

Vol. 12, No. 4

Published by Chestnut Growers of America (CGA)

Fall 2010

Exploring the Future of the Chestnut Industry

Dennis Fulbright, Michigan State University

Where is the chestnut industry going and how will it get there?

The future of chestnut as we all know is a moving target combining the accumulating knowledge of growers in four areas: A. Germplasm and planting stock; B.



Above and right: Attendees of the Midwest Chestnut Farm Conference, Clark Lake, Mich., Aug. 21-22.



Horticultural care and orchard management; C. Harvest, storage and quality

control; and, D. Marketing. These four knowledge areas require regular visitation by growers if they are to be growing the highest quality chestnuts for their particular markets.

In this is	sue:
------------	------

Future of the Chestnut Industry	1
Photos Needed!	1
Selling Strategies	3
Compost for Orchard Establishment	4
Alert: Blight Found in Australia	5
What I Wouldn't Do Again	5
Farm Visit: A Growing Interest	6
Chestnuts Roasting Virtually	10

To approach these issues, the Midwest Nut Producers Council in concert with Michigan State University and The Center for Agroforestry at the University of Missouri sponsored the Midwest Chestnut Farm Conference in Clark Lake, Mich., a couple of miles from the new MSU Rogers Reserve Endowed Research Farm. The research farm is the center of activity for chestnut research in Michigan.

On the weekend of Aug. 21 and 22, about 45 growers, researchers and extension educators met to discuss a list of priorities set up earlier in the year by Michigan chestnut growers. At this meeting, Michigan State University and University of Missouri researchers told the audience what they are attempting to discover in terms of the list of priorities and requested feedback from those present.

(cont. pg. 8)

Photos Needed of Your Chestnut Roasters in Action!

A presentation at The Center for Agroforestry's final 2010 chestnut growing workshop by Debbie Milks and Charlie NovoGradac opened my eyes to the fact that there are many, many different contraptions for roasting chestnuts out there! Chestnut Charlie often uses, for example, a rotating basket similar to a rotisserie cooker.

What are some of the options you have at your disposal when you roast chestnuts? Please send photos and a short description of your roasters, where you bought them or how you made them, and the pros and cons of each, for a photo essay in the Winter 2011 issue of The Chestnut Grower! Deadline is Jan. 5.

Thanks in advance! We look forward to sharing these options and ideas. Chestnut growers are a very creative bunch! *CGA*





A Message from the President

Mike Gold The Center for Agroforestry University of Missouri

Fall, the time for chestnut harvesting and marketing, has arrived. As I write, chestnut growers across the U.S. are busy picking up the fall crop by hand, with nut wizards and with mechanical harvesters; washing and sanitizing their crops (tossing out the "floaters"); sorting chestnuts into size classes; refrigerating them; and moving their production to market through many different channels. Remember always: Quality is key.

The longer I work with chestnuts and chestnut growers the more I realize how much knowledge is required to run a successful chestnut-based business.

To help you with marketing ideas, in this issue we have reprinted an excerpt from a University of Missouri Extension publication that is focused on "Selling Strategies for Local Food Producers." While many CGA members are superb marketers, some growers are new to the chestnut marketplace and sharing sound marketing ideas helps all of us to succeed.

Every chestnut grower has an interesting story to share and Sally Weed, CGA member from California, shares her story in this issue.

Dennis Fulbright of Michigan State University and his Michigan-based colleagues hosted the Midwest Chestnut Farm Conference in Jackson, Mich., in August. In addition to researchers and growers from Michigan, other individuals from Missouri (MU and Forrest Keeling Nursery) and Indiana (Notre Dame) attended and shared information. In this issue he recapitulates the activities and hoped-for outcomes from the conference.

I wish all CGA members a bountiful and lucrative 2010 harvest.

