

# May 2011

## Midwest Nut Producers Council Journal

### *The Newsletter for Professional Chestnut Growers in the Midwest*

## President of the Midwest Nut Producers Council

Membership of the MNPC welcomes the new President of the MNPC, Pete Ivory, chestnut grower in Lapeer, Michigan. He is the 6th president of the MNPC since the organizations founding in 1987. Previous presidents include Roy LaVerne Adkin (South Haven), Joe Lukasiewicz (Allegan), Bruce Smith (East Lansing/Central Lake), Robert Haack (Dansville/Central Lake), Roger Schultz (Vicksburg), and now, Pete Ivory (Hadley). Thanks Pete!

### President's Message



Finally spring is here once again. Spring to me means it's time to get back out into the orchard. Brush from winter pruning has been picked up from the orchard rows. The soil samples have been sent in to be tested and fertilizer amounts have been determined. Hopefully, if it doesn't snow, it can be applied this weekend.

Warm weather also makes me think about all the insects good and bad that live in and around the orchard. The one that concerns me most is the gall wasp. I know that we have a good chance of managing most of the insects in our chestnut orchards. Gall wasp isn't one we have a handle on just yet. Grafted chestnut trees or chestnut seedlings shipped in late fall or early spring can be infested with gall wasp without any visible signs. This has been proven by researchers in Europe. At this time, there are no chemical controls for a gall wasp infestation. Chestnut production and tree health will take years to recover if left to Mother Nature's healing hand. I am planning on adding more grafted chestnut cultivars this year. Before I bring the new trees into my orchard I will verify the nurseries are free of gall wasp.

I was curious about the gall wasp's effect on The American Chestnut Foundation's reforestation project in the U.S. I made a couple of phone calls to the TACF and asked if they had been adversely affected by the gall wasp. Their answer was YES. One of their breeding sites had almost no nut production last year. The orchard had been infested with gall wasp from seedlings that were planted one to two years prior. The gall wasp was found in other states by TACF members as well. These chestnut plantings were supplied by one chestnut grower whose job was to supply the TACF with chestnut seedlings. The TACF is no longer using this grower as a chestnut seedling source.

On a more positive note, the cool wet spring most Michiganders loathe make a chestnut tree grower grin. The trees aren't pushing yet and that may help us escape a late frost.

On April 9, 2011 the research committee for MNPC met and discussed potential future research projects that MNPC could help fund.

Best wishes for the new growing season.

Pete Ivory  
President MNPC  
Hadley, Michigan  
April 2011

## **MNPC Initiates New Grants Program**

With matching funds from MSUs Rogers Reserve Endowment, the MNPC will now be able to solicit grant proposals from researchers at MSU. Once the MNPC grants committee designates the proposal or proposals to be funded, the MNPC funds will be granted to the principal investigator of the project and the Rogers Reserve funds will be used to match the MNPC contribution, in effect doubling the groups granting power. A call for proposals has been sent to the researchers and they will be submitting proposals to Pete Ivory, President, who will pass them to the MNPC grant committee for review and approval or rejection. The lucky principle investigator(s) receiving the funds will have one year to do their proposed research.

## **A Contest for a New Cultivar Name**

In the Rogers Reserve website ([www.rogersreserve.org](http://www.rogersreserve.org)) a mistake was made in the description of a suggested cultivar for Michigan chestnut growers. In fact, Forrest Keeling is adding this cultivar to their line up of selections for sale this fall. Norm Higgins simply called it, 'J160' based upon the row in which it was planted. Forrest Keeling is currently calling it 'J160'; and the website calls it 'J160', 'Labor Day' and 'Michigan Early'. However, that will soon change with your help. All three of those names are appropriate, but three names for one cultivar will not work! As we prepare to register this cultivar with the International Horticulture Society, we want the best name possible.

Therefore, we are announcing a contest that could give an MNPC member a place in immortality: Name the New Cultivar Contest. Read the description of this new cultivar for Michigan growers and read about its single most important genetic trait and give it a cultivar name; preferably a name that makes some sense as to its known characteristics.

