end product is a high-resolution visual tool that can be queried by simply typing a US Postal address to assist extension agents and faculty to locate the most suitable vineyard sites in their respective counties.

Cropload Management of 'Traminette': The University of Kentucky is conducting trials at grower sites to assess the sustainability of varying croploads on 'Traminette'. The study is completely crossed with three wine making techniques to mitigate the effects of mutual shading within lightly pruned treatments.

Cultivar, Rootstock and Training System Trials: Vineyards are being established at the University of Kentucky Horticulture Research Farm in Lexington to evaluate 28 French-American hybrid cultivars. Another trial is also being established at the Lexington site to select rootstocks for 'Cabernet franc' and 'Chambourcin' grapevines that would be adapted to the limestone soils of the region. The training system trial being established is comparing five training systems that are split over five French-American hybrid cultivars. A vinifera cultivar trial is also being established that is evaluating various clones of seven cultivars.

The University of Kentucky also has a cultivar trial at the University of Kentucky Research and Education Center in Princeton in which eight cultivars (American, French-American hybrid and vinifera) were planted in 2001.

Japanese Beetle and Green June Beetle Feeding Preference/Impact Trials: In conjunction with the Entomology faculty, two half-acre vineyards are established to investigate the feeding preference of Japanese Beetle and Green June Beetle on 12 American, French-American hybrid and vinifera cultivars.

Extension Activities:

In conjunction with the statewide grower association (Kentucky Vineyard Society), the University regularly conducts Field Days (two in 2005) and Workshops (seven in 2005) and also sponsors the Grape and Wine Short Course during the Annual Fruit and Vegetable Trade Show. Results from the cultivar trials in progress reports are distributed free of charge to growers at the Annual Fruit and Vegetable Trade Show. A mailing list service with 170 subscribers alerts commercial growers and interested parties of weather conditions, disease models and upcoming field days, workshops or short courses. The University Cooperative Extension Service responds to requests for information by phone, mail or e-mail and makes site visits for problem diagnosis or site evaluations as requested.