CHESTNUT GROWERS OF AMERICA BOARD OF DIRECTORS

PRESIDENT Mike Gold (573) 884-1448 e-mail goldm@missouri.edu VICE PRESIDENT Bill Nash (517) 651-5278 e-mail nashfarm@shianet.org SECRETARY-TREASURER Ray Young (360) 887-3669 e-mail ray@chestnutsonline.com DIRECTOR Bob Wallace (386) 462-2820 e-mail chestnuthilltreefarm@gmail.com DIRECTOR Dennis Fulbright (517) 353-4506 e-mail fulbrig1@msu.edu DIRECTOR Lee Williams (509) 765-3922 e-mail techestnuts@scml.us DIRECTOR Sandy Bole (503) 625-1248 e-mail BenBole@aol.com

Newsletter Editor: Mike Gold (573) 884-1448; goldm@missouri.edu Newsletter Coordinator: Michelle Hall (573) 882-9866; hallmich@missouri.edu

NOTICE

The Chestnut Grower is published quarterly by the Chestnut Growers of America at 203 ABNR, Columbia, MO 65211. Copyright 2010. Original articles may be reprinted with written permission of the author and this publication.

Web site: www.chestnutgrowers.com

Single membership is \$30 per year per person, household membership is \$40 and associate membership is \$50. Members receive The Chestnut Grower quarterly. For foreign delivery contact the Editor for pricing. Back issues may be obtained by members. Membership applications may be obtained from the Secretary-Treasurer.

POSTMASTER

Send address changes to CGA, c/o PO Box 841, Ridgefield, WA 98642.

ADVERTISING RATES

Full page, camera ready (w/1 photo) . \$20.00
Half page, camera ready (w/1 photo)15.00
Quarter page10.00
Business card (4 issues)15.00

One classified ad per member per year is free (max. 6 lines, \$2.50 ea. add'I 6 lines). Ad space may be reserved with full payment but must meet established deadlines. For more information and specifications, contact Michelle Hall at (573) 882-9866 or hallmich@missouri.edu.



PUBLICATION DEADLINES

Fall issue deadline 9/15 mailed 10/15 Winter issue deadline 12/15 mailed 1/15 Spring issue deadline 3/15 mailed 4/15 Summer issue deadline 6/15 mailed 7/15

The Center for Agrofor



Selling Strategies for Local Food Producers

adapted from MU Extension guide G6222 by Bill McKelvey, department of rural sociology; Mary Hendrickson, department of rural sociology; and Joe Parcell, department of agricultural economics

For many farmers, marketing and selling their products are the most challenging parts of the farm enterprise, especially when selling directly to consumers. However, direct markets for fresh and unique food products are among the most rapidly growing farm opportunities. People around the country are looking to buy tasty, healthy food directly from farmers – farmers with whom they can talk, ask questions and build relationships. However, these

Checklist: Are you ready to sell?

Being prepared to sell is essential. You should have the basics covered before you open for business or make a sales call.

- * Product quality Is your product fresh, clean and ready for sale? Are samples prepared?
 - Price Is your product priced fairly and competitively? Is your price list accurate and up-to-date?
- * Display

Is your display neat, accessible and attractive? Are prices clearly marked? Is the name of your farm displayed on boxes, banners or signs?

* Supplies

Do you have plenty of shopping bags? Do you have enough cash to make change? Is your scale in good working order? Are farm pamphlets and recipes available?

* Personal appearance

Are you clean, neat, well dressed and well groomed?

* Attitude

Are you proud of your products and what you do for a living?

* Service

Are you ready to be personable and helpful? Do you have a plan for handling complaints? Do you have a good invoice system?

* Gratitude

Are you thankful for your customers and the opportunity to serve them?

new market opportunities, particularly in farmers' markets, community supported agriculture (CSA), roadside stands, restaurants and cooperatives, require expertise in selling as well as marketing, production and financial management.

The guide "Selling Strategies for Local Food Producers" from MU Extension, expands on many aspects of selling your product direct, whether at farmers' markets or to chefs at local restaurants.

The guide says it is important to remember that selling skills – just like other skills – can be learned. However, selling is just one part of a successful direct-marketing business. Good production skills and superior postharvest handling techniques can ensure high-quality products that command premium prices. Likewise, a thorough knowledge of your farm's financial condition can ensure that you employ the right pricing and advertising strategies to gain the most profit.

The guide lists ways to build relationships with your customers; discover your customers' needs and preferences; be an advocate for your products; and provide quality service.

Tips include finding someone in your family or hiring someone if you do not feel you are outgoing enough for direct marketing. However, place reasonable expectations on yourself and others; it is guaranteed you will not satisfy everyone all of the time.

Research the latest consumer trends, particularly by reading lifestyle magazines. Look for information about the types of products you sell. Stay abreast of the latest developments in direct marketing and farming.