We will collect cultivar names from paid-up MNPC members until July 1, 2011. You may submit candidate names as many as you want. Then we will put all of the names on a ballot and send the names out to the MNPC membership for voting. You will only be able to vote once. Only current MNPC members can suggest names. We will send the ballots out to the MNPC members who will have the month of July to vote. Your name will not be associated with the

nomination on the ballot. If your suggested cultivar name wins, you will receive four grafted chestnut trees from Forrest Keeling at no charge this fall as your reward. The cultivar name will be submitted to the International Horticulture Society for official recognition for this new cultivar. Norm Higgins will receive credit for its discovery. If your contribution is voted to be the winner, your cultivar name will be immortalized and you will have four grafted chestnut trees for your efforts! Please send your submission to Dennis Fulbright, Professor, MSU Rogers Reserve, 8072 S. Jackson Rd., Jackson, MI, 49201. To find the cultivar description, please go to [www.rogersreserve.org](http://www.rogersreserve.org). Pull down the "Chestnut" menu at the top. Then choose "Growing Orchard Chestnuts". Then go to Suggested Cultivars for Michigan on the right side menu. Read about 'J160' and give then enter the contest. Under "Chestnut" (where you are now) Go to "Growing Orchard Chestnuts" and finally "Suggested Cultivars for Michigan" or click here ([http://www.rogersreserve.org/index.php?option=com\\_content&view=article&id=150&Itemid=214](http://www.rogersreserve.org/index.php?option=com_content&view=article&id=150&Itemid=214)) . Good luck!!

Want to be a member? Membership forms are attached. Go to "Chestnuts" on the top of the home page and pull down "Midwest Nut Producers". After that click "Membership Form".

## Grafting Workshop Filling Up Quickly

Seats are quickly filling up for the annual Grafting Workshop to be held Saturday, May 14th at the Rogers Reserve. The workshop will be begin at 9:00 am and cover scion preparation, cutting, joining, and care. If you do not know how to graft trees and wish to be a chestnut orchardist, you should plan to attend this workshop. You will take home apples that you will graft after you learn the basics. Grafting knives, machines and other supplies will be provided, as will lunch. The afternoon will consist of top-working large trees in the field. This will be its 11th and possibly its final year. After 5 years on campus we took off for three years in Traverse City and three years in Petoskey. Midwest Nut Producer Council members will receive \$15 off the workshop cost of \$50. This may be our last workshop.



**Workshop Fee:** \$35 for MNPC members and \$50 for non-members

*All required items for this workshop will be supplied, but if you have a grafting knife, you may wish to bring it.*

**Start/End Time:** Registration - 8:30 to 9:00 AM; class starts at 9:00 AM, ends at approximately 5:00 PM

**Location:** Rogers Reserve, 8072 S. Jackson Rd. Jackson. [www.RogersReserve.org](http://www.RogersReserve.org)  
To find the directions from you location, go to the “Home” page and click on “Directions”

## **General Workshop Agenda**

**Introduction/Orientation** - 1 hour lecture on grafting, purpose of grafting, what will be seen, and what will be done in this workshop.

**Group Work** - Participants will be divided into groups to practice cutting and joining techniques. The number of groups will depend on the number of students in the class.

**Lunch** – Lunch will be provided as part of the course.

**Individual and Group Exercise** - Participants will be provided apple root stock and scion wood from a large selection of apple cultivars. Using all of the different methods, participants will be able to graft the apple rootstock with a favorite cultivar selection to take home. Up to 8 rootstocks will be available for each student.

**Large Tree Practice** - Participants will travel to another location to practice "top working" of older, non-productive, ungrafted, wild, chestnut trees that the landowner says have rarely produced nuts . After a demonstration, a branch on a tree will be assigned to you and you will graft the limb with guidance.

**Dress** - Participants are encouraged to wear appropriate clothing since part of the class is outdoors. Be prepared for cool or inclement weather. Sharp tools will be used.

## **In the Chestnut Orchard with Mira**

### **May: Spider Mites, Small In Size But Major Headache For Michigan Chestnut Growers**

By Mira Danilovich, Michigan Fruit Tree Extension Educator  
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### **Background**

Who can forget the bronzed and off colored leaves from last summer? A closer look revealed hefty colonies of spider mites...most commonly, European red mites (*Panonychus ulmi*). This mite is native to Europe and was first introduced to North America in 1900s. Since then, this tiny arthropod has established itself throughout the United States and Canada and become an economically most important pest.

The European red mites overwinter in egg-form. Egg masses are found in crevices, in rough bark, in crotches usually in folds of bark inclusion, on branches and in the bud scales. Eggs are very easy to spot “sprinkled” on the trees resembling red paprika.

