

## Bylaws Changes to be Voted Upon at Annual Meeting

by Ben Bole

Most of the proposed revisions in the bylaws (shown beginning p. 13) are designed to make them more "user friendly" and to bring them more into agreement with Roberts' Rules of Order. There are, however, some changes that warrant some explanation.

The household membership category was created to allow two members of a single household, both of whom have an interest in chestnuts, to belong to the Association individually and to each have a vote in matters of the Association. The reduced rate for the second member reflects the savings to the Association of the elimination of duplicate mailings.

After considerable discussion it was determined that it would be best to have the annual meeting in the months of June or July so that if a field trip were to be included it would occur when orchards are in production. Combining the annual meeting with a meaningful field trip should be more rewarding to members, reduce travel expenses for members living some distance from more central meeting points and eliminate the need to organize two meetings. A second meeting could be held, if appropriate, but it would not be necessary. If this is accepted the officers and directors elected at the Feb. 23, 2002 meeting will serve until the next annual meeting in June or July of 2003. The WCGA fiscal year will be from January to December while the association year will be from one annual meeting to the next.

Proxy voting will not be allowed but members will be able to vote by mail as spelled out in Article IV.



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## Nominating Committee Presents Slate for 2002

by Chris Foster, Nominating Committee Chair

The WCGA Nominating Committee has proposed the following slate for the coming year's board positions. Terms are for one year. Attendance at the Annual Meeting, unless excused for a medical reason, is required for voting privileges. (*The current Board proposes changing this; see the Bylaws proposal*). Nominations will also be open at the February 23rd meeting. Volunteering is always welcome.



**President:** Chris Foster. Chris has been the V.P. for the past two years. Known as Cascadia Chestnuts, Chris and Andrea's 6 acre orchard northwest of

Portland began largely as a seedling planting. After trialing several varieties, they began top-working the orchard in 1999 to five cultivars, mainly of European origin. Chris's tree collection includes 25 named varieties.

### V i c e

**President:** Ben Bole. Ben is the current President and operates Ladd Hill Orchards with his wife, Sandy. The Boles grow the Colossal variety on nearly



25 acres near Sherwood Oregon, making it one of Oregon's largest plantings to date. Ladd Hill is also one of Oregon's most mechanized, with harvesting, sorting, and peeling equipment on site.

**Secretary/ Treasurer:** Ray Young. Ray has agreed to continue as Secretary/Treasurer for a second year, bringing with him

organizational skill and experience with other non-profits. Ray and Carolyn Young operate Allen Creek Farm, a 10 acre planting of Colossal northwest of Portland near Ridgefield, Washington. Planted in 1999, they are looking forward to marketable production in the coming year.



**Director:** Harvey Correia. Harvey is a third generation California farmer, although his main occupation is in farm finance. In 1999, he planted a 4 acre plot of Colossal at his home on the Sacramento River Delta



near Isleton, with an eye on trialing other varieties for a possible expansion. Many of you may know Harvey from his outstanding volunteer effort in organizing the 2001 summer orchard tour.

**Director:** Lucienne Grunder. Lucienne



operates Owl Creek Ranch east of Modesto California. While most of the property is dedicated to walnuts, she has established a diverse

planting of chestnuts totaling 80 acres. Much

*See Candidates, p. 7*

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## A MESSAGE FROM THE PRESIDENT

*This has been an interesting and active year for chestnut growers and for the Association. The summer tour of chestnut orchards in California was considered to be a great success by those who attended. Harvey Correia did a wonderful job of organizing the many stops and the dinner at Lucienne Grunders Owl Creek Ranch prepared by member chef Angelo Ibleto was delicious and the conversation was*

*lively. In addition, many growers have reported increased or outstanding harvests.*

*The new Association bylaws are in this newsletter. The Board of Directors felt that the existing bylaws could be modified slightly to make them more usable by the Association and to bring them in line with the latest edition of "Roberts' Rules of Order". The more significant changes are explained in the introductory paragraph to the bylaws on page 1. Ray Young has applied his past experience in drafting these documents to produce these WCGA bylaws and we very much appreciate his efforts. The previous bylaws were a good beginning but as the organization has grown the need to update them became apparent.*

*The WCGA has received quite a lot of free publicity during the past year and it is gratifying to see the increased interest in chestnuts and their uses. With each interview I have been asked how many chestnuts are produced in the United States or how many acres of chestnuts there are. I can only guess at these numbers so please fill out the information on the Membership Application/Renewal form so that the Association can build a basic database for this information.*

*It was decided to increase the membership dues from \$20 to \$25 per year. The primary reason for this increase is to build a cash fund so that the Association can set up and maintain its own web site. Today we are using Ray and Carolyn Young's web site. In the near future WCGA should have its own web site to benefit all of the grower members. Maintenance of a web site costs between \$500 and \$600 per year today and probably will not be less in the future. The \$5.00 increase might cover the web site maintenance cost.*

*Please plan on coming to the annual meeting on February 23rd, at the Food Innovation Center in Portland. This is an interesting facility and the staff from Oregon State University and the Oregon Department of Agriculture is very interested in helping us promote our product. The building tour and presentation by a staff member promises to be informative. The other presentations on the program also have a direct impact on what we are trying to achieve as chestnut growers. I hope to see as many of you as possible.*

*Ben Bole*

## EDITOR'S NOTES

*This was the year of the Un-harvest for us. Our ten-acre orchard is but two years old and someone forgot to tell it that production wasn't to start until next year. Who needs the Adkins diet? We've got an orchard.*

*This issue is jam-packed with good things to read, from an introduction to your candidates to a very detailed article on grafting by Dr. Kay Ryugo, to some well substantiated information on chestnut storage by Italian researcher Ilaria Mignani. In between you'll find a great article by Jim Pettit on the use of their new harvester and another exemplary article by Anthony Boutard on Japanese and Korean chestnuts.*

*You'll want to make sure to read the proposed Bylaws changes that your Board of Directors will ask you to vote on at the Annual Meeting, Feb. 23rd in Portland. Lots of good things are being planned for the meeting so plan to attend.*

*See you in Portland,*

*Carolyn*

## WESTERN CHESTNUT GROWERS ASSN., INC.

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VICE PRESIDENT	Chris Foster
SECRETARY-TREASURER	Ray Young (360) 887-3669
DIRECTOR	Harvey Correia
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DIRECTOR	Scott Sloane
DIRECTOR	Lee Williams

### COMMITTEES

Editor Carolyn Young  
Phone: (360) 887-4520 FAX: (360) 887-3669  
email: Carolyn@ChestnutsOnline.com

### NOTICE

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### EDITORIAL OPINION

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# Japanese and Korean Chestnut A profile

by Anthony Boutard  
aboutard@orednet.org

*Castanea crenata*, is a forest tree indigenous to the Japanese archipelago and the South Korean peninsula. It is a delicate tree, which grows no more than 60 feet tall. The trunk can grow to about three and a half feet in diameter. As with other species of chestnut, the nuts vary considerably in size. The chestnut is called *kuri* in Japan and *bam* in Korea.

The Japanese and Korean populations are both treated as the same species, *Castanea crenata*, but they grow in very different soils and climates. This situation is similar to the ponderosa pine, which thrives in relatively heavy clay soils in the Willamette Valley, and under very dry conditions in eastern Oregon. The Korean varieties have greater cold hardiness and are well suited to the Midwest and northeast of the US. The Japanese varieties are better suited to the maritime climate of the Pacific northwest, though their peeling and flavor has not made them particularly attractive relative to other varieties available.

The Japanese chestnut is blight (*Cryphonectria parasitica*) tolerant and, in some cases, resistant. Consequently, blight resistant strains are used in French breeding programs and the new commercial hybrid varieties have *C. crenata* as a parent. The Japanese chestnuts were initially introduced to France because of their resistance to ink disease (*Phytophthora*). "Colossal" likely has a Japanese parent and exhibits blight tolerance but not much ink disease tolerance. As a rule, the hybrids tend to have better nut quality than pure *C. crenata*.

In Mesolithic and Neolithic Japan, called the "Jomon Period," chestnuts were an important staple. Archeologists believe the Jomon people tended and planted chestnut groves. The rot resistant chestnut wood was used in Jomon house construction, which employed timber framing and thatched walls and roof. Around 300 BC, the Yayoi entered Japan from China, bringing with them rice, which quickly displaced chestnuts as a staple. Even so, as in Europe, chestnuts were maintained as a hedge against failure of the rice crop. One of Japan's most famous gardens is named *Ritsurin*, or chestnut grove, because it was once a protected chestnut orchard.

The Japanese are fond of chestnuts, consuming about 0.48 kg (1.06lb) per capita in 1999. In 1999, the South Koreans consumed 1.7 kg (3.74lb) of chestnuts per capita, which is the world's highest.

In general, the Japanese prefer to prepare chestnuts by soaking the nuts overnight and peeling them before cooking. Ideally, the kernel should not be nicked in the peeling process, lest flavor is lost. The peeled chestnuts are then steamed or boiled in a sugar syrup. As in Europe, chestnuts are also roasted by street vendors. In fact, in an "Iron Chef" television episode with a chestnut theme, a popular Japanese culinary competition show notorious for its dishes, Iron Chef Kobe won over the judges by presenting them simple roasted salted chestnuts presented in the classic folded newspaper.