Sharing recipes is another great way to promote your products, especially if they are new or unique [which chestnuts definitely can be to many consumers!]

Give customers a reason to visit your booth again and the opportunity to become preferred customers. Offer a sample of your own product with an appropriate promotion to bring them to your stand the next week. (**cont. pg. 5**)



Compost for Orchard Establishment

from the December 2008 issue of the Australian Nutgrower by Katie Webster, Compost for Soils, Stirling, South Australia

Editors' note: MU has not conducted any research on the subject of using compost for orchard establishment. This subject is an interesting idea we are sharing for your information.

Orchard establishment is a crucial time and can shape the future of your production for many years to come. [*Editors' note:* Start by matching your crop with the proper soils. This is absolutely critical.] Compost can help young trees get off to a good start by protecting and improving the topsoil and allowing roots to become established more quickly.

Incorporation of compost at planting

Increasing the amount of organic matter around the rootzone of young trees can assist with retaining water and nutrients in the rootzone. This is also an ideal time to undertake soil testing to determine if other amendments, such as lime and gypsum, are required. These amendments can act more effectively when incorporated with organic matter. The increased biological activity commonly seen with the use of compost can soften [aerate] the soil, allowing young roots to grow more freely, and improve and maintain soil structure for years after incorporation in the soil.

Australian research has demonstrated these benefits in newly planted almond, apple and citrus orchards. Within 18 months of planting, measures have shown that young trees treated with compost developed thicker trunks and more height than their untreated neighbours.

Current recommendations

Compost used for soil incorporation should always be fully composted and stablised. As this material will come into direct contact with plant roots, it must be of high quality and not phytotoxic (toxic to plants). Phytotoxicity can occur if compost is not pasteurised or composted properly. The Australian Standard for composts (AS4454) includes tests for phytotoxicity. Ask your compost processor to provide a recent analysis of the material indicating how it meets the standard.

For orchards where the nuts are shaken then swept from the orchard floor, compost quality will be particularly important. Compost must be free of physical contaminants such as glass fragments, which could be swept and taken up with the crop. This caution applies not only to composts derived from urban curbside collections – lighting and heating bulbs in intensive animal production often 'blow,' contaminating the manures with glass fragments. To ensure you are satisfied with the standard of composting, take a tour of the processing site with the operator. You may find that your processor is able to customize the compost to your needs, with additives such as lime and gypsum incorporated into the compost.

Another important quality of compost for soil incorporation is the carbon to nitrogen ration (C:N). This ratio should be below 20:1 to ensure that there is no "nitrogen draw-down." Nitrogen draw-down occurs when there is not enough nitrogen in the compost to allow breakdown of woody particles. Soil microbes draw nitrogen from the soil to break down this material, meaning less is available to plants.

Soil incorporation at establishment - Applications of quality compost which give a 20-25% concentration once mixed in the soil have been shown to be beneficial. While detrimental effects with higher application rates have not been seen, additional benefits have not been shown either. Compost can be applied in a band 50cm [20 inches] wide along the planting row and cultivated into the top 10-25cm [4-10 inches] of soil. The quantity of compost required will depend on row spacing; for example, to apply a 50cm [20 inches] band, 5 cm [2 inches] deep to an orchard with a four metre row spacing would require about 60m³.

During mound formation and following ripping -

Composts can also be incorporated during formation of mounds at rates of 60-100m³/ha and to assist maintenance of soil structure following ripping and cultivation at rates of 5-20t/ha.

Incorporation in planting hole - The recommended rates and benefits of compost applied in the planting hole are not as well established by Australian research. Incorporation of 5L [21 cups] in the planting hole has been shown to give good results for vineyard establishment, although results have been variable (**cont. pg. 11**)



Alert: Blight Found in Australia's Ovens Valley

According to Chestnuts Australia Inc., chestnut blight has been detected on two properties in Ovens Valley near Myrtleford in northeast Victoria, Australia.

Ray Young, Secretary/Treasurer of Chestnut Growers of America, shares "there are probably as many chestnut trees in that valley as the entire U.S."

CAI's Web site says a grower and community meeting was held Thursday, Sept. 16, 2010, at the Savoy Club, Myrtleford. CAI and the Department of Primary Industries presented all the current facts to date regarding the fungus and procedures being adopted to determine the extent of the disease and how it can best be managed and contained.