Summer eggs are found on the leaves along the veins on both sides of the leaf, but mainly on the underside. Eggs are orange-red, look like turbans. Once the eggs hatch nymphs move onto the young leaves and start feeding on the underside. First generation takes a bit longer to develop,



about three weeks, since it has to battle cool temperatures in the early season. Summer generations, driven by the hot and dry weather are completing their cycles much faster, in about 10 days or so. Under favorable weather conditions (hot and dry) they can have 8 or more generations in one season.

Feeding injury is cumulative. Leaves appear mottled, stippled, and in

more severe cases bronzed, burned leading to early defoliation. Injured leaves have reduced photosynthetic activity leading to reduced nut size, and return crop load potential as well as increased sensitivity to winter injury.

## Management

Mite control starts with monitoring early in the spring looking for the overwintering eggs and assessing the potential mite pressure. Dormant or delayed dormant oil application is the most effective time to control mites. Use of highly refined oils known as “Superior Oils” is



recommended. There are several trade names for them like, Sun Ultra-Fine Oil, Sunspray, Superior 70 Oil, Supreme Oil, Trilogy (neem product), etc. Good coverage is essential for successful control.

Severely stressed trees should not be sprayed with the oil. Generally, if there is some stress involved, the rate should be cut

down to 1 ¼%. Normally, it is safe to spray 70 seconds oil at 1 ½% to 2% rate. If there is temperature above 75-80<sup>0</sup>F the rate should be dropped to 1 ¼ to 1%. It is not advisable to spray oil when the temperature is much above 80<sup>0</sup>F. High humidity (above 90%) may result in increased injury potential while low humidity allows for faster oil evaporation and lower injury potential. If there is an insecticide in the spray mix, the oil concentration should be dropped to 1%.

When working with oils it is important to pay attention to the pressure and agitation. Spray should be done at lower pressure i.e. 100 PSI (never to exceed 300PSI). Otherwise, the oils can be “driven” into the tissue resulting in significant phytotoxic “burn” injury and potential dieback. Damage may and will also occur if the sprayer agitation is not working properly. Under this scenario, the oil will tend to separate and result in non-uniform concentrations on the plant with possible “burn” injury.

Summer mite management is based on monitoring/scouting procedure and use of miticides. Monitoring involves examination of 10 leaves off of 10 trees randomly selected throughout the orchard. Leaves should be collected from four sides of the tree. With the help of hand lens (10X or 20X), all stages of pest and predatory mites need to be counted. Determine average mite count per leaf. Threshold or the number of mites per leaf that tree can tolerate without having too much problems that would cause economic losses, varies with time of year. Control application is recommended if the average mite count exceed 5 mites per leaf. In the summer (August-September), leaves are larger, more mature and more tolerant to mite injury threshold is 7-10 mites per leaf.

**Materials available for mite control on bearing trees:**

Trade Name	Chemical Name	Rate per acre	Insects controlled
<a href="#">Acramite 50WS</a>	Bifenazate	0.75-1.5 lb	Mites
<a href="#">Dimethoate 4E</a>	Dimethoate	2/3 pt	Mites, leafhoppers, aphids
<a href="#">Zeal</a>	Etoxazole	2-3 oz	Mites
<a href="#">Nexter</a>	Pyridaben	4.5-5.2 oz	Mites, leafhoppers, aphids, weevils
<a href="#">M-Pede</a>	Potassium Salts of fatty Acids (soap)	1 to 2% v/v solution	Mites, thrips, beetles, plant bugs, aphids, scale, caterpillars, adelgids, gipsy moth
<a href="#">Envidor EC</a>	Spirgdiclogen		Mites
<a href="#">Aza-Direct</a>	Azadiractin	1-2 oz	
	Neem product		Mites, scale, aphids, beetles, bugs, caterpillars etc.

## **Coming in June 2011**

**Look for these interesting subjects in the next MNPC newsletter (June):**

**Learn how chestnut blight** is being naturally controlled by nature in Michigan and how we are trying to harness this natural bio-control for our orchard chestnut trees.

**Because Forrest Keeling nursery**, the nursery that is beginning to graft and sell some of the Michigan cultivars, is recommending fall planting for their trees, we wanted to test fall planting. Therefore, in the fall 2010, dozens of grafted trees were sent to Michigan to test fall planting. The trees were planted by growers around the state and by MSU researchers. Actually we are looking at how the freshly planted roots will survive the winter. Read the June newsletter to find out how well these trees faired around the state.

**And of course, Mira will be in the Chestnut Orchard** and provide us with updates regarding the season.