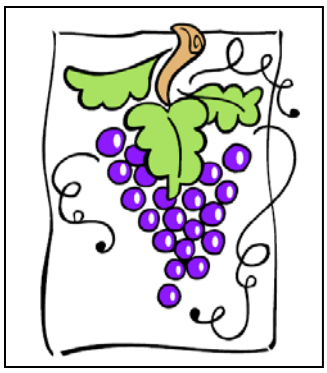

Texas Pierce's Disease Research and Education Program

A Semiannual Report of Activity July 2005 – January 2006

The Texas Pierce's Disease Research and Education Program is a collaboration, cooperation, and interaction among the Texas Agricultural Experiment Station (TAES), Texas Cooperative Extension (TCE), Texas A&M University (TAMU), Texas Tech University, the University of Houston, the University of Texas at Tyler, the USDA Animal and Plant Health Inspection Service (APHIS), The Texas Department of Agriculture, and the grape growers, wine producers, and citizens of Texas. In her capacity as Vice-Chancellor and Dean for Agriculture and Life Sciences, and Director of TAES, Dr. Elsa A. Murano announced on July 25, 2005 the appointment of the Executive Team of Drs. Tim Davis (Head of the TAMU Department of Horticultural Sciences), Dennis Gross (Head of the TAMU Department of Plant Pathology and Microbiology), and Kevin Heinz (Project Leader and Head of the TAMU Department of Entomology) to manage the multi-agency, multi-institutional, and multi-disciplinary program. The responsibilities of the Executive Team are: (1) to insure the contractual responsibility of the Texas Agricultural Experiment Station (TAES) to the funding agency APHIS (which includes the: (i) pursuit of stated goals and objectives of the project, (ii) insurance of progress according to agreed upon milestones, and (iii) use of funds according to an approved budget), and (2) to coordinate, facilitate and communicate project activities. The program has made significant progress within each of these categories during the past six months, of which this semiannual report provides selected highlights. Comprehensive reporting of activities is posted regularly on the Texas Pierce's Disease Research and Education Program website (http://piercesdisease.tamu.edu/).

Programmatically the research and education effort is divided into four components, which are to: (1) develop and implement a statewide monitoring system for the detection and movement of the disease and its insect vectors, (2) conduct fundamental and translational research that leads to the timely development of effective and economical Pierce's Disease management, (3) provide research-based, quality, and relevant education to grape growers, wine producers, and other interested individuals, and (4) provide for the infrastructure necessary to advance research excellence. During the 2005-06 budget cycle, the program dispensed $1.113 million for research and education programs, of which $161,500 was allocated for capital improvements. Within each category there are many notable highlights that include:

Detection,

- APHIS scientists together with TAES and TCE researchers Dr. Ed Hellman, Mr. Jim Kamas, Dr. Isabelle Lauzière, and Dr. Forrest Mitchell are teaming to develop the technology necessary to provide growers with timely reporting of the geographical locations of the disease among vineyards during the 2006 growing season.
- Dr. Lisa Morano, Dr. Blake Bextine, and Jim Kamas are documenting and mapping the occurrence of various strains of the disease-causing bacterium *Xylella fastidiosa*.
- Dr. David Appel is conducting within-vineyard epidemiological studies to document how the disease spreads through a vineyard once inoculated.

Research,

- Forrest Mitchell and Jim Kamas are conducting imidacloprid efficacy and timing trials, and are generating science-based information that matches insecticide applications to glassy-winged sharpshooter activity based on temperature data.
- Dr. Julio Bernal and USDA-ARS scientists in Weslaco, TX are working to assess the influence of vegetational factors on the abundance and activity of indigenous beneficial arthropods useful in controlling glassy-winged sharpshooters in grape producing regions.
- Dr. Mark Black is studying the reactions of Texas rootstalks to the disease-causing bacterium *Xylella fastidiosa* that will provide growers science-based information on their selections of rootstocks to plant in Texas vineyards.
- Isabelle Lauzière is documenting the diversity, pathotype vectoring capabilities, and sources of xylem-feeding Hemiptera within Central Texas that will characterize and prioritize target arthropods and pathotypes as candidates for management programs.

Education,

- Mark Black, Ed Hellman and Jim Kamas have initiated publication of the bimonthly Extension education bulletin titled *Texas PD Notes* (for all issues, see http://piercesdisease.tamu.edu/news/). These Extension faculty also communicate regularly with interested constituents across the state on issues related to Pierce's Disease and its management.
- Ms. Neal Lee, web designer within the Texas A&M University Department of Entomology, rejuvenated and continues to maintain the Program website that serves as a repository of all external communications.
- Quarterly meetings are held between the Executive Team and the Texas Pierce's Disease Grower Advisory Board to discuss programmatic matters.