CAI has appointed a Chestnut Blight Incursion Taskforce to ensure the industry can respond quickly and effectively to the many challenges that lie ahead, CAI President John Morton said.

DPI strongly encourages growers to request a survey of their orchards.

CAI's Web site is being continuously updated. Go to http://www.chestnutsaustralia.com.au/

What I Wouldn't Do Again

66 We do not have a What I *Wouldn't* Do Again to offer for this issue. We know all of you are busy with harvest and marketing and probably just didn't have time to write something up! So that means we hope to see a lot of submissions in time for the winter issue!" CGA

Don't look now but we've posted each and every "What I Wouldn't Do Again" online at the University of Missouri Center for Agroforestry Web site. Now you can browse these tips anytime. Go to http://www.centerforagroforestry.org/ pubs/chestnut/index.asp to see them all!

Selling Strategies (cont. from page 3)

It's also very important to remember to ask for the sale – many sales don't happen with out it! Be specific rather than general. Assume the sale by asking questions that will make a sale regardless of the answer. The best questions include two choices with no negative outcome (i.e., no loss of sale). For example, rather than asking, "Would you like to buy some chestnuts?" say "Would you like just one pound of chestnuts this week, or would you like to take an extra pound to have on hand?"

Finally, make a concerted effort to evaluate and improve your service. Record yourself during busy times with a video or audio recorder. Listen to and watch other vendors. Tour other markets, visit other roadside stands, or go to the supermarket to check their selection, display and prices. Put yourself in the customers' shoes and think about your business from their perspective. Some businesses measure customer satisfaction through customer surveys, meetings with customers, or customer complaints and compliments. The goal is to reflect on both successes and failures and be willing to change.

The guide also has suggestions for creating printed and online materials; understanding nonverbal communication; the top five annoyances for farmers' market customers; and building relationships with chefs.

To learn more about selling strategies for local food producers, see the entire guide online or purchase a print copy at https://muextension.missouri.edu/publications/ DisplayPub.aspx?P=G6222 *CGA*



A Growing Love for Chestnuts

Q-and-A with Sally Weed, owner of Weed Farms Corporation, Gridley, Calif.

How long have you been in the chestnut business?

I have been involved with chestnuts for the last five years. Last year, I really increased my involvement and started selling my nuts directly to local restaurants and at the farmer's market in my town square. However, the bulk of our yield gets shipped to the East Coast.

Did you plant your trees or did you acquire the land after planting? What age are your trees?

My trees are situated along the Feather River in Northern California

(very northern tip of the Sacramento Valley), and I have been told the top soil is extraordinarily deep. The original owners of the property were named Tanimoto and the brothers were known for forward thinking and innovation in their farming. They were instrumental leaders in the development of the kiwifruit business in California in the early '70s, and they were (and perhaps still are) true innovators. They identified chestnuts as an up-and-coming possibility and decided to convert a portion of the kiwi vineyard over to chestnuts. They did this by interplanting the chestnuts into the kiwi and then removing the kiwi





Top: Jack in the orchard. Above: Jack and Queenie. The dogs are a breed called McNab, a subset of the Border Collie, named after a breeder and rancher in northern California. They are smart, catlike on their feet and great farm dogs, Sally Weed said. Photos by Caitlin McCaffrey. Right: Weed in the orchard. Photo by Weed Farms ranch manager, Desta Bechtol Lair.



and thinning the chestnuts over time so the land could still be productive during the long start up period for chestnut production. I still have 7.5 acres of their original kiwi vines. They are fantastically beautiful also, especially the male vines, which tower over the female plants and form thick, contorted trunks. The oldest of the chestnut trees (15 acres) are over 25 years old. My late husband, David, purchased the ranch from the Tanimoto brothers in the late '90s and formed the Weed Farms corporation. He simultaneously developed a small wine grape vineyard in the Dry Creek Valley (Healdsburg, Calif.). He found excellent partners (Wil-Ker-Son Ranch and Packing Co.) in carrying out the chestnut and kiwi farming, as he lived in the Bay Area and wasn't on site. In 2007, we moved to Healdsburg full time with the idea that we would get involved with the vineyard (**cont. pg. 7**)