In the autumn, the Japanese make *kuri-gohan*, which is steamed rice with chestnuts, and a dash of salt. This dish, as simple as chestnuts in the newspaper, is very popular and is served at home, in restaurants and school cafeterias. A variation calls for adding red beans (azuki beans) to the dish. These beans, *Vigna angularis*, are a different genus from beans we enjoy in western cooking, and are also a specialty in the areas where chestnuts thrive. Koreans prepare rice with chestnuts in the same manner as the Japanese and it is called *bam bap*. Beef rib stew, *Kalbitchim*, is a traditional Korean dish with chestnuts.

*Mochi*, sticky rice, is a popular Japanese snack food sold in train and bus stations that is made by pounding sweet rice in a mortar until it is creamy and smooth, and then forming it into cakes. During the chestnut harvest in the Kyoto and Nagano prefectures of Japan, *kurimochi* is made by adding red beans and steamed chestnuts, and mixing them so that the chestnuts remain as little chunks in the *mochi*.

The chestnut is part of the traditional Japanese New Year celebration menu, one of Japan's important festivals. Special dishes, *osechi ryori*, are prepared and served for the occasion. Each dish has its own meaning and symbolism, and the chestnut is believed to bring success. Chestnuts for the *osechi-ryori* are served peeled, steamed and sweetened with sugar (*kuri fukame-ni*), or they are cooked with mashed sweet potato (*kuri kinton*).

For the small town of Obuse in the Nagano prefecture, chestnuts are an important local industry. Chestnut plantations were first established in the 15<sup>th</sup> century on the Matsukawa River plain where other crops would not grow. The original seeds were brought from the Tanba region (Kyoto), also famous for its high quality chestnuts. Obuse restaurants and stores feature confections, entrees and ice cream made from local nuts. In the Tanba town of Sonobe, the store "Kuri-Ya" has been making candied Tanba chestnuts since 1855.

From the 1940s through the mid 1970s, Japanese chestnut plantations expanded five fold, but increases in production were not as dramatic due to the introduction of the gall wasp, *Dryocosmus kuriphilus*, to Japan in 1941. The gall wasp develops in the buds and decreases yields by interrupting the development of shoots in the spring, thus affecting the development of flowers. Severe infestations can kill trees. The gall wasp has infested the southeastern US in 1974, where it has done a lot of damage, and should serve as reminder about the value of quarantines.

In both Japan and Korea, past breeding programs have emphasized gall wasp resistance. Nonetheless, in Japan the wasp has evolved to overcome plant resistance, so resistant chestnut varieties released in the late 1950s are now susceptible. More recently, the introduction of the parasitoid wasp, *Torymus sinensis*, has reduced the population of gall wasps in eastern Japan to a level at which breeders can refocus their attention on nut quality, especially with respect to sweetness and kernel texture. Breeders are hybridizing the Japanese chestnut with the Chinese species, *C. mollissima*, to increase firmness and sweetness.

According to the Food and Agriculture Organization of the United Nations (FAO) between 1961 and 1979 when harvested acreage peaked, harvested yield dropped from 2.5 mt/ha (2,200 lb/ac) to 1.5 mt/ac



(1,340 lb/ac). In 2000, the yield was less than 1 mt/ha (848 lb/ac). Although the gall wasp invaded Korea in 1958, and existing plantations were severely damaged, the Korean breeders identified and selected resistant varieties. In 2000, Korean harvested yield was 2.5 mt/ha (2,200 lb/ac), on par with French and Italian productivity.

Japanese plantations meet less than 50% of domestic demand, so the remainder must be imported from China and Korea. In 1999, Korea harvested approximately 95,768 mt (105,345 ton) of chestnuts, or 2.6 mt/ha (2,305 lb/ac). Of this harvest, 14,528 mt (15,980 ton) was exported, virtually all of it to Japan. The Chinese exported roughly 20,000 mt of chestnuts to Japan.

In Korea, small operations form the basis of the industry. The Korean Forest Service estimates that the country has 50,000 farmers growing chestnuts in 2001. The Korean Chestnut Growers Association has a membership of 29,000. At this point, the Korean industry is based on indigenous varieties of *C. crenata*, though some Chinese chestnut plantations, *C. mollissima*, have been planted.

Korea also exports some peeled and processed chestnuts to Japan. These hand cut nuts retain the basic shape of the chestnut, but have a distinctive faceted look. They are generally packed in syrup. According to the Korean Forest Service, the majority of chestnuts are sold fresh and in the shell. Both Korea and China are developing factories to machine peel chestnuts.

Based on FAO statistics for the year 2000, *Castanea crenata* accounts for roughly 26% of the world's production of chestnuts. All of the chestnuts are grown and consumed in Japan and the Korean peninsula, excluding a small amount shipped to specialty markets the US. Even at this level of production, the region is a net importer of nuts, with China as the major supplier. Interestingly, the Japanese are willing to pay almost double the price for Korean nuts over Chinese nuts. The Koreans see competition from China affecting nuts sold for roasting, where a thin shell and small size are important attributes.

The Korean nuts available on the west coast are probably not the best representatives of the species. At the Beaverton "Owajimaya," a store specializing in Japanese produce, the bin of chestnuts contained a mixture of varieties as evidenced

by a large variation in size, color and shape. A large percentage of the nuts I bought showed weevil damage and kernel rot. Moreover, the nuts had picked up odors from the soaps and vegetables with which they were shipped, which had a rather disconcerting and unpleasant effect on their taste. Chris Foster has also noted the odor problem, and neither our dogs nor our chicken, normally great chestnut aficionados, would eat the nuts.

With the Korean nuts, the soak and peel method necessitated cutting into the kernel because the shell, pellicle and kernel stuck together. The shell is hard and thick. This is in marked contrast to the Chinese seedlings at OSU, which can be peeled with little effort as the pellicle generally comes off with the shell. Even roasted, the pellicle of the Korean nuts tend to remain firmly attached to the kernel. All the nuts had single embryos, and some were truly massive, twice the size of a "Colossal" in some cases. The cooked kernel is mealy and fairly sweet. All nuts were hollow in the center.

On West Coast in particular, there are a great many people of Korean and Japanese descent. The chestnut has long been a part of Japanese and Korean heritage, and has been cultivated in Japan for several millennia. Chestnut growers who are interested in expanding sales of chestnuts to stores specializing in Japanese and Korean produce need to understand how the nut fits into the cuisine and customs of those countries. Although the Chinese produce nuts of good quality, they are very dense and sweet, and very different in texture and flavor from the *Castanea crenata* nut. Moreover, the imported Korean nuts are of such poor quality, northwest growers certainly have an opportunity to sell high quality nuts in specialty stores, especially those from *C. crenata* and its hybrids.

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Japanese confections: [www.ginza.co.jp/tokushu-e/1120/](http://www.ginza.co.jp/tokushu-e/1120/)

Korea production: [www.koreanforest.com/cgi-bin/wwwboard/CrazyWWWBoard.cgi?db=echest1](http://www.koreanforest.com/cgi-bin/wwwboard/CrazyWWWBoard.cgi?db=echest1)

Korean chestnuts: [www.chestnut.or.kr/english/enchest\\_distribution\\_body.html](http://www.chestnut.or.kr/english/enchest_distribution_body.html)

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Korean production: [www.korea.net/kwnews/pub\\_focus/content.asp?cate=05&serial\\_no=1606](http://www.korea.net/kwnews/pub_focus/content.asp?cate=05&serial_no=1606)

Korean recipe: [www.koreainfogate.com/taste/food/recipes.asp?src=recipes\\_sub25](http://www.koreainfogate.com/taste/food/recipes.asp?src=recipes_sub25)

Korean recipe: [www.skynews.co.kr/skynews\\_main/english/dishes/dishes\\_018.htm](http://www.skynews.co.kr/skynews_main/english/dishes/dishes_018.htm)

North Korean chestnuts: [www.kcna.co.jp/item2001/200102/news02/28.htm](http://www.kcna.co.jp/item2001/200102/news02/28.htm)

Obuse: [www.infocreate.co.jp/hometown/obuse/rekisi-e.html](http://www.infocreate.co.jp/hometown/obuse/rekisi-e.html)

Obuse: [www.infocreate.co.jp/hometown/obuse/tabe-e.html](http://www.infocreate.co.jp/hometown/obuse/tabe-e.html)

Obuse: [www.city.nagano.jp/english/sightsee/miyage-e.htm](http://www.city.nagano.jp/english/sightsee/miyage-e.htm)

Osechi ryori: [//home.att.ne.jp/gold/aosara/articles/oshogatsu.htm](http://home.att.ne.jp/gold/aosara/articles/oshogatsu.htm)

Ritsurin Park: [www.pref.kagawa.jp/eizo/vo1001/english/e/siki/e15.htm](http://www.pref.kagawa.jp/eizo/vo1001/english/e/siki/e15.htm)

Statistics: [www.fao.org](http://www.fao.org)

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US Imports: [www.fintrac.com/gain/tradestats/USA/data/08024000.stm](http://www.fintrac.com/gain/tradestats/USA/data/08024000.stm)



# A Harvesting Option for Chestnuts

by Gary Pettit  
Delmarvelous Chestnuts, Townsend, DE  
chestnutsunltd@msn.com

One of the ongoing problems the small commercial chestnut grower faces is how to economically harvest the crop in a timely fashion. With the dramatic increase in yields an orchard of 1600 trees brings when they reach their early years of maturity comes the realization that manual harvesting must be replaced. The question is, replaced with what?