Infrastructure,

- The site plan for development of a research facility at the Gillespie County airport facility was finalized in Fall 2005 with assistance from Mr. James

Dunn, TAES Agricultural Construction Engineer, Mr. Greg Snelgrove, Gillespie County Economic Development Commission, Isabelle Lauzière, Jim Kamas, the Executive Team, and TAES administration.
- Jim Kamas initiated development of the research vineyard in Fall 2005.
- Plans for construction of a research laboratory and research greenhouses through private funding are currently being explored by the Gillespie County Economic Development Commission, the Executive Team, and Texas A&M Agriculture Administration.

In meeting their assigned responsibilities, the Executive Team has dedicated itself to building an operational network to reach the shared goals of the Program for which they hold themselves, and all who are involved, mutually accountable. The Team is committed to establishing an effective working environment with uncompromising integrity and professionalism that includes management functions, such as planning, organizing, setting performance goals, assessing performance, and depending heavily on peer review in deciding dispensation of resources. Examples of these activities include:

- Establishment of performance criteria for assessment of programmatic progress mutually agreed upon by the Executive Team, the Grower Advisory Board, and the Principle Investigators.
- Re-creation of the Texas Pierce's Disease Research and Education Program website (http://piercesdisease.tamu.edu/) that serves to increase programmatic transparency and provides ease of public access for continuous viewing of program activities.
- Submission by Principle Investigators of quarterly progress reports that are made available for public inspection through the Program website.
- Joint quarterly meetings are held by the Executive Team together with the Texas Pierce's Disease Grower Advisory Board and Texas A&M Agriculture Administration.
- Obtaining budgetary consensus from the Texas Pierce's Disease Grower Advisory Board, APHIS, the Executive Team, and Texas A&M Agriculture Administration that balances the competing demands for allocation of funds between the development of Gillespie County infrastructure versus research and education programming.
- Use of a peer-review process for evaluation of principle investigator project proposal submissions that included broad participation of the Texas Pierce's Disease Grower Advisory Board, the Executive Team, and Texas A&M Agriculture Administration.

The presence and activities of the Executive Team represent only the surface of Texas A&M Agriculture's investment and commitment to success of the Texas Pierce's Disease Research and Education Program. The Executive Teams recognizes the activities of the

following Texas A&M Agriculture Administration, staff, and partners for the programmatic progress made during the past six months:

- Dr. Elsa A. Murano, Vice-Chancellor and Dean for Agriculture and Life Sciences, and Director of the TAES, actively participated in the July 25, 2005 public meeting held in Fredericksburg, Texas.
- The Executive Team remains in constant communication and meets formally approximately monthly with Dr. Mark Hussey (TAES Associate Director for Programs), Dr. Bill Dugas (TAES Associate Director for Operations), Dr. Roland Smith (TCE Associate Director for Agriculture, Natural Resources and Community Economic Development) to discuss programmatic progress and to plan future activities. Drs. Hussey, Dugas, and Smith also review all programmatic budgetary requests made by the Executive Team through Texas A&M Administration.
- Ms. Diane Gilliland (Assistant Director for Research Administration – Texas A&M Agriculture) serves as budgetary advisor and liaison between the Executive Team and Texas A&M Agriculture Administration.
- Mr. James Dunn (TAES Agricultural Construction Engineer) provides oversight in the development of the Gillespie County research site.
- Ms. Roberta Priesmeyer (Administrative Services Officer in the Department of Entomology) provides primary oversight to the budgeting process, Ms. Vicki Bienski (Administrative Assistant in the Department of Entomology) coordinates program planning, and Ms. Teresa Gold (Office Associate in the Department of Entomology) provides staff clerical support to the Program.
- The Texas Pierce's Disease Grower Advisory Board provides input regarding program relevancy with regard to the interests of the Texas grape growers and wine producers.
- David Kostroun serves as governmental liaison to the Commissioner's Office, Texas Department of Agriculture.
- Gary Carpenter, George Nash, and Bobby Guerra provide APHIS oversight to the statewide survey program and APHIS programmatic administration.

This report was drafted by Tim Davis, Dennis Gross, and Kevin Heinz as members of the Executive Team for the Texas Pierce's Disease Research and Education Program.