A Growing Love for Chestnuts (cont. from page 6)

and the ranch more directly. When he died in 2008, I became the President of Weed Farms. I feel especially connected to the area as it is extremely close to where my family settled in the mid-1800s (also within sight of the Sutter Buttes, but in the Marysville/Yuba City area). Like so many people, our family gravitated over time to the nearest larger city (Sacramento). My father told stories about having to pick peaches as a young man, but by the time I was around, we simply brought lugs back home after visiting relatives. So, to me it was about the smell of peaches wafting from the back of the station wagon, and a feeling of wishing I knew what it was like to live on a farm. I think there were a lot of stories because the experiences with farming are so sensory and 360 degree. I am envious of my colleagues who can step out the front door and walk the orchard, but at the same time it is probably a lifesaver for me that I have to drive a while to do that! I don't live on the ranch itself (in fact I am more than two hours away!) I appreciate being aware of the seasonal changes and visit as often as I can. I am thinking of installing a webcam on top of our processing shed so I can see the progression of the crop through the seasons.

How many acres/trees do you have? Cultivars? If yes, what kind?

I have 22.5 acres of Colossal chestnuts, with Silverleaf and Nevada pollinator trees.

What got you interested in growing chestnuts? What has been rewarding? What has been challenging?

Well, I came into the role in a sideways fashion, since previously my experience with growing was on the scale of a home garden. It is rewarding because I have learned so much, and know I have so much more to learn. It is also rewarding because we live in a time where people from all backgrounds, cultures, and access levels are focused on where their food comes from. People are interested in the integrity of our motivations as growers. I think it means something when a grower loves land, plants, food, trees and is delighted by the product he or she is associated with. (**cont. pg. 8**)

BOND ORCHARD SELECTIONTM Chestnuts



Working with the University of Missouri Center for Agroforestry, I have, over the last 17 years, established a very successful Chinese chestnut orchard whose germplasm produces quality

chestnuts with hybrid vigor and large tasty nuts.

Forrest Keeling Nursery in Elsberry, Mo., grows outstanding seedlings – with its patented Root Production Method (RPM) – that reach heights of 3-5 feet the first season, and have produced dozens of burs in the third year following outplanting.

– Kit Bond

For more information, contact Forrest Keeling Nursery, 800-356-2401 or info@fknursery.com

Or join us at Forrest Keeling Nursery's Great River Road Chestnut Roast, Elsberry, Mo., Oct. 30

kitbond.com • fknursery.com





A Growing Love for Chestnuts (cont. from page 7)

Have you encountered issues such as grafting failure, insects, disease, irrigation problems, etc.? What have you learned? What's worked; what hasn't?

The most recent issue we have had relates to irrigation and frost protection, and the sizing and location of the pumps. The pumps we had in place were old, and were sized probably based on their original (kiwifruit) demands. There have been a lot of improvements in the efficiency of pumps in recent years, as well as the ability to have variable speeds, etc. So, after consulting with a local pump company we resized our two pumps so that we had more control and more options over the area we needed to cover. I still need to analyze whether this has been cost effective energy-wise.

How many pounds do your trees typically produce?

Since we have three age groups (15 acres at 25+ years, and 7.5 acres in 15 years and juvenile trees) I can only speak to the total harvest, which would be around 50 tons for a season.

What is your harvesting method?

We harvest with a sweeper, into lugs which then get fed into our huller and on down to the sizing tumbler. From the tumbler we glean Jumbos out the end and XLarge, Large, Medium and Smalls into lugs by size. They are bagged into 25-lb. bags (typical type for nuts or onions)

and stacked 100 bags to a pallet. The pallet is wrapped and they go immediately into the walk-in (or should I say drive-in because the one at Wil-Ker-Son is so huge?) until they are shipped.

What is your marketing method?

The bulk of marketing for my nuts has been handled by our farming partners, Wil-Ker-Son Ranch, in Gridley. They are very close by, and do a lot of business so that we are able to make use of their existing distribution networks. They are growers (kiwifruit, sugarplums, etc.) and they also process and pack for many other growers and crops. It is an amazing thing to be on site when the sugarplums are coming in, getting chilled and loaded onto the semis to make it to the port of Oakland in time for a scheduled overseas departure. Wil-Ker-Son is still a family operation, even though the scale is quite large. It makes me grateful that our season is relatively short and (relatively!) sweet.

For the last several years, I have been selling a very small amount of our chestnuts locally through my town farmers market and also to local restaurants that appreciate the quality of fresh chestnuts. Since there is a fair amount of work involved in handling/prepping chestnuts for use, and a good chance of mishandling, I'm selective in the ones I approach. But luckily I live in a place (Sonoma County, Calif.) where we have a great number of truly outstanding chefs. I think this is true all over the country, but I can only say to any doubters...come here and eat out!

D^o you produce any value-added products?

No, I don't do any value-added products at present, but have an interest in exploring it. I was inspired after the CGA conference to work a little on the idea of doing chestnut flour, or at least dried nuts. It just makes sense with transportation costs being what they are and the heaviness of fresh product. I am most interested in dried chestnuts, chestnut flour and possibly chestnut honey. *CGA*





Future of the Chestnut Industry (cont. from front page)

Eleven researchers, two extension educators and four graduate students presented their current research programs on chestnut:

- Professor Mike Gold (MU) covered the Missouri chestnut research program including marketing, grower surveys and cultivars
- Professor Dan Guyer and graduate student Irwin Donis-Gonzalez (MSU) covered chestnut harvest and quality enhancement technology
- Professor Jeanne Romaro-Severson (U. Notre Dame) covered the complex issue of chestnut genetics and cultivars
- Graduate student Carmen Medina-Mora (MSU) covered chestnut pollination
- Professor Michele Warmund (MU) covered secondary bur production, budding and cultivar performance
- Associate Professor Andrew Jarosz (MSU) covered chestnut blight and the biological control called hypo-virulence
- Assistant Professor Jianjun Hao and graduate students Lucy Lu and Howard Liu (MSU) covered research on by-products found in chestnut shells
- Assistant Professor Eva Almenar (MSU) discussed studies on chestnut packaging
- Assistant Professor Brent Ross (MSU) talked about surveying growers on the bottom line in terms of making money on chestnut farms
- Extension educator Mira Danilovich (MSU Extension) covered the development of spray calendars and extension communications
- Professor Dennis Fulbright (MSU) spoke on chestnut quality and an unexplained kernel rot
- Extension educator Phil Tocco (MSU Extension) discussed good agricultural practices as they apply to the industry.

In addition, special guests Wayne Lovelace and Kim Young from Forrest Keeling Nursery, Elsberry, Mo., spoke on the Root Production Method (RPM) rooting system patented by Forrest Keeling and the program they are setting up with Michigan State University for chestnut germplasm production for the Midwest.

It was a busy two days. Saturday night everyone came over to the research station and saw the new

chestnut scoring machine that had just arrived from Italy. (See photos, right.) We found out it does not perform well in high humidity, but it has done a great job when

everything is kept dry. We were hoping to show the new chestnut harvester C180 from FACMA in Italy, but it arrived later the next week.

(cont. pg. 11)

Right and below: Different views of the Boema chestnut scoring machine. The equipment was recently purchased from Italy by the Michigan cooperative, Chestnut Growers, Inc.









Chestnuts Roasting In the Virtual World

Welcome to the 21st century! It seems you can spend a bit of time looking for your favorite band's latest video on YouTube. That clip from that movie you love. Today's viral video.

There are also a lot of "how-to's" for the do-it-yourselfer. Roasting chestnuts is definitely one of them!

I spent a bit of my time checking out the top chestnut roasting videos. Some are pretty good, some made me shake my head a bit, but one thing's for sure – everyone has their own method!

Reviewing many current YouTube how-to videos it is clear CGA needs its own video series to help both chefs and consumers do a better job roasting chestnuts. Ex. Step 1 - Do not cut an "X" on the flat side, etc. (There are much better ways to prepare chestnuts for roasting.)

Here's a short round-up, but have fun tracking them down yourself too (just type "roasting chestnuts" or something similar in the search box), when you get a minute, like say in January!:

*Done by About.com. Pretty factual, at least from our perspective (and man do those chestnuts look fresh and delicious!) although he suggests using a bread knife instead of a chestnut knife. I'm not so sure about using a long, serrated knife for this, but it looked pretty easy when a professional chef did it!: http://www.youtube.com/watch?v=Vm6_P4_KJT4&feature=fvst

*Oops, he used a photo of a buckeye in one shot!! Suggested dipping the finished, roasted product in sour cream at the end. Never heard of that but sounds interesting! But his nutrition info, etc., seemed spot-on: http://www.youtube.com/watch?v=HVbLIACvWyg&feature=fvst

*Can't say he makes scoring the nuts look too easy! (But I guess it's not, so that's probably good!) Nice music, no speaking, just words on the screen: http://www.youtube.com/watch?v=AYOxcled5HE

*Never seen a chestnut cutter hand tool in action – pretty messy!: http://www.youtube.com/watch?v=LpKB-3RtI-0

*Yay! This one looks to use a chestnut knife. Suggests squeezing the finished product in a kitchen towel to loosen the shells – interesting!:

http://www.youtube.com/watch?v=m8sz2rwM5kk CGA

(There are also quite a few videos detailing what happens when you forget to score chestnuts before roasting. I'm sure we all know this, but, YES! they really do explode!)



Compost for Orchard Establishment (cont. from page 4)

in other trials and some phytotoxicity has been observed. Current recommendations for German vignerons suggest a 1:2 or 1:4 concentration of compost to be incorporated into the planting hole. For orchard establishment, a quantity which give a 20-25% concentration once mixed with the soil may be beneficial.

Compost mulch

Australian experience has demonstrated the value of using a compost mulch to protect newly planted trees. The roots of young trees are confined to the upper soil when first planted, and are susceptible to the extremes of temperature and moisture which occur in this zone. Compost mulches protect the topsoil, insulating it from extremes of temperature and conserving moisture around the rootzone of the young tree. Trials have shown that young trees can grow faster (as measured by trunk diameter) when protected by a compost mulch.

Growers of nut crops where the nuts are shaken then swept from the orchard floor should carefully consider the pros and cons of using a mulch in this situation. The mulch must fully break down before the trees reach an age where harvest commences, to avoid sweeping up 'sticks' with the crop, and the compost must be free of physical contaminants, such as glass and stones, which will hang around on the surface indefinitely, and which could downgrade the crop or at worst, render it unfit.

Current recommendations

I currently recommend that compost-mulches should not be used in mature orchards where the nuts are shaken, then swept from the orchard floor, due to the potential for sweeping up the compost and anything in it. However, for newly planted orchards, clean compost which will break down before the trees reach harvestable age, can offer great benefits and advance the development of young trees.

When choosing compost for mulch, the two key factors to remember are texture and application rate.

Texture - Coarse textured compost is the most appropriate for use as mulch. It should have larger woody particles, which allow movement of water and air through the mulch to the soil. Finer textured materials applied at depths greater than 50mm [2 inches] can trap water, preventing it from reaching the soil.

Application rate - For coarse materials, an application rate of 50-75mm [2-3 inches] is recommended, and rates should not exceed 100mm [4 inches]. Mulches of finer texture can be applied at 25mm [1 inch], but they should never be applied at high rates (not higher than 50 mm [2 inches]) A coarse grade of compost can be applied in a band 40-100cm [16-40 inches] wide along the tree row, or as a 1m² area around the tree.

To get the maximum benefit from compost mulch, soil moisture monitoring should be undertaken to ensure that you are not irrigating unnecessarily. Monitoring soil and plant nutrient levels can also help achieve best value from the compost. Fertilizer applications may need to be adjusted to account for the additions the orchard will receive from compost application. *CGA*

For more information on choosing and using compost, visit www.compostforsoils.com.au or for free information sheets, contact Katie at ecorsrch@bigpond.net.au or (08) 8339 8628.

Future of the Chestnut Industry (cont. from page 9)

The meeting was not widely advertised because it was not known how growers would accept it in the current economic times, but overall it was well attended and most who attended indicated they thought it was worth the time and expense. Michigan will host a second meeting in 2012 the weekend before the International Chestnut Symposium to be held in Shepherdstown, W.Va. Perhaps we could start with a west coast U.S. meeting prior to our Midwest meeting. In that way, those from abroad who are interested in chestnut production in the United States could start in California, take the train to Portland, Ore., fly or take the train to East Lansing, Mich., then fly to Washington, D.C., for the short trip to Shepherdstown and the International meeting. That would be quite a tour and learning experience for us all. *CGA*



CGA c/o Center for Agroforestry **203 ABNR** Columbia, MO 65211







Chestnut

Tree Farm, Inc.

Larger nuts than almost all Chinese Chestnut varieties

Blight resistant and better tasting than European Hybrids!

Proven production for over 30 years all over America!

Unique selection of many types of fruit - Kaki persimmons, figs, low chill fruit, berries and much more