Since you cannot just go to your local chestnut grower equipment and supplies store, you need to “think outside the box” and improvise.

Fortunately, we can learn from others who have faced this problem and found some options. I had the pleasure of visiting Ernie Grimo, a fellow grower who has developed this “outside the box” approach to problem solving, in

August of this year at his farm in Niagara-on-the-Lake, Ontario, Canada. Ernie purchased a pecan harvester a few years ago, a Model 8042 manufactured by Savage Equipment Company in Madill, Oklahoma. He adapted its use to harvesting chestnuts. That visit was enough to convince me to purchase one for myself.

My harvester arrived late in September at the beginning of this year’s harvest. The model 8042 weighs 1,100

pounds but is compact and very maneuverable. It is designed with an adjustable off-set tongue to permit easy towing behind a small tractor. It is a self contained unit with an 18 HP gasoline engine to drive the nut pickup and auger mechanisms to deliver the nuts into sacks or

over a lot of nuts and splits open the nutshells. My recommendation is to put a power brush on the front of the tractor and sweep the nuts to the side in front of the harvester for pickup. Second, the Model 8042 does a good job of picking up the chestnuts, but it also picks up ev-

everything else on the orchard floor. Some of this debris gets eliminated by the units “trash separation” system, but a fair amount of small “trash” items get deposited with the nuts. This requires a certain amount of barn clean up work to separate the nuts from the “trash”. My suggestion is that you need to prepare your orchard floor to rid it of as much of the “trash” as possible before the harvest time begins to minimize the barn clean up work.

I have only logged a few weeks using this harvester so I

haven’t learned all of the subtleties of mastering the use of this tool. One thing I can say for certain is that it is not perfect, but it eliminates most of the manual process of getting the crop in from the field which saves a lot of time. This means that I now have more time to devote to the problems of barn clean up and processing the crop for market.

□□□



containers. There are also adjustments to raise and lower the height of the harvester to facilitate optimum nut pickup.

There are, however, a couple of operational issues I found that need to be addressed in using this tool for chestnuts. First, the Model 8042 only has a pickup width of 42 inches which means that you have to make multiple passes down the tree rows to cover the nut drop zones. The result is that the tractor runs



# Propagation of Chestnut Trees

by Dr. Kay Ryugo, Professor and Pomologist, emeritus  
Dept. of Pomology, U.C. Davis

Commercially, chestnut trees are propagated by chip budding or whip grafting onto one-year-old seedlings. Seeds for rootstocks should be harvested from desirable scion variety, i.e. Colossal scions should be grafted onto Colossal seedlings so as to minimize any graft-incompatibility which may occur 1 to 8 years later. One of the first symptoms of graft-incompatibility is the formation of a brown line at the graft union (Fig. 1).



Fig. 1

Seeds should be stored in moist peat moss or shavings immediately after being harvested to prevent drying out of the embryos. When the nuts germinate and the radicles begin to protrude, plant them 6 to 8 inches apart in a nursery row. Once the shoots emerge, the seedlings should be irrigated at nearly weekly intervals and given

small amounts of fertilizer monthly to keep the seedlings growing vigorously. Any "runts" or poorly growing seedlings should be rouged. Seedling trees will grow as tall as 6 to 8 feet in good soil and with care within a year so they should be staked to remain upright.

Collect the desirable scion wood,  $\frac{1}{4}$  to  $\frac{5}{8}$ " diameter, in early February when the trees are still dormant, place the scion wood in a plastic bag containing in moist peat moss, and store them at 32-34° F.

## Top-grafting Seedling Trees During the Dormant Season or Early Spring

**Whip grafting:** In late February, match the diameter of the scion with that of the rootstock. Make an upward, slanting cut about  $1\frac{1}{2}$ " to 2" long on the rootstock. Do the same on the scion wood with 2 buds. Then make a cut about  $\frac{1}{4}$  the distance from the beveled tip and  $\frac{1}{2}$ " deep, forming a tongue (Fig. 2) into each. Slide the scion wood onto the rootstock, making sure that the tongues overlap (Fig. 2). Wrap the two together with a rubber band. Place a long vertical strip of adhesive over the rubber band (Fig. 2), and then coat the rubber band and the cut surface of the scion with grafting wax, such as "Tree Seal", but not

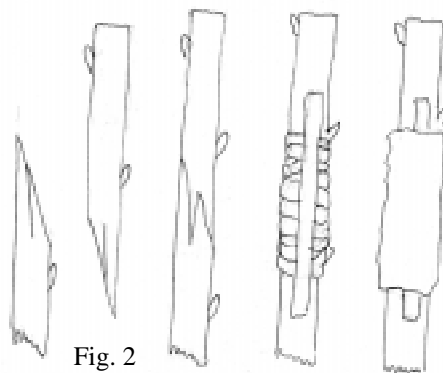


Fig. 2

over the tips of the vertical tape. When the buds on the scion have grown about 4 inches in the spring, the rubber band needs to be cut. At that time, pull the vertical tape by the unwaxed tip away from the trunk, leaving a clean area, thus exposing the rubber band that can now be cut without coating the knife with wax. As the graft grows in diameter, the rubber band will stretch and deteriorate.

## Chip budding:

This method can be used on rootstock while it is dormant or growing. A chip, including a bud, is removed from the scion wood and placed into a wedge-shaped notch, slightly narrower than that of the chip in the rootstock (Fig. 3).

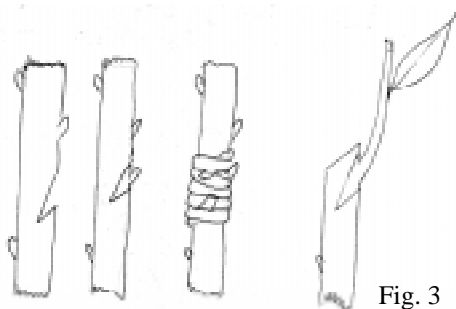


Fig. 3

Force the chip into the notch, making sure that the cambia, the ring of tissue between the wood and bark, match. Then, bind the chip in place with a rubber band (Fig. 3); no waxing is necessary.

## Shoulder graft:

In this method the scion is cut as that for whip grafting. A slanting cut, equally as wide as that of the scion, is made on the shoulder of the rootstock; another cut is made for the tongue. Now match the cambia of the scion with that of the rootstock because the rootstock bark may be

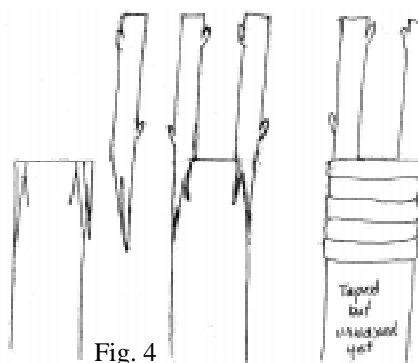


Fig. 4

thicker than that of the scion. Again make certain that the two tongues should slide past each other (Fig. 4). Tie the scion into place and wax completely. Remove the tape after the buds on the scions have grown several inches.

**Shield or "T" budding:** This is the most common method of propagating most fruit trees, such as peach, apricot, etc. for spring budding (around full bloom, before bud break), summer budding (after bud break to August) and dormant budding (August to when the bark does not slip easily in the fall). In a commercial nursery, a budder would remove

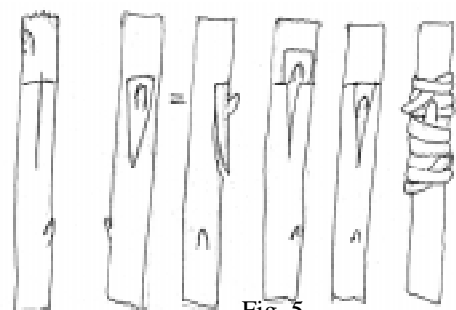


Fig. 5

the lower branches up to 6" from the ground where the bud will be inserted a day or two later. Make a vertical and a lateral cut on the rootstock (Fig. 5). A shield with a vegetative bud is excised from a dormant scion wood for spring budding, but from a vigorously growing new shoot for summer and dormant budding. Slide the shield behind the bark of the rootstock so that the top of the shield is even with that of the lateral cut on the rootstock (Fig. 5). Tie the shield in place with a rubber band; no wax is necessary.

### Top-Grafting Older Trees During the Dormant Season or Early Spring

**Cleft grafting:** The stock is split into two equal parts with a special tool (Fig. 6) or a large knife. Make two tapered cuts on a scion, one side being just slightly narrower than the other (Fig. 6). Widen the cleft with the wedge end of the tool and force the scions into the cleft at a slight angle. Make sure that the cambium of the scion crosses that of the root stock about 1/4" below the cut surface (Fig. 6). Usually the cleft graft does not need to be tied together. Completely wax over all cut surfaces, including the scion tips.

