

## Welcome to the new era of Hazelnut Orchards!

Secondly our store is restocked for Spring. It is often hard to see when we are in the middle of change that will affect our lives and future generations to come, especially when it involves trees. However, the information we are about to give you will show we are on the cusp of making hazelnuts as common as grapes and apples. This vision has been our effort for 28 years, ever since we saw how much farmland has gone fallow in the Northeast.

Normally in the newsletter we like to show you our efforts to bring you quality nut trees. In this issue we bring you the combined efforts of researchers and citizen scientists to bring you hazelnuts from across the continent. The harbinger that illuminates we have reached a new era is the chart of new cultivars that are being made available to the public. This means superior hazelnuts are being cloned (layered and tissue cultured) allowing the consistency and quality of nuts needed to establish very productive hazelnut orchards. This also means there will be the volumes of trees needed to establish larger scale plantings.

When starting out planting hazelnuts most of us just want to grow a few or a hedgerow of hazelnut trees and are happy with the varied nut sizes and ripening times. If we see good growth, many of us then plant a mini orchard of 20 or more and then expand beyond. However, you know if you plant a cultivar you will get a superior tree with high production of quality nuts. If you plant whole rows of a "cultivar" those rows will ripen at the same time and the nuts will be uniform to enable processing to remove the shells, required by

consumers, confectioners, and bakers. Remember that a "cultivar" is a clone of a superior tree and it is given a name by the breeder that is often copyrighted or patented to protect the name or genetics, respectively. Keep in mind seedlings will remain an important roll in commercial orchards for pollination insurance and genetic diversity that we explain in our book, "<u>The Hazelnut and Chestnut Handbook</u>".

We talk to many people that are happy to plant seedlings as they are more economical to buy. We can only refer you to our experience of the last 28<sup>+</sup> years of what it takes to generate a "cultivar". We have purchased over 10,000 trees and planted many of our own controlled cross hybrids in the last ten years. Of the original 10,000 trees, we have identified 8 superior trees. It is only these eight trees we generate our seedling trees from and two of them have been given a cultivar status. The invested cost of planting and replanting over 28 years and the costs associated to find the superior trees is why it is not an investment taken by private companies and usually is done by colleges. The cultivar may cost more; but will more than pay for itself, just in the extra quantity and quality of nuts they will provide year after year.

Table #1 below lists all the cultivars that are being made available to the public that we are aware of. Most cultivars are ramping production and will be available soon if not already. How did this happen and why now? Like we said many researchers and citizen scientists have been working in parallel building on previous efforts to bring blight resistant trees to the eastern half of the continent where Eastern Filbert Blight exists.

Name	Heritage - European, American, Asian	EFB Resistance	Pollen (Early, Mid., Late)	Cold hardiness, USDA Zone	Nut Quality Comments	Buy from
Grand Traverse	ExA	Yes	м	5b	1.3g nut, 40% kernel	Great Plains, Arbor Day
The Beast	ExA	Yes	E	5b	43% kernel, aggressive grower, Taller European type tree	Great Plains, Arbor Day
NADF 10-50	AxE	Yes	M,L	5b	1.0g. nut, 39% kernel	Great Plains, Arbor Day
Raritan PPAF	E	Yes	М	6b/7a	1.1g. nut,48% kernel	Foggy Bottom
Monmouth PPAF	E	Yes	E, M	6b/7a	1.2g. nut, 52% kernel	Foggy Bottom
Somerset PPAF	E	Yes	M	6b/7a	1.1g. nut, 55% kernel	Foggy Bottom
Hunterdon PPAF	E	Yes	М	6b/7a	1.2g. nut, 46% kernel	Foggy Bottom
NITKA ™	AxE	Yes	M	4a	1.1g. nut, 52% kernel	Z's Nutty
Truxton	AxE	Yes	М	5b	1.1g. nut, 44% kernel	Z's Nutty
Rose9-2 PPAF	AxE	Yes		3	0.62g. nut, 45.5 % kernel	
PriceW41 PPAF	AxE	Yes		3	0.58g nut, 39.4 % kernel	Check UMHDI
Minar342 PPAF	AxE	Yes		3	38 % kernel	Check UMHDI
Rose18-10 PPAF	AxE	Yes		3	0.75g. nut, 41.9 % kernel	Check UMHDI
SpC-2D5 PPAF	AxE	Yes		3	0.68g. nut, 37.4 % kernel	
StapN2-7 PPAF	AxE	Yes		3	0.66g. nut, 39.4 % kernel	
ShepRosy PPAF	AxE	Yes		3	0.77g. nut, 42.0 % kernel	Check UMHDI
Cuddy2-28 PPAF	AxE	Yes		3	0.48g. nut, 35.3% kernel	Check UMHDI
Arb4-3 PPAF	AxE	Yes		3	0.50g. nut,38.5% kernel	Check UMHDI
Gibs5-15 PPAF	AxE	Yes		3	0.54g. nut, 29.1 % kernel	Check UMHDI
Eric4-21 PPAF	AxE	Yes		3	0.57g. nut,31.0 % kernel	Check UMHDI
HandFats PPAF	AxE	Yes		3	0.81g. nut,42.7 % kernel	Check UMHDI
Andrew™	A x As	Yes	L	3b	medium sized nut	Grimo
Aldara ™	A x As	Yes	L	3b	medium sized nut	Grimo
Marion	Α	Yes		3b	medium sized nut	Grimo
Frank	Α	Yes		3b	medium sized nut	Grimo
Northern Blais TM	Α	Yes		4	medium sized nut	Grimo
Gene™	AxE	Yes		5b	med./large sized nut	Grimo

Table #1, Named Cultivars of hazelnuts in the process of tissue culture, from the book "The Hazelnut and Chestnut Handbook" by Jeffrey and Dawn Zarnowski, all rights reserved.

Three cultivars are being brought to you by the <u>Hybrid Hazelnut Consortium</u>, which is a joint effort between Oregon State University, Nebraska Forest Service/University of Nebraska-Lincoln University, Rutgers University and Arbor Day Foundation. Another major research effort is from the <u>Upper Midwest</u>

<u>Hazelnut Development Initiative</u>, where scores of growers have combined their efforts to locate their first generation of selections. <u>Rutgers University</u> also has its own efforts, that has yielded four selections so far, for the warmer regions of New York and