The meeting of the Eastern Grape Clean Plant Network (EGCPN) was convened at 8:30 a.m. on October 8, 2008, at the Seminar Room of Barton Lab, New York State Agricultural Experiment Station, Cornell University, in Geneva, New York. Dr. Marc Fuchs of the Department of Plant Pathology, Cornell University, acted as moderator.

The following were present: Eric Amberg (Grafted Grapevine Nursery), Herman Amberg (Grafted Grapevine Nursery), Murali Bandla (USDA/APHIS), Mark Black (Texas AgriLife), Tom Burr (Cornell), Mark Chien (Penn State), Peter Cousins (USDA-Geneva NY), Imed Dami (Ohio State), Joe Fiola (University of Maryland), Marc Fuchs (Cornell), Deborah Golino (FPS/UC Davis), Alan Green (USDA/APHIS), Pat Herrick (Cornell), Harvey Hoch (Cornell), Carol Holko (Maryland Dept. Ag.) Tania Krastanova (Cornell), Will Lower (Boyer Nursery, PA), Bob Martin (USDA-Corvallis, OR), Tim Martinson (Cornell), Bruce McPheron (Penn State), Bob Mungari (New York Department of Agriculture), Bill Nelson (WineAmerica), Wenping Qiu (Missouri State University), Dennis Rak (Double A Vineyards), Keith Striegler (University of Missouri), Nancy Sweet (FPS/UC Davis), Ruth Welliver (Pennsylvania Dept. Agriculture), Tony Wolf (Virginia Tech), and Yvonne Demarino (USDA/APHIS/PPQ New York).

Dr. Tom Burr, Station Director and Associate Dean, and Dr. Harvey Hoch, Department Chair of the Department of Plant Pathology, made welcoming remarks. Introductions were made.

**NCPN Program Update**

Dr. Murali Bandla, Director, Plant Safeguarding & Pest Identification, APHIS, reviewed NCPN history and presented an update on the governance structure.

**Tier 1**

The Federal Advisory Committee Act (FACA) requires that the seven representatives on the Tier 1 governing body must for the present be state or federal government employees. A legislative proposal will be submitted to Congress to remove the application of FACA to the NCPN so as to allow industry participation on the Tier 1 Board.

The three representatives on the Core Working Group (CWG), the nucleus of the Tier 1 Board, will be: Murali Bandla (APHIS), Gail Wisler (ARS) and Tom Bewick.
The Commodity Networks
NCPN commodity constituents now include grapes and fruit trees. Other commodity groups, such as citrus and small fruits, have expressed an interest in the program.

The Fruit Tree Clean Plant Network operates on a national level (Tier 2) as a single entity. The members of that governance structure have been approved. The issue of a foundation block on the East Coast will be discussed at the December 8-9, 2008, meeting in Denver, Colorado.

The Western Grape Clean Plant Network (WGCPN) has elected members for its governing body (Tier 3). The next WGCPN meeting will be December 16, 2008, in Davis, California.

Many important issues still must be addressed. NCPN funding currently extends to foundation level and mother block plantings but not to state certification programs. Funding options for certification programs will be discussed in the future once the foundation and mother block plantings have been established. Another priority is an NCPN extension and outreach effort to foster grower and nursery interest in the program.

Dr. Bandla's full presentation can be viewed on the NCPN website at:
http://groups.ucanr.org/ncpn/files/58761.pdf

Scope of the NCPN Program

The group then discussed the mechanism and scope of NCPN program funding.

Bandla indicated that the first task of the Tier 1 Board will be to allocate the $5 million available in federal FY 2009 by way of cooperative grants using memoranda of understanding between the USDA and universities\(^1\). The funding will not be distributed using a competitive grants process.

The enabling legislation mandates that the NCPN use existing federal or state facilities to the extent practicable. Bandla stated that the goal is to strengthen

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\(^1\) Alan Green, APHIS/PPQ, indicated that the USDA will most likely continue the $750,000 PPQ money (2008) to supplement NCPN funds in future years.
existing programs and identify research needs after consultation with state Departments of Agriculture, universities and industry representatives.

The NCPN funds may be used to establish and maintain foundation and mother blocks but are not available to the states to fund activities in state certification programs. NCPN funds could be used for extension and outreach in support of establishing and maintaining foundation and mother blocks.

NAPPO Guidelines recommend that clean plant programs consistently use the Generation level terminology for planting blocks. Determination of the appropriate Generation level depends on the source of plant material and the conditions under which that material is maintained.

A foundation block contains elite material that is initially tested for viruses and other pathogens, cleaned up if necessary, planted under conditions that prevent (re)infection, and inspected and tested regularly thereafter. That foundation material is referred to as Generation 1 (G1). Foundation Plant Services (FPS) maintains G1 level grapevine plantings that have come into the country under quarantine regulation and have qualified for release from quarantine after extensive testing.

Grapevine material propagated from a foundation block and moved to another location would normally be considered Generation 2 (G2) material. Under this definition, mother blocks that are sourced from G1 stock that is moved to another location for planting and maintained in conditions that prevent infection would normally be considered G2 plantings. However, grapevine blocks at the Northwest Grape Foundation Service (Washington State University) at Prosser, Washington, are sourced from FPS and maintained under conditions similar to those at FPS. It was agreed that the material at NWGFS would be considered G1 stock because it is maintained under conditions similar to those for the foundation vineyard at FPS.

Ruth Welliver proposed that definitions be created for the Generation levels for purposes of the NCPN Program. The Generation level concept will be included in the Glossary on the NCPN website. Deborah Golino indicated that the Generation level terminology has been included in the proposed amended regulations for the California Grapevine Regulation & Certification Program. The Canadian Food Inspection Agency (CFIA) is familiar with the application of Generation level terminology in its program and will send representatives to the NCPN meetings for grapes and fruit trees.

For purposes of the discussion at the meeting, it was agreed that G1 refers to foundation (elite) level plantings such as those at FPS and NWGFS. This level contains clean plant material that undergoes regular testing annually and is isolated. Plant material taken from foundation stock (G1) and moved to another location to establish mother blocks can be considered G1 material if there are a
limited number of plantings in the mother block and the mother block vines undergo a regular testing regimen similar to that used in the foundation blocks. Plant material harvested from G1 material and moved to a nursery mother block that undergoes more limited inspection and testing would be G2 stock. Material taken from a nursery G2 block and moved to another location would be considered G3 stock.

Deborah Golino suggested that the Eastern Grape Clean Plant Network could develop mother blocks on the East Coast from FPS G1 grapevine stock. G2 mother blocks are now usually maintained in private nurseries instead of at state universities, since the money for state university service activity of this type has been discontinued. She indicated that FPS could accommodate supplying G1 plant material to universities for establishment of the mother blocks under the NCPN.

A question arose as to the language in the Farm Bill that limits NCPN money to expenditure at the G1 and G2 levels. Specific language in the bill states that the NCPN shall produce and maintain clean plant material that shall be “made available” to a state for certification programs as well as to private nurseries and producers. The language does not say that the NCPN money may be used in support of state certification programs. Bandla indicated that the inference is that the funding should stop with activities related to mother blocks at universities or federal facilities (G1 or G2). He added that the Farm Bill contains an additional $40 to $50 million for block grants that could fund NCPN proposals to benefit state certification programs.

Bandla envisions that, within three to four years, an NCPN label will be associated with clean plant material in the United States. The label will provide an assurance that plant material is tested and maintained under defined standards and is clean. He sees this assurance as the lure for domestic nurseries and foreign producers to participate in the NCPN program. A model document for state certification programs is in progress and can be developed further to facilitate interstate cooperation within the NCPN.

**Asset Inventory**

Dr. Tony Wolf from Virginia Tech presented the results of an inventory of assets for NCPN use within the Eastern Grape Clean Plant Network. The inventory included the following categories: locations with facilities that could contribute to the NCPN; existing diagnostic/lab facilities; field/farm assets; personnel; regulatory services. The inventory of grape nursery listings for the Eastern Grape CPN is not yet complete.

The inventory showed that states with available facilities include Maryland, Michigan, Missouri, New York, Pennsylvania, Texas and Virginia. In addition to the facilities listed on the report, Imed Dami indicated that Ohio also has a
research and diagnostic facility at Wooster. There is a new Plant Management & Diagnostic Center in College Park, Maryland. Keith Striegler added that there is a research component to the program at Columbia, Missouri.

Adequate lab facilities for research and diagnostics are already in place in all the locations.

The issue with field/farm assets was the identification of an appropriate location for a foundation or mother block for G-1 stock in the Eastern Grape CPN. The following locations were identified as possibilities: screenhouses at the Lower Eastern Shore Research & Education Center (LESREC), Maryland; acreage in St. Joseph, Michigan; acreage at Mt. Grove, Missouri; greenhouses and farm acreage in Geneva and Portland, New York; acreage at the Fruit Research & Extension Center (Penn State), Biglerville, Pennsylvania; screenhouses and greenhouses at Uvalde and Fredericksburg, Texas; acreage near Virginia Tech, Virginia. Wolf indicated that the more moderate temperatures in Maryland and Virginia make those states more suitable for outdoor plantings for purposes of avoiding winter injury.

All facilities are staffed with plant pathologists and other experts. Virginia Tech has recently finalized the hiring of the pathologist mentioned in the report.

Most of the states have past experience with state certification programs, and some have current programs for horticultural crops other than grapes.

The question of the existence of increase blocks in the East region gave rise to discussion of state certification programs and nurseries in that region. The New York grape certification program lapsed in the 1990’s due to industry lack of interest; the regulations governing grape testing and certification are still in existence. Dennis Rak indicated that interest in New York for wine grape production surfaced only in the past 10 to 15 years. His opinion is that management of certified material (G2 blocks) at the nurseries will be the difficult part of any future program. Marc Fuchs stated that Cornell University, the New York Department of Agriculture and industry members all work together on certain issues, despite the lack of an active certification program. The New York nurseries, Double A Nursery and Grafted Grapevine Nursery, obtain much of their plant material from California (FPS) but do not market it as “certified” because of the lack of an active program. The nursery representatives at the meeting indicated that the ability to provide clean plant assurances would be attractive to customers if the price differential were low enough (10¢ for virus tested; $1.00 for crown gall tested).

Deborah Golino stated that, in California, almost all of the rootstock is certified virus-tested and the nurseries all have that in stock. Scion wood is different. She estimated that 2/3 of the fully made bench grafts in California are non-certified. A large percentage of initial grower plantings are made with certified
stock, but are then budded with common stock in the following years. In California, the price differential for virus-tested material is about $1.00.

Dennis Rak suggested that literature showing positive benefits of virus-tested material could be used for an education program with nurseries and growers. Keith Striegler mentioned that there may be some compelling information that emerges from testing in Missouri (Chardonel) and Geneva.

Joe Fiola proposed that the goal in the East region be that no non-certified material be sold, i.e., that there be a mandatory certification program. Rak indicated that mandatory certification would not be practical until all desirable varieties are clean. He also believes that finished plants (rather than budded plants) must be offered. Bill Nelson thinks that mandatory certification might encourage circumvention.

*Dr. Wolf’s written presentation can be accessed at the NCPN website at:*

**Pathogen testing standards**

Dr. Marc Fuchs reported on pathogen testing standards and protocols for the Eastern Grape Clean Plant Network. The spreadsheet displayed in his presentation contains a list of pathogen tests required by National Standards (applicable to both the West and East) and a list of pathogens of concern on a regional basis (highlighted in yellow).

Discussion among the EGCPN has resulted in a consensus to adopt the National Standards (which apply to the entire NCPN, both West and East) for the present time. The group strongly feels that *Agrobacterium* (crown gall) is a pathogen that should be included on the tests required for the EGCPN. The immediate goal of the EGCPN is to support efforts to develop reliable testing for *Agrobacterium* so that it may be included on the list of regional testing required in the East. *Agrobacterium* is an issue of concern in the Pacific Northwest but is not included in the Western Regional Standards.

Rupestris stem pitting (RSP) was not included on the list for several reasons. The RSP virus is variable. It is difficult to test for the virus. There is no documented negative impact on vigor or fruit quality in vines that test positive for the RSP virus. Deborah Golino indicated that RSP virus is present in a large percentage of the popular European clones at FPS.

*Dr. Fuchs’ presentation may be accessed at the NCPN website at:*
Testing for Agrobacterium in a certification program

Dr. Tom Burr of Cornell University spoke on the current state of testing for Agrobacterium vitis, a pathogen specific to grape. The pathogen survives endophytically, and infection is usually associated with wound sites. A. vitis can be isolated from bleeding sap in the Spring. Both tumerogenic and non-tumerogenic strains are found in the isolate. Both strains cause necrosis but only tumerogenic strains cause crown gall.

Good PCR markers are available for purposes of the indexing process to separate tumerogenic and non-tumergenic strains. There is a good antibody available for ELISA testing.

There are several issues to be addressed in connection with effective testing for A. vitis. A. vitis is not evenly distributed within the grapevine. Burr, with the assistance of Dennis Rak at Double A Nursery, is sampling vines for bacteria concentration. The type of material (canes and position, roots, sap, etc.) and time of year for sampling are the variables. The results are erratic. Burr believes that a higher degree of confidence must be established with the sampling procedure before it can be recommended for use in a national program. Additionally, the A. vitis bacteria is diverse with many strains. An indexing procedure to detect all the known strains must be developed. The procedure would include PCR primers that detect all known strains and the use of different Ti-plasmid genotypes for ELISA testing.

Tony Wolf raised the issue of false negatives.

A recent published article authored by Burr and others suggests that a particular multiplex PCR process might reliably detect tumerogenic A. vitis in grapevines. This testing method shows promise for use by the NCPN for detection of the bacteria. The recent article can be accessed at the NCPN website at: http://groups.ucanr.org/ncpn/files/58765.pdf

However, the issue of effective sampling procedure remains. More work must done on the location in the cane where bacteria cells most likely are found and the detection of a consistent level of cells. The sensitivity of assays must be increased before the testing can be recommended to the NCPN.

Burr believes that there is an advantage in developing clean plants despite the fact that A. vitis survives for “a long time” in root tissue. He could not assess the probability of bacteria existing in root tissue despite negative test results in the canes. Burr stated that he has harvested material from a known, infected vineyard and that material has tested negative for A. vitis.

Cornell is experimenting with research trials using a nontumerogenic strain as a biological control to prevent entry of an A. vitis tumerogenic strain into the vine.
The nontumerogenic must be inoculated into the plant before the tumerogenic strain is able to enter.

Deborah Golino explained that FPS has established a “Next Generation” vineyard for all major rootstocks and some scion varieties. This foundation vineyard was created using microshoot tip tissue culture techniques and is prophylactically free of crown gall. The Next Generation vineyard is isolated from the remaining foundation vines at FPS. FPS will add the major cool climate grapes to that collection. Tom Burr is testing those vines for crown gall on a regular basis.

Both Burr and Golino indicated that no one is certain yet how *A. vitis* moves. The possibility of reinfection in the new vineyards is another reason for not mandating *A. vitis* testing to the NCPN at this point.

The recommendation to the EGCPN was to continue the ongoing research into testing for *A. vitis*. Burr will report on the status of the research at the end of the year. The EGCPN will then make a recommendation after considering his report. The group recognized that pursuing *A. vitis* testing is necessary with the realization that such testing currently has limitations.

It was proposed that the NCPN require all plant material under the aegis of the NCPN undergo microshoot tip tissue culture treatment, which would produce plant material free of crown gall. Golino indicated that most of the California suppliers (nurseries) of grapevine stock to the East Coast do not have tissue cultured plant material. FPS has some scion varieties in the New Generation vineyard; anything not there at the present time would take at least two years to produce. Dennis Rak indicated that it would be 5 to 10 years before nurseries would have plants available. Although the tissue culture rule could keep plant material free of crown gall for G1 (foundation) stock, there are no provisions that require nurseries to maintain that material under conditions to keep it clean. The suggestion was made to require nurseries to maintain the stock using “best management practices”.

Murali Bandla recommended that a rule be established that any material in a G1 (foundation) vineyard be tested for crown gall. Golino added that FPS will soon have grapevine material tested under Eastern standards (including *A. vitis*) from which nurseries can obtain plant material for customers in the Eastern United States.

*Dr. Burr’s presentation may be accessed at the NCPN website at:* http://groups.ucanr.org/ncpn/files/58764.pdf

*Foundation block (G1) in the Eastern Grape Clean Plant Network*
The group then discussed whether and where a G1 (foundation) vineyard should be established for the Eastern Grape Clean Plant Network.

Deborah Golino explained the California model. The grapevine material comes into FPS in two ways. Domestic material is provided from sources within the United States. Imported grapevine material is sent to FPS for quarantine under an APHIS permit. Once released from quarantine, a decision is made as to whether or not the material will remain in the public program. If so, vines are planted in the FPS foundation vineyard (G1) at Davis. Thirty of the forty acres available for grape plantings currently contain over 700 varieties and thousands of vines in the FPS grape collection. There are 2, 4 or 6 vines of each selection.

Sales of the G1 material do not fully support FPS grape program activities. The nurseries have elected to tax themselves to pay part of the costs. G1 plant material is sold primarily to nurseries in the California Grapevine Registration & Certification Program; the blocks those nurseries plant to increase the material received from FPS are called increase blocks (G2 plantings). The R&C nurseries operate under regulations issued by the state certification program, which inspects and tests their blocks.

The Pacific Northwest also has a G1 (foundation) vineyard at the Northwest Grape Foundation Service at Prosser, Washington. FPS supplied the NWGFS with most of its plant material starting about 10 years ago. The material sent to Prosser is RSP negative and produced by microshoot tip tissue culture techniques.

Golino indicated that FPS has an extensive DNA testing lab and could perform all the testing for the entire grape NCPN. FPS would be willing to try to meet demand for G1 material for nurseries on a national level; receipt of additional funding would allow FPS to expand its capacity to meet such a need. FPS currently has many of the cool and cold climate varieties, including those from the Cornell and Minnesota breeding programs. The New Generation vineyard at FPS is tested for A. vitis and soon will also contain many of the major cool and cold climate varieties.

Routine testing on G1 blocks is currently performed at FPS (UC Davis), the NWGFS (Prosser, WA), Cornell/Geneva and Missouri State University at Mountain Grove. The G2 (nursery) blocks are tested at the state level by state certification programs. Marc Fuchs and Murali Bandla indicated that the expertise to accomplish testing could be shared with other labs to broaden the testing capability for certification programs. Tom Burr and Wenping Qiu suggested that broader testing participation may encourage the industry to take local ownership of the programs.

Bandla proposed that testing on G1 material be continued at the four university sites that now perform that type of testing. There are many lab facilities that can
perform testing on G2 level plant material, including those of the state regulatory agencies. Materials can be shipped if no local lab is available, and testing expertise could be shared to broaden participation. He added that the tests required at each level should be clearly defined and harmonized where possible. The same protocols for indexing and testing for specific pathogens should be uniformly used within the NCPN.

Two presentations were made for the establishment of G1 blocks on the East Coast – Tony Wolf from Virginia Tech and Joe Fiola from Maryland. Missouri State University already has a small foundation vineyard at Mountain Grove, Missouri. Murali Bandla indicated that there will be one fulltime technician position available to the G1 program from the NCPN.

Tony Wolf discussed a G1 planting at Virginia Tech’s AHS Agricultural Research & Extension Center in Winchester, Virginia in the northern Shenandoah Valley. The climate is relatively free from winter injury to vines, with occasional cold spikes. Many wild grapevines grow in the area. Phytoplasmas are present. The location is far enough north that there is little risk of Pierce’s Disease.

Wolf proposed a G1 planting consisting of both screenhouses and a 2-acre outdoor vineyard planting. The screenhouse vines would serve as backups to the outdoor vines. Total costs for the physical resources, testing and personnel (including a postdoctoral research associate) for the four-year period are estimated: $242,000 (year 1); $212,000 (year 2); $185,000 (year 3); and $185,000 (year 4). Wolf suggested that it did not appear that such an operation would be self-sustainable over the long term.

Joe Fiola presented the proposal from the University of Maryland and the Maryland Department of Agriculture. The temperature on the Eastern Shore of Maryland rarely goes below zero. The G1 and G2 blocks would be maintained in screenhouses that were formerly used in the bramble program. The screenhouses could be heated if necessary.

The proposal anticipates that the Maryland Department of Agriculture would maintain and test the G1 block. The G1 plant material would be harvested and grown by the University of Maryland in 1/3 of an acre of screenhouses containing G2 blocks. The screenhouses have wooden frames and are located on a sandy location near the shore. The vines would grow to as much as 25 feet per vine. The cuttings from the G2 blocks would be sold to commercial nurseries to support the program.

Fiola stated that the University of Maryland is aware that the NCPN involves service work. The Dean has agreed to dedicate personnel, materials and supplies to the NCPN program. A $2.1 million proposal to increase the Viticulture Program in the state of Maryland will be presented to the Maryland Legislature. There is industry support.
Dennis Rak asked about the number of varieties that would be grown in the G1 blocks on the East Coast. The number of selections determines the necessary facility size, at the rate of 4 vines per selection (variety). Fiola stated that the G1 blocks in the East would be primarily for hybrids, of which 20 clones were widely used in the East.

Wenping Qiu maintains a small G1 vineyard for the Missouri Grape Importation & Certification Program at Missouri State University at Mountain Grove. Material is located in screenhouses and in the field. They have experience with tissue culture and testing. Hybrids have some difficulty growing in the Missouri climate.

Murali Bandla suggested that EGCPN representatives visit those locations that are possible sites for an Eastern G1 block, i.e., Missouri, Maryland, Virginia Tech. FPS (Davis), Cornell (Geneva) and Missouri State all act as quarantine stations for grapevine material imported from abroad; material emerging from that quarantine process is planted into the G1 foundation blocks. Bandla envisions keeping the G1 material separate from the quarantine material.

Fiola stated that there may be advantages to split the G1 blocks among several locations on the East Coast to cover emergencies such as unexpected cold snaps. Multiple G1 sites could offer diversity of climate and redundancy of plant material. The downside to multiple sites would be the cost of infrastructure and personnel.

Ruth Welliver proposed that a technical committee be assigned to create definitions and specifications. The committee should define a G1 block and specify which rootstocks are appropriate.

Bill Nelson proposed that FPS in California act as the G1 block for the nation, along with the program in Prosser Washington. He stated that the G1 foundation block should be viewed as a service function. The programs at Davis and Prosser would supply the plant material to be planted in G2 blocks. If there is a disaster in California, material would still be available from Prosser or from G2 blocks. The G1 issue could be settled by using the existing resources and attention could be focused on the many additional policy issues needing decisions.

Concern was expressed by several members that the Eastern Grape Clean Plant Network have a meaningful role in assisting the grapevine nurseries with maintenance of clean plant material. Dennis Rak supported the establishment of a committee to research the alternatives for a G1 location. Rak does not feel strongly about the source of G1 plant material coming to his nursery but is very interested in creation of a protocol for maintaining clean G2 blocks at the nursery and providing clean G3 material to growers. Eric Amberg expressed the identical concerns.
Concern was further expressed that the Eastern Clean Plant Network develop its own resources that would survive in the event that the NCPN money is not continued beyond the four year period. Several members felt uncomfortable with growing plant material destined for East Coast nurseries in West Coast vineyards, particularly in regard to the crown gall problem.

A committee of four people was appointed to evaluate each site to be considered for the source of G1 plant material for nurseries in the EGCPN. The committee is: Keith Striegler, scientist; Dennis Rak, nurseryman; Imed Dami and Ruth Welliver, state regulatory members. The sites are FPS (California), NWGFS (Washington), Missouri State University, Maryland, and Virginia Tech. The committee report should be completed by mid-December. The issue of a G1 source for the Eastern Grape Clean Plant Network should finalized at the meeting of the national (Tier 2) Grape NCPN in January.

**Increase blocks (G2) in the Eastern Grape Clean Plant Network**

G2 level plantings are propagated from from G1 (foundation) blocks and normally planted in nursery blocks. Grape nurseries increase the plant material received from foundation blocks and sell it to growers.

Dennis Rak stated that his nursery has a G2 block for registered commercial varieties. The need varies from year to year. Maintaining isolation is a problem. Rak and Eric Amberg again reiterated the need for a clear protocol for nurseries to follow in regard to maintenance and testing of increase blocks (G2 plant material).

Tony Wolf stated that the academic institutions should maintain the G1 foundation blocks and the state regulatory agencies should monitor the G2 blocks. Virginia Tech is willing to take on the responsibility of a G1 block but not a G2 block.

Deborah Golino mentioned that in California some growers maintain G2 blocks and supply nurseries with grape plant material. Those grower blocks are monitored by the California Department of Food and Agriculture. Under the new California regulations, there is a new type of planting called a secondary increase block where nurseries can sell plant material to growers, who grow the plants and contract with the nurseries for the wood.

Golino recommended that the EGCPN consider a similar arrangement for its nurseries. FPS might not have enough G1 scion wood to supply all the nursery demand in the nation. Growers could be contracted with to grow G2 material under specified conditions to supply the nurseries.
Ruth Welliver stated that there are many sets of state regulations that define G2 level material and set forth protocols for testing and maintenance. Those regulations must be studied and harmonized.

The National Standard for testing the G1 foundation blocks sets forth the minimal level required. The East region has its own unique issues such as *Agrobacterium vitis*. The definition of “best management practices” for purposes of protecting nursery increase blocks (G2) must be developed.

NCPN money may not be distributed to private nurseries or growers. Federal funding may be provided to state, quasi-state (public university) or federal facilities for testing. One suggestion was made that Maryland could grow plant material in G2 blocks and distribute it to qualified nurseries and growers. The regulations would specifically state that the Maryland Department of Agriculture/University of Maryland may increase or multiply G1 material for this purpose. The diagnostic labs associated with those G2 blocks could be strengthened.

Murali Bandla described a PPQ pilot project where Riesling grapevine material was imported from Germany and quarantined at a private vineyard in the Finger Lakes. Marc Fuchs at Cornell supervised the testing and quarantine, along with the USDA. Deborah Golino indicated that such an exchange with a G1 program in Europe might be appropriate but not with plant material at the G2 or G3 level. She added that the NCPN process will enable the United States to clean up its grapevine material so as to have standing to impose strong regulations on imports.

A comment was made that, after the Committee presents its recommendation on the G1 foundation block(s) for the Eastern region, the diagnostic testing capacity of each should be evaluated.

Bruce McPherson suggested that the NCPN explore the concept of regional centers (comprehensive pathology centers) that are provided with funding for staff and equipment to do mandatory diagnostic testing for G2 blocks. The universities such as Cornell were proposed as an alternative for the regional centers.

Deborah Golino indicated that the quarantine facilities (FPS, Cornell/Geneva, Missouri) already have adequate expertise to do any necessary screening or testing. Murali Bandla stated that the Farm Bill does not allow for expenditure on new infrastructure; the language specifies that the money be used to strengthen existing resources.

**Funding options for state certification programs under specialty crops block grants**
Bill Nelson of WineAmerica discussed funding options for state certification programs. APHIS has interpreted the language in the Farm Bill to exclude from NCPN funding certification, testing and maintenance activities by state regulatory programs.

**Block Grant Money**
A short term option for funding of activities related to certification, testing and maintenance of G2 blocks is a block grant program to the states through the USDA. Congress allocated the money with the expectation that state Departments of Agriculture would use the money for this type of activity. The block grant funding is in the Farm Bill for four years, in varying amounts from $7 million to $50 million per year (FY 2009).

A multi-state application for block grant money is acceptable but a lead state must be designated. Multistate proposals are generally confusing and difficult to implement. There is a formula for baselines but the state(s) must submit a proposal. Nelson advised that each state submit its own separate application.

Bob Mungari (NY State Department of Agriculture & Markets) explained that the prior New York state certification program for grapevine material dissipated because there was not enough economic incentive to the nurseries who were multiplying the plant material in G2 blocks for sale to growers. There was a small profit margin with certified plant material. The question is how to make nursery participation in the certification program attractive given the time and expenses associated with testing and maintenance of the certified vines. The goal is to get clean stock out in production.

Ruth Welliver referenced a paper from the Washington State IR-2 program that explained the financial benefits of clean stock. The report concluded that growers experience better and longer lived crops with clean stock. Bruce McPherson stated that extension groups use case studies to show growers the benefits of clean stock and the downside to a vineyard that is stricken with disease (leafroll).

Eric Amberg suggested that nursery costs for participation in a certified program could be reduced by block grant money paying for testing in G2 and G3 vineyards. Dennis Rak indicated that a cost comparison for maintenance of certified versus non-certified plant material would be necessary. The protocol required for maintenance of G2 blocks in the certified program would be a prerequisite to making the assessment. Deborah Golino suggested that it could be productive to retain an economist to work with the nurseries to put a cost on the protocol.

A speaker from the USDA will attend the Fruit Tree NCPN meeting in Denver on December 9 and the Western Grape CPN meeting in Davis on December 16 to discuss the block grant money. A call for proposals for the $50 million available
in FY 2009 should be issued in December, 2008, and the deadline for proposals is in March, 2009.

**Specialty Crops and Pest Risk Management Money**
The Pest Detection and Management provisions in the Farm Bill provide $4 million for 2009, $45 million for 2010, and $50 million for 2011. The CAPS (Cooperative Agricultural Pest Survey) is developing a plan on how to distribute the money. The provisions include money for state certification programs; Murali Bandla’s request for money for FY 2010 has been granted but the amount has not yet been set. There are also provisions for inspections in the plan.

This program is not considered an earmark in Congress because it is a national competitive program that provides useful research to growers. Nelson requested feedback about past usefulness of research to growers for use when speaking to members of Congress.

**Tier 3 Board Members for Eastern Grape Clean Plant Network**
The following have been elected to the Eastern Grape Clean Plant Network Board (Tier 3 level):

*Chair*
Keith Striegler (Missouri)

*Vice-Chair*
Marc Fuchs (New York)

*Industry*
Nursery representatives – Dennis Rak (Eastern states)
Larry Don Womack (Central states)

Grower representatives – Fred Frank (Eastern states)
John Held (Central states)

*Extension*
Mark Black (Texas)
Tim Martinson (New York)

*Research*
Tony Wolf (Virginia)

*State regulatory*
Carol Holko (Maryland)
David Johnson (Missouri)
The EGCPN charter should provide that any representative who misses three consecutive meetings shall be removed from the position.

**National (Tier 2) representatives**

The following Tier 3 Board members were selected to represent the EGCPN at the meetings of the National (Tier 2) Grape Clean Plant Network:

- **Nursery**: Dennis Rak
- **Grower**: John Held
- **Extension/Research**: Keith Striegler
- **State Regulatory**: Carol Holko

**Model regulations**

A group was appointed to draft model regulations for a state certification program for grapevines. That group is: Eric Amberg (Grafted Grapevine Nursery, New York), Tom Burr (Cornell University, New York), John Duarte (Duarte Nursery, California), Ray Johnson (CFIA, Canada), Bob Martin (USDA, Oregon), Tim Martinson (Cornell, New York), Susan McCarthy (CDFA, California), Ruth Welliver (PDA, Pennsylvania).

Murali Bandla asked for a draft of the regulations by March, 2009. He will provide feedback to the group from a NAPPO meeting on October 19, 2008.

**Announcements**

The NCPN Tier 1 Board will meet sometime after the first of the year, perhaps at the same time as the National Grape Clean Plant Network (Tier 2) meeting in January, 2009. The $5 million NCPN money for 2009 will probably be divided into $3 million for grapes and $2 million for fruit trees. The NCPN funding should be available by March, 2009.

Proposals for NCPN funding should be prepared by “existing programs” before March, 2009. Budgets should be included. Successful proposals will be implemented by way of memoranda of understanding (MOU).

The decision will be made by March, 2009, as to whether or not there will be CAPS (USDA) funding for state certification programs.

If any existing program needs funding for activities prior to March, 2009, that program should notify Murali Bandla.

An announcement will be released in November, 2009, that applications are being solicited for a Clean Plant Network coordinator at the USDA. The position
will be a GS 14 and will be stationed in Maryland. Bandla will see that the announcement is distributed by the LISTSERV.

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