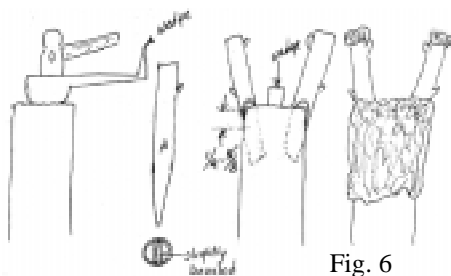


Fig. 6

**Saw-kerf grafting:** In this method, a tapered, vertical notch about 2" long and 3/4" deep is cut into the rootstock (Fig. 7) with a half-round knife (a special knife used in the livestock yards to skin an animal). A double-beveled cut, slightly wider than that on the rootstock, is made on the scion (Fig. 7). The scion is tapped into place. Make sure that the two cambia cross about 1/4 to 3/8" below the top of the root-

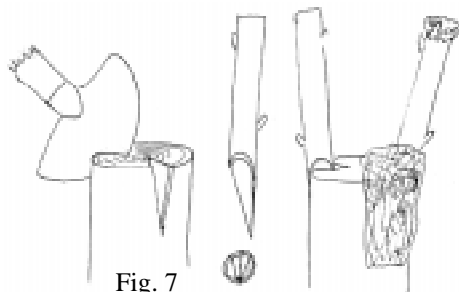


Fig. 7

stock. Wax all cut surfaces. The advantage of this method is that more than two scions can be placed on a large stock, the wounds are small so that they heal faster, and no tape, rubber bands, or nails are necessary.

### Grafting After the Bark Begins to Slip in the Spring

**Bark grafting:** Make a long slanting cut on the dormant scion and a small cut on the opposite side. The scion is placed against the stock and two parallel cuts are made in the bark. Remove about 1/4" of the flap (Fig. 8) and insert the scion, the long cut facing the wood of the stock. The scion can be held in place with a tape or with nails (1"x18); carefully drive one nail in the scion above

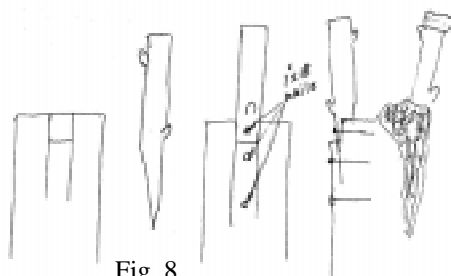


Fig. 8

the flap, one on the flap and one at the base of the scion (Fig. 8). Wax over all cut surfaces. The nails need not be removed; they will rust and be absorbed by the tree.

Some grafters will leave one branch on a large tree as a "nurse limb" to support the roots while the scions on the other limb are growing

If xylem exudation is a problem, we overcome it in walnuts and kiwi vines by making deep, slashing diagonal cuts into the wood of the rootstock so that the bleeding occurs at these cuts. No bleeding should take place at the graft. Xylem exudates of walnuts have a growth inhibitor(s) that prevent callus formation on the scion and stock so that the graft will fail "to take".

### Care of Grafted Trees

Tree seal usually hardens after a day, but if it should rain, rewrap the cut surfaces.

Once the buds on scions begin to grow on seedling trees in the nursery row, they should be staked up. On large trees in the orchard, the scions should be supported by laths nailed onto the trunk of the rootstock to prevent them from breaking out.

Prevent the trunk from getting sunburned by leaving any sprouts below the grafts for shade and for transpiration which cools the trunk, but keep the sprouts short by summer pruning. If you remove the sprouts, white-wash the trunk with a diluted white latex paint.

### Candidates, *cont'd from p. 1*

of the planting is currently transitioning from seedling stock to field grafted cultivars. She has a reputation for diligence, experimentation, and innovation. Lucienne graciously hosted a memorable visit and evening dinner at the 2001 orchard tour.

Director: Peggy Paul (no photo available). The Paul orchard and chestnut business, known as Western Idaho Chestnut Growers, is located just outside of Boise near Nampa. The current planting is 10 acres of Colossal, with an expansion under consideration. Some of you may recall a news article or two about Peggy's promotional chestnut roasts in downtown Boise.

Director: Bob Schilpzand (no photo available). Bob has agreed to continue for a second year as a Director. While he claims to be a "rookie" to chestnuts (his first planting was just 3 years ago), he is no stranger to agriculture, operating Cloverdale Propagators, which produces 50 varieties of lilac. Bob's orchard is near Woodland Washington.

**Plan on attending the  
Annual Meeting  
Feb. 23, 2002  
Food Innovation Center  
Portland, OR**

See p. 11 for details  
or visit the WCGA website at  
<http://www.ChestnutsOnLine.com/wcga>

# EFFECTS OF POSTHARVEST TREATMENTS AND STORAGE CONDITIONS ON CHESTNUT QUALITY

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Ilaria Mignani, Di.Pro.Ve.-Sezione di Coltivazioni Arboree, e-mail: [ilaria.mignani@unimi.it](mailto:ilaria.mignani@unimi.it);

Annamaria Vercesi, Istituto di Patologia Vegetale, e-mail: [annamaria.vercesi@unimi.it](mailto:annamaria.vercesi@unimi.it);

Università degli Studi di Milano. Via Celoria 2. 20133 Milano - Italy

(This paper was presented at CA2001 - 8th International Controlled Atmosphere Research Conference. Rotterdam (The Netherlands) 8-13 luglio 2001.)

**Key words:** *Castanea sativa*, Controlled Atmosphere, curing, heat treatment, rots.

## **Abstract**

Interest in chestnut culture is increasing because of both its healthy nutritional contents and curiosity about ancient traditional foods. Fruits are grown either for fresh market or for production of special and typical foodstuff. The nut loses viability rapidly after harvest due to fruit rots and insects and several storage methods were applied in the past to prolong its postharvest life.

The present work considers two local cultivars (Catot and Platella) of chestnut from Valle Camonica (Brescia, Northern Italy), grown at 900 m a.s.l. Nuts are treated or not with traditional curing (nine days submerged in water), hot (51°C) water for 45 min, NaHCO<sub>3</sub> 1% and stored for 60 and 105 days in cold room (1°C) equipped or not with two different Controlled Atmosphere conditions (CA1: 2.5 % CO<sub>2</sub>, 1.5 % O<sub>2</sub>; CA2: 20% CO<sub>2</sub>, 2% O<sub>2</sub>). At harvest and after the storage period, fruits of cv Platella from control, cured and CA2 treatments, are peeled, sterilized, cut into halves, plated in Petri dishes and incubated at 24°C for 21 days, to assess fungal contamination.

Curing, heat treatment and CA2 are very effective in controlling fruit rots till December, then their effect decreases. CA2 maintains the best quality of fruits in term of freshness, taste and flavor: on middle February the chestnuts looked as fresh and bright as just picked. Cured and heat treated fruits are respectively a little or very dry and NaHCO<sub>3</sub> treatment has no effect in controlling fruit rots. The treatments seem to have a selective effects on diverse fungal contaminants; i.e. curing shows a quite good effect in reducing contamination due to all fungi except from *Penicillium* spp., and CA gives excellent results, but it is ineffective in controlling *Aspergillus niger*. The treatments, except NaHCO<sub>3</sub>, are effective in controlling insect development into fruits.

## **1. Introduction**

Interest in chestnut culture is increasing because of both curiosity about ancient traditional foods and its healthy nutritional contents especially high in carbohydrates, dietary fibre, potassium, vitamin B<sub>2</sub> and PP, lysine (Desmaison et al., 1986). Fruits are grown either for fresh market or for production of special pasta, flour, cookies, cakes, jams, candies and many other typical foodstuff. The nut loses viability rapidly after harvest due to fruit rots and insect larvae in spite of its low water content (50-55%) and leathery skin. Several storage methods were applied in the past to prolong its postharvest life, as curing in water, underground storage, dehydration by means of charcoal fires with a little air. The main aim of these treatments was to increase fruit availability during winter, considering that chestnuts were the basic food source for many mountain populations in the past centuries.

At the present good quality chestnuts are sold at a very high price and the market requires the product along all winter months

and these facts justify the use of more expensive or innovative technologies as cold rooms, CO<sub>2</sub> treatments, Controlled Atmosphere, 20°C frozen fruits for food industry.

## **2. Materials and methods**

The present work has been carried out on two local cultivars (Catot and Platella) of chestnut from Valle Camonica (Brescia, Northern Italy), grown at 900 m a.s.l. Nuts are treated or not with traditional curing (nine days submerged in water), hot (51°C) water for 45 min, NaHCO<sub>3</sub> 1% and stored for 60 and 105 days in cold room (1°C) equipped or not with two different Controlled Atmosphere conditions (CA1: 2.5 % CO<sub>2</sub>, 1.5 % O<sub>2</sub>; CA2: 20% CO<sub>2</sub>, 2% O<sub>2</sub>). At the end of storage periods and after five days of shelf life at 20°C, fruits are cut into halves and examined in order to assess the incidence of fruit rots and insect larvae.

At harvest and after the storage period, a set of 200 fruit each of cv 'Platella' from control, cured and CA2 treatments, is peeled, washed in 95% ethanol for 30'' and 5% NaOCl for 60'', rinsed twice in sterile water, cut into halves, plated in Petri dishes containing 6% NaCl agar (Doster et al., 1994) and incubated at 24°C for 21 days, to assess fungal contamination.

Data are statistically processed for Anova and Tukey's test by SPSS software.

## **3. Results**

At harvest fruit rots are not present in chestnuts, while insect larvae (*Curculio elephas*) incidence is about 10% in both cultivars; after storage fruit rots increase significantly both in cv Catot (18.7%) and in cv Platella (34.5%). Insects do not increase during the storage.

Postharvest treatments and storage technologies are generally able to improve the proportion of healthy fruits on middle term storage (December), except NaHCO<sub>3</sub> treatment (Figure 1); after 105 days (February) only curing and CA2 are effective in maintaining a significant higher proportion of healthy fruits. Curing, CA2 and heat treatment decrease fruit rots incidence till December but at the end of storage (February) no treatment is significantly efficient even if the best results are observed on cured and AC2 stored fruits. Insect larvae invade NaHCO<sub>3</sub> treated chestnuts at higher extent than other fruits.

Cv Platella is more contaminated by fungi than Catot (see control bars in Figure 2), and it is very reactive to treatments, mainly to CA at higher CO<sub>2</sub> content and curing that are able to reduce fruit rot incidence and to increase the number of healthy fruits. Also NaHCO<sub>3</sub> is effective in controlling fruit rots. Catot is less affected by rots and CA2 increases the proportion of healthy fruits while curing restrains fruit rots.

The assessment of fungal contamination on Platella fruits shows the presence of twelve different genera: the incidence of the most frequently isolated genera is reported in figure 3. Untreated chestnuts are contaminated at harvest by *Penicillium* spp. and *Aspergil-*



*lus niger* and curing is able to reduce significantly their incidence. *Alternaria* spp. and *Phoma* spp. are isolated from cured chestnuts but not from control fruits. At the end of storage *Alternaria* spp. is strongly present both in control and cured fruits and curing loses its effect in reducing fruit rots incidence, except *Phoma* spp. Controlled Atmosphere at high CO<sub>2</sub> content is very effective in decreasing fruit rots except *A.niger*.

#### 4. Discussion

Fruits of the two chestnut cultivars, Catot and Platella, are qualitatively excellent at the beginning of this experiment, without rots and with a very low incidence of insects. Anyway the high perishability of this fruit is already clear at the end of the middle term storage (December) when the untreated nuts have lost their viability. The fast development of fruit rots indicates that postharvest technologies are necessary also for short and middle term storage periods.

All the considered methods, except NaHCO<sub>3</sub> are able to increase the healthy fruits number. Moreover traditional curing, heat treatment and CA at high CO<sub>2</sub> are very effective (Anelli et al., 1982; Anelli, 1986; Fadanelli et al., 1994; Nour-Eldin et al., 1995) in controlling fruit rots for the first period of storage (December). Afterwards their effect decreases and heat treatment becomes ineffective after 105 days of storage (February). CA at high CO<sub>2</sub> content maintains the best quality of fruits in term of freshness, taste and flavor till the end of storage: on middle february the chestnuts looked as fresh and bright as just picked. Cured and heat treated fruits are respectively a little or very dry. NaHCO<sub>3</sub> treatment has no effect in controlling fruit rots, in spite of its positive effect on other kind of fruits (Sportelli, 2000) and this may be due to chestnut peel too thick and leathery.

*Penicillium* is the most frequent fungal contaminant isolated from on plated Platella fruits, both at harvest and after storage, as already reported by Washington et al. (1997). *Aspergillus niger* incidence is strongly reduced in control chestnuts after storage, suggesting a negative effect of cold (2°C) storage on this fungus, while *Alternaria* spp. do not seem to be influenced by the low temperature. *Alternaria* spp. is isolated from cured fruits, where *Phoma* spp. are not present. Controlled Atmosphere at high CO<sub>2</sub> content is

very effective in decreasing the incidence of all the contaminating fungi except from *A. niger*. These results indicate that the different treatments may have a selective effect on the various fungal contaminants.

#### Acknowledgements

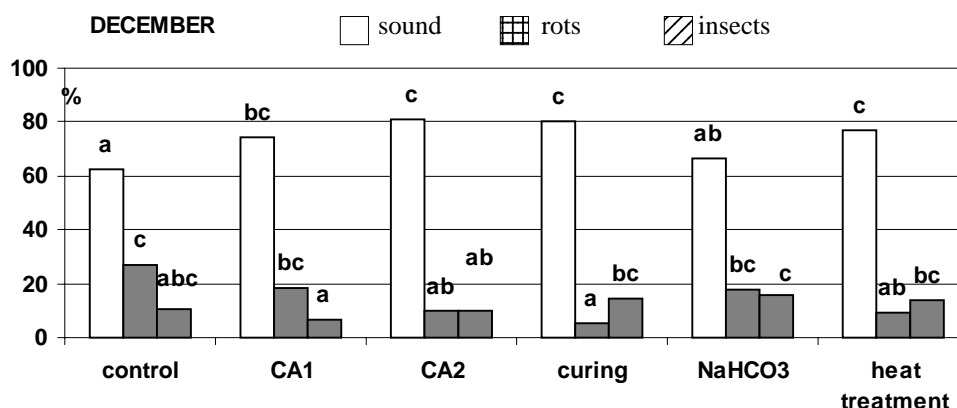
The authors thank Dr. D. Garegnani and Miss I. Giaimi for their work as degree thesis.

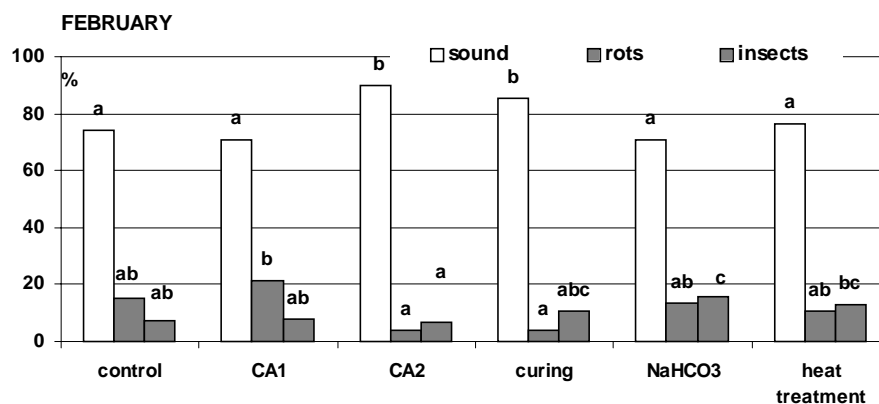
The authors contributed to the same extent to the present work.

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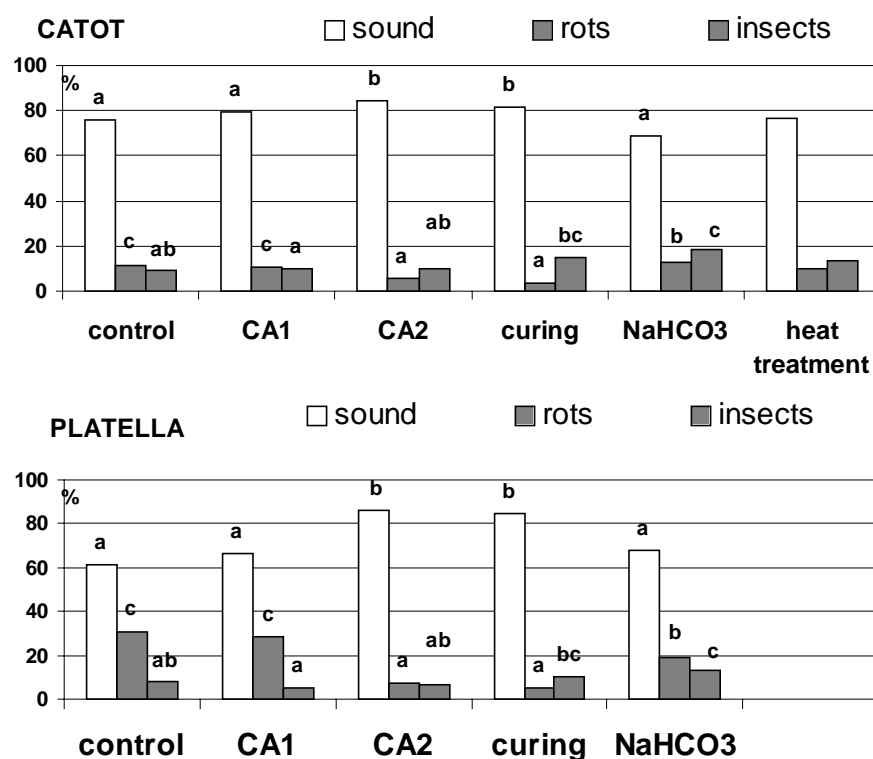
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**Fig. 1.** Fruit rots and insect incidence in chestnuts stored with different methods. Bars with different letters are significantly different for P<0.05 according to Tukey

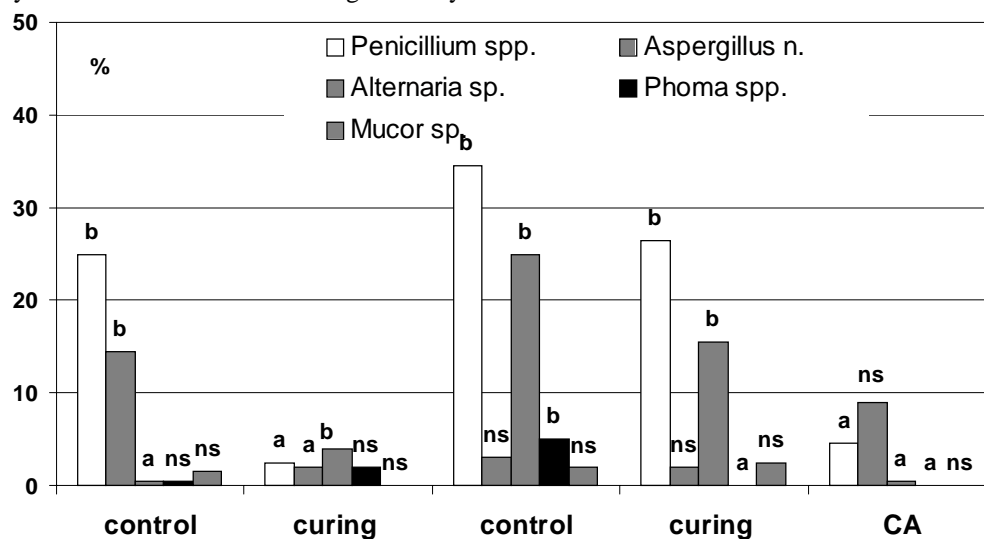




**Fig. 2.** Fruit rots and insect incidence in chestnuts cv Catot and Platella stored with different methods. Bars with different letters are significantly different for  $P < 0.05$  according to Tukey



**Fig. 3.** Incidence of fungal contaminants in chestnuts cv Platella at harvest and after storage with curing and CA. Bars with different letters are significantly different for  $P < 0.05$  according to Tukey



Research partially founded by Consorzio della Castagna di Valle Camonica, Paspardo (Bs - Italy)



# WCGA ANNUAL MEETING

*Saturday, Feb. 23, 2002*

9:30 a.m.

*at the Food Innovation Center*

*1207 NW Naito Parkway*

*Portland, OR*

## Where to Stay

*Four Points by Sheraton*

50 Morrison St. (at Front Ave.), Portland, OR

(503-221-0711).

Arrangements have been made for special group rates of \$77 (double or single) per night. A block of rooms will be held until Jan. 23. Use “**Chestnut**” as the key word when making a reservation to assure the special rate. Four Points is on the MAX line from the airport and about half a mile from the Food Innovation Center.

## Chestnut Snacks

Bring your favorite chestnut cookies/snacks/whatever for break time and bring copies of your recipe to share with others.

## WCGA Clothing

Clothing with the WCGA logo will be available for order at the meeting. See p. 17.

## Raffle

There will be a surprise raffle that you won't want to miss.

Questions? Contact Ben Bole, 503-625-1248 or via email at BenBole@aol.com or check out the WCGA website at <http://www.ChestnutsOnLine.com/wcga>

Clip here



## The Agenda

1 1/2 Hour Tour of the Food Innovation Center  
(including presentations on Marketing and  
Value Added Products by the FIC Staff)  
Presentation by Fowler Nursery

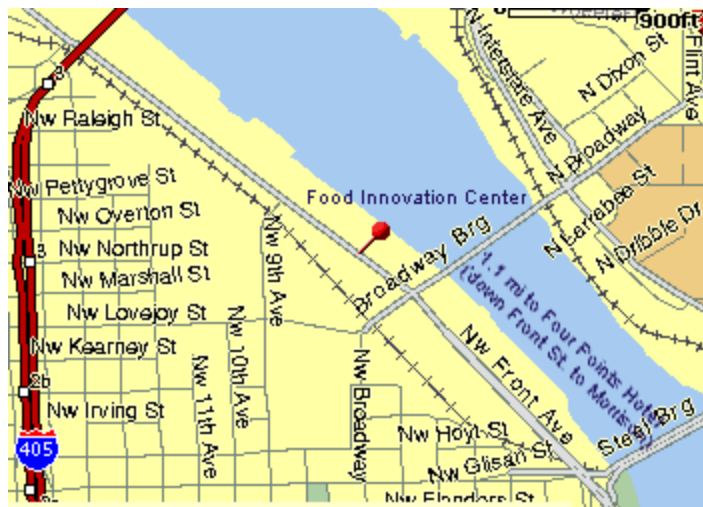
### Lunch

Jeff Olsen, OSU: Managing Potassium in Chestnut Orchards

2:30 p.m. Business Meeting

Surprise Raffle

For those of you coming from out of town who would like to see a few local orchards on Friday or Sunday arrangements can be made with Chris Foster (503) 621-3564.



Reserve your seat for the Annual Meeting today. **Cost is \$15.00 including lunch.** Send this form with your check today, made payable to WCGA to Ray Young, Secy/Treasurer, PO Box 841, Ridgefield, WA 98642. **Reservations must be received by Tuesday, Feb. 19, 2002.** **Late registration is \$20.00.**

Name(s) ..... Amt enclosed \$ .....

Address ..... Phone .....

City ..... State ..... Zip .....

If you want confirmation of receipt please enclose SASE or email address:

.....



## Guidelines for the Use of the WCGA Logo

The logo is owned by Western Chestnut Growers Association and it is protected by United States copyright law. It can only be used by members of the WCGA and users do not have the right to grant use of the logo to another person. Users agree to cease all use of the logo upon cessation of their membership. The user agrees to use the logo as it is provided and not to modify it beyond the following:

a) The logo may be enlarged or reduced to meet individual needs.

b) The logo may only be duplicated in the colors provided in the original copy or in black and white.

c) The logo may be used to promote any members' chestnuts or chestnut products on labels, banners, stationery, clothing, etc.

d) Use of the logo does not imply that the user is an official representative of the WCGA.

e) The logo should always be reproduced in the highest possible resolution regardless of the application.

### How to Obtain the Logo

All members of WCGA are entitled to use the association's logo. The easiest way to obtain it is to email your request to the Editor and it will be returned via email. Please specify the file type you want, e.g., TIFF, BMP, etc., and whether you need it in PC or Mac format.

If you prefer receiving it on disk send a blank disk (floppy or Zip) with appropriate protective, stamped, self-addressed envelope to the Editor at PO Box 841, Ridgefield, WA 98642. Make sure your disk will accommodate the file. The TIFF file is 948K. The BMP file is 55K. For the best resolution we would advise using a TIFF file. Send your email request to Carolyn@ChestnutsOnLine.com. It will be sent as soon as the request is received.

□□□



There's nothing more enjoyable in our house on a cold winter night than soup and bread for dinner. The following recipe for chestnut bisque comes from several sources, all modified to suit our tastes. I hope you enjoy it.

#### Chestnut Bisque

1 medium carrot, diced  
1/2 onion, chopped  
1 stalk celery, chopped  
1 Tbsp butter or canola oil  
12 oz cooked, peeled, frozen chestnuts (1 lb fresh) run through a food processor  
3 C chicken bouillon  
1/4 C apple juice or cider  
1/4 C parsley, chopped  
Pinch ground nutmeg  
1/4 Tsp salt  
1 Tsp fresh tarragon or 1/2 Tsp dried  
Freshly ground black pepper to taste  
Nonfat sour cream or yogurt (optional)

Melt the butter in large saucepan over medium heat. Add carrots, onion, and sauté until soft, about 7 minutes. Add chestnuts and continue cooking 5 minutes, stirring occasionally. Add bouillon and bring to a boil. Reduce heat to low and add apple juice, parsley, nutmeg, salt, and pepper. Simmer 15 minutes. Add tarragon and continue cooking 5 minutes. Puree two thirds of the soup in a food processor or blender. Return soup to saucepan and reheat. Adjust seasonings. Serve with a dollop of sour cream Serves 3-4.

### The Chestnut Forum

Interested growers are invited to use the new Chestnut Forum, an electronic bulletin board that can be found by going to [www.ChestnutsOnLine.com](http://www.ChestnutsOnLine.com) and clicking on "Forum". The service is provided free but you must register if you wish to post to any of the sections of the Growers' Forum, or if you wish to view the postings of others in that section. If you have questions, comments or concerns as a grower this is the place to ask, to share and to learn.

*Have a recipe you'd like to share?  
Send it to the Editor,  
PO Box 841, Ridgefield, WA 98642.*

*Don't forget to pay your dues.  
Send your check now in the enclosed envelope.*

***Notice: These proposed bylaws changes will be voted on at the annual meeting. Make sure to read the explanation for the changes that is to be found on p. 1.***

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## BYLAWS

### WESTERN CHESTNUT GROWERS ASSOCIATION

(Revised February 23, 2002)

#### ARTICLE I - NAME

This Association shall be known as the Western Chestnut Growers Association.

#### ARTICLE II - PURPOSES

The purpose for which this Association is formed is to promote chestnuts, to disseminate information to growers of chestnuts, to improve communications between growers within the industry, to support research and breeding work and generally to further the interests and knowledge of Chestnut growers. ~~of Western North America.~~ ***The Association advocates the delivery of only high quality chestnuts to the marketplace.***

#### ARTICLE III – MEMBERSHIP

**1. ELIGIBILITY** – Any person(s) interested in the cultivation and use of the chestnut and who shall pay the annual dues. The membership of this ~~corporation~~ **association** shall consist of the following classes: (a) ~~Regular~~, **Single**, (b) **Household**, (c) ~~(b)~~ Honorary, and (d) ~~(c)~~ Complimentary.

(a) ~~Regular members are any growers of Chestnuts who shall pay the dues.~~ **Single membership is any interested adult.**

(b) **Household membership includes any two adult persons living in the same household. Each person would have one vote in Association matters. A Household membership will receive only single copies of Association mailings.**

~~(b)(c)~~ Honorary members are those persons who, in the opinion of the Association, have made a significant contribution to the chestnut industry. ~~and who are elected to honorary membership by a two-thirds vote of the members present at any regular meeting of the Association.~~ They shall have all privileges of membership but will not be required to pay dues. **Nominations of Honorary members will be made in the form of a letter outlining the potential nominee's contributions and must be submitted to the Secretary with the signatures of five members who are presenting the nomination. The letter will be read to all present at the next annual meeting and voted on by ballot. A two-thirds affirmative vote is required for approval.**

~~(c)(d)~~ Complimentary members are those persons designated by the Board of Directors each year and will have all privileges of membership but will not be required to pay dues and shall not be entitled to vote on Association business. They will generally consist of extension agents or other non-growers helpful to the Association or interested in the industry.

**2. ELECTION TO MEMBERSHIP** - Each applicant for Single or Household membership in the Association shall apply on a form as provided by the Secretary and submit the form along with the required dues payment for the current year.

**3. DUES** - The dues shall be set by the Board of Directors. Dues are payable on or before January 1, each year. No member may vote whose dues are not paid for the current year.

#### ARTICLE IV — MEETINGS

**1. THE FISCAL YEAR** shall begin on the first day of January and end on the last day of December.

**2. THE ASSOCIATION YEAR** shall begin immediately at the conclusion of the annual meeting and shall continue through the next annual meeting.

**1.3 ANNUAL MEETING OF THE MEMBERSHIP** - The annual meeting of the members of the Association shall be held upon such day and hour in ~~January~~ **June or July** of each year as set by the Board of Directors. **Ten (10) members of the Association shall constitute a quorum.**

**2.4 NOTICES OF MEETINGS** - Notice of any meetings of members shall be given in writing by regular mail to the address of each member as shown on the records of the Association. Notice shall be mailed at least fourteen (14) days prior to the date of the meeting.

~~3. 5~~ **SPECIAL MEETINGS OF MEMBERS** - A special meeting of members may be called at any time by the President or by a majority of the Board of Directors. No business shall be transacted at any special meeting other than that specified in the notice of such meeting.

~~4. 6~~ **REGULAR MEETINGS OF THE BOARD OF DIRECTORS** - A meeting of the Board of Directors shall be held whenever called by the President or by **written request of** any two (2) members of the board. Any and all business may be transacted at a meeting. Such meeting shall be held at the time and place stated in the call. Five days notice of a meeting of the Board of Directors shall be given by **fax, phone, voice mail, email,** or ~~by regular mail.~~

**5. 7 VOTING** - At any member meeting each member classified as a voting member shall be entitled to one vote. **Proxy voting is not allowed at any meeting or election.** ~~Members shall not vote by proxy unless prevented from attending by health. Association voting members shall designate a representative to cast their votes and the Secretary shall be notified who the representative will be. All voting results will be~~

*based on the number of votes cast, excluding all blank ballot votes and abstentions. The election of officers and directors will be decided by plurality vote.*

8. **ELECTION OF OFFICERS** - *Eligible members may cast their ballots for Officers and Directors in person or by mail. Each individual ballot cast must be sealed in a blank envelope with no identifying marks on the envelope or the official ballot. If mailed, the blank, sealed envelope, shall then be inserted into a second envelope having the member's name and address clearly written on the outside, and addressed to the Secretary. Mailed ballots must be received by the Secretary at least 3 days prior to the member meeting or hand delivered to the Secretary at least thirty minutes prior to the scheduled meeting time to be counted. During the Annual Meeting a teller's committee will open each outer envelope after matching the names against the current list of paid up members. A list will be made of those members casting a mail ballot and the inner envelope removed unopened to maintain the secrecy of the ballot process. The teller's committee will open and count the mailed ballots along with attendee ballots. All raw ballots as well as the list of those who cast ballots by mail will be available for review for a period of thirty days following the election at the residence of the Secretary.*

#### ARTICLE V - BOARD OF DIRECTORS

1. **COMPOSITION** - The governing body of this Association shall be a board of seven (7) Directors who shall exercise the powers of the Association and conduct and control its business and property. Such Board of Directors shall consist of three officers: President, Vice President, the Secretary/Treasurer, and four Directors at large. *These officers shall perform the duties prescribed by these bylaws and by the parliamentary authority adopted by the Association. No member shall hold more than one office at a time.* The Directors shall serve for a term of one year or until their successors are elected and qualify, *and their term of office shall begin at the close of the annual meeting at which they are elected.* ~~No Director shall serve for more than three (3) consecutive terms in one office.~~
2. **QUORUM** - Four (4) Directors shall constitute a quorum for the transaction of business.
3. **VACANCY** - Vacancies on the Board of Directors, other than by expiration of term, shall be filled by ~~appointment~~ *vote of* the remaining Directors.
4. **COMPENSATION** - No Director shall be compensated or receive a salary from the Association.
5. **POWERS AND DUTIES**
  - (a) The board of Directors shall set the dues, manage the business and conduct the affairs of the Association and shall carry out such policies and instructions as may be approved at any meeting of the members. The Board of Directors may ~~set up~~ *establish* committees for any of the objectives of the Association; ~~and such committees shall be appointed by the President. All committees serve at the pleasure of the Board.~~
  - (b) The Board of Directors shall have the power to make and enter into any contract or agreement for the furtherance of any of the purposes of the Association.
  - (c) The Board of Directors shall have the power to represent the Association on the various boards or congresses of the horticultural industry.
  - (d) *The Board of Directors may conduct its business by mail, internet, or fax and such voting requires each board member's vote be recorded in the Board minutes.*

#### ARTICLE VI - DUTIES OF OFFICERS

1. **PRESIDENT** - The President shall call and conduct meetings of the members and of the Board of Directors and shall serve as an ex-officio member of all committees except the ~~audit~~ *nominating* committee. *The incoming President and Treasurer will develop a proposed budget for the upcoming year for Board approval within thirty (30) days of taking office. The approved budget will be available to any member upon written request.* The President shall appoint members of committees as they are established and guide their progress; ~~The President shall appoint a three member nomination committee, chaired by the Vice President, at least 30 days prior to elections.~~
2. **VICE PRESIDENT** - The Vice President shall assist the President with the duties of that office and assume the duties of President when the President is unable to attend a meeting or resigns the office.
3. **SECRETARY/TREASURER** - The Secretary/Treasurer shall be responsible for the following:
  - (a) Provide for publication of all notices required by the bylaws or ordered by the President.
  - (b) Keep regular books of account under the direction of the Board.
  - (c) To collect and deposit all monies due the Association and to deposit the same in a bank designated by the Board.
  - (d) To keep minutes of the meetings and to provide those minutes to the Board.
  - (e) To render a report of finances of the Association at each annual meeting and at such other times as the Board/*President* may request.
  - (f) To render a report to the President at the end of each year detailing receipts and expenditures of the Association.
  - (g) *To cooperate with the Financial Oversight Committee each January.*

#### ARTICLE VII – COMMITTEES

1. *All positions outside the Board are considered to be committee level appointments.*



2. The Board of Directors may ~~set up~~ **establish** committees for any of the objectives of the Association ~~and such committees shall be appointed by the President~~
3. The President shall appoint members of committees as they are established, **subject to Board confirmation**, and guide their progress. ~~The President shall appoint a three member nomination committee, chaired by the Vice-President, at least 30 days prior to elections.~~
4. **All committee appointments expire at the close of elections each year.**

#### **ARTICLE ~~VH~~ VIII - NOMINATIONS**

1. **A Nominating Committee of three (3) members, no more than one (1) of which may be a member of the board shall be appointed at least 90 days prior to the annual meeting each year to prepare a slate of officers with one candidate for each office. The Nominating Committee's report and the proposed slate of officers will be made available to the newsletter editor in time for regular publication prior to the election. Ballots, if required, will be mailed at least ten (10) days prior to the annual meeting along with the newsletter or mailed separately by the Secretary.**
2. **Members may nominate their own candidate(s) by submitting a written petition to the Secretary at his regular address, prior to the election and including the following:**
  - a) **A written acceptance by each nominee to serve the association for the next year;**
  - b) **A request to place the proposed candidate(s) on the ballot with a clear description of the office being challenged, signed by at least 10 per cent of the eligible voting members listed in the most recent membership directory.**
3. **Nominations may not be made at the annual meeting or in any manner other than as provided in this Section.**
4. **If no valid written petitions are received by the Secretary prior to March 1st, the Nominating Committee's slate shall be considered to have been elected unanimously and no balloting shall be necessary.**

#### **ARTICLE IX – ASSOCIATION LOGO**

1. **The logo and the name “Western Chestnut Growers Association, Inc.” are owned by the WCGA and are protected by U.S. copyright law. You must treat the copyrighted material just as you would any other copyrighted material, such as a book.**
2. **The original copy of the logo will be maintained by the secretary and will be available upon written request. Users do not have the right to grant use of the logo to another person. Users agree to cease all use of the logo upon cessation of their membership in WCGA.**
3. **The user agrees to use of the logo as it is provided and to not modify or adapt it beyond that allowed in this Article.**
  - a. **The logo may be enlarged or reduced to meet individual needs.**
  - b. **The logo may only be duplicated in the colors provided in the original copy or in black and white format.**
  - c. **The logo may be used to promote any member's chestnuts or chestnut products on labels, banners, stationery, clothing, etc.**
  - d. **Use of the logo does not imply that the user is an official representative of the WCGA.**
  - e. **The logo should always be reproduced in the highest possible resolution regardless of the application.**

#### **ARTICLE ~~VH~~ X - CONDUCT OF BUSINESS**

The following order shall be observed as a guide to the transaction of business of the annual meeting of the members:

1. Call to order and reading of minutes of previous meeting.
2. Reports of Officers.
3. Reports of Committees.
4. Unfinished business.
5. New business.
6. Election of Officers
7. Papers, special reports, etc.

Roberts Rules of Order *Newly Revised, most current edition*, shall govern the deliberations of the Association.

#### **ARTICLE ~~VH~~ XI - NON PROFIT STATUS**

This Association shall not engage in any form of trade or commerce or carry on any activity for profit.

#### **ARTICLE XII - DISSOLUTION**

**The Association may be dissolved at any time by the written consent of not less than 2/3 of the members in good standing. In the event of the dissolution of the Association other than for purposes of reorganization whether voluntary or involuntary or by operation of law, none of the**

*property of the Association nor any proceeds thereof, nor any assets of the Association shall be distributed to any members of the Association but after payment of the debts of the Association its property and assets shall be given to a public or charitable organization selected by the Board of Directors.*

#### ARTICLE ~~IX~~ XIII - AMENDMENTS

These Bylaws may be amended or repealed by a two-thirds vote of the membership at any regular or special meeting thereof, if notice of such purpose has been given in the notice of the meeting.

#### ARTICLE XIV - STANDING RULES

- 1. Standing Rules shall contain operational procedures, policies, and practices of the Association not otherwise specified in its Articles of Incorporation or bylaws and shall be binding upon its membership. In no case shall a Standing Rule conflict with the Articles of Incorporation, bylaws, or other Standing Rules of the Association.*
- 2. Standing Rules may be proposed by any member in good standing at any regular meeting.*
- 3. The Association's Secretary shall, each year, prepare a list of all policy matters instituted by the Board during the previous year for enacting, amending, or rescinding by the Association membership at its Annual Meeting. A current list of all Standing Rules shall be published along with the bylaws in the membership directory.*
- 4. The Board shall cause to be circulated to the membership, along with the nominations for the annual meeting all Standing Rules it intends to submit for action at the annual meeting.*
- 5. Standing Rules may be adopted by a majority vote of the membership present and voting at any regular business meeting of the Association, provided that prior notice has been given; in the absence of such notice, a two-thirds vote shall be required.*
- 6. Any policies or rules adopted by the Board or the membership during the year cease to be operational at the close of the Annual Meeting unless adopted according to this Article.*

#### CERTIFICATION of ADOPTION

We, the President and Secretary, respectively, of the Western Chestnut Growers Association, hereby certify that the foregoing draft of ~~four~~ (4) pages constitutes a full and true copy of the Bylaws as amended of said Association and as adopted by members thereof in session at **Portland**, Oregon.

On \_\_\_\_\_, 2002

President \_\_\_\_\_

Secretary \_\_\_\_\_

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#### STANDING RULES OF THE WESTERN CHESTNUT GROWERS ASSOCIATION

- 1. The annual dues are set at \$25.00 per year for Single members and \$35.00 per year for a Household membership.*
- 2. The Association shall publish a quarterly newsletter to be mailed to all members.*
- 3. The President shall appoint a Financial Oversight Committee no later than December 31<sup>st</sup> each year to review the financial condition of the Association and prepare a report to the Board by January 31<sup>st</sup>.*
- 4. No disbursements of cash are to be made by the treasurer. Regular recurring expenses for newsletter, postage, required corporation report, refunds, meeting related items, banking expenses, resale clothing expenses, and Secretary/Treasurer expenses may be paid without board approval. Board approval is required for all other expenditures of \$200 or more. All voided checks will be retained in the Treasurer's records.*
- 5. Association financial records are to be maintained on "Quicken" or an equivalent software program.*
- 6. Candidates for all Director positions should have internet access.*
- 7. New members joining after August 1 will have prepaid for the forthcoming association year.*
- 8. The current Standing Committees are: Clothing, Newsletter, Nominations, Program.*

# WCGA CLOTHING ORDER

Here's another opportunity to promote the Association. The following clothing items are available with the new logo for association members.

Please complete the order form and mail with your check payable to WCGA, or VISA/Mastercard number to Sandy Bole, Ladd Hill Orchards, 15500 SW Roberts Rd., Sherwood, OR 97140 or Fax your order to 503-625-1937.

Colors available		Item No.	Unit price	Description	Sizes available
K420	Pique Knit Short-sleeve Polo Shirt	Unisex sizes XS-4XL	White, Ivory, Oxford, Stone, Yellow Faded Blue, Red, Faded Olive, Burgundy Forest Green		\$36.00
K420P	Pique Knit Short-sleeve Polo Shirt w/Pocket	Unisex sizes XS-4XL	White, Stone, Faded Blue		\$38.00
L420	Ladies Pique Knit Short-sleeve Polo Shirt	Sizes S-XL	White, Stone, Yellow, Faded Blue, Red		\$34.00
PC61	Men’s/Women’s Cotton Knit T- Shirt	Sizes S-2XL	White, Ash, Yellow, Natural, Stonewashed Blue, Stonewashed Green, Violet, Colonial Blue, Red, Spruce		\$16.00
SP10	Long-sleeve Denim Shirt	Sizes XS-4XL	Faded Blue		\$35.00
SP11	Short-sleeve Denim	Sizes XS-4XL	Faded Blue		\$35.00
L600	Ladies Long-sleeve Denim Shirt	Sizes S-XL	Faded Blue		\$44.00
83062	Crewneck Sweatshirt 80/20 Cotton/Poly	Adult sizes S-2XL	Ash, Heather, Bluegrass (slate blue), Wine		\$46.00
CP82	Brushed Twill Baseball Cap adj. closure		Khaki, White, Red, Royal		\$15.00
AP34	Butchers Apron 34” long		White, Vanilla, Butter, Sage, Hunter, Red, Royal		\$19.00

**Note:** All items are 100% cotton, unless otherwise noted.

We will be ordering again at the annual meeting.

Clip the order form below.

## WESTERN CHESTNUT GROWERS' ASSN. CLOTHING ORDER FORM

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

[illegible]

Payment Method: ☐ Check ☐ VISA ☐ Mastercard  
Credit Card No: \_\_\_\_\_ Expiration Date: (Mo/Yr) \_\_\_\_\_

Signature: \_\_\_\_\_

MAIL YOUR ORDER WITH CHECK ENCLOSED **PAYABLE TO WCGA** TO SANDY BOLE, LADD HILL ORCHARDS, 15500 SW ROBERTS RD. SHERWOOD, OR 97140.



# A Special Thank You to Contributors

An organization's newsletter can only be as good as its contributors, and WCGA is fortunate to have so many dedicated people that have contributed to the success of "*The Western Chestnut*". I'd like to take time to thank those who have contributed since the publication's inception, July, 1999.

Our member writers: Annie Bhagwandin, Ben Bole, Sandy Bole, Anthony Boutard, Christopher Foster, Dennis Fulbright, Steve Jones, Michael Nave, Charles NovoGradac, Jeff Olsen, Jim Pettit, Kay Ryugo, John Schroeder, and Paul Vossen

Members who have pointed us to useful information or helped us with an article: Ben Bole, Harvey Correia, Peggy Paul,

Writers who have allowed us to reprint their work from other publications: Bridget K. Behe, Ric Bessin, Dan Hager, Peter Hall, Kathleen Kelley, Dr. David Klinac, Ilaria Mignani, Bill O'Kane, Thomas L. Wessels, Jennifer Wilkinson, Annamaria Vercesi, Peter Williams, David F. Zoldoske C.I.T.

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*Visit the WCGA Website*

[www.ChestnutsOnLine.com/wcga](http://www.ChestnutsOnLine.com/wcga)

*Don't forget that all members are entitled to a free "6-liner" each calendar year.*

*Additional lines are only \$2.50 for 6 more.*

*Want something a little larger -- more room to elaborate on your product or service -- then try a full page ad for only \$20 including a graphic, a half page at \$15, or quarter page at \$10. Contact the Editor today.*

## Advertising in The Western Chestnut

**Don't forget that your business card ad can appear for only \$15 for 4 issues.**

**Bargain of the century, right?**

**How can you go wrong?**

## NOTICE

**Mark your calendar for the next International Chestnut Symposium to be held Oct. 20-23, 2003 in Tras-os-Montes, Portugal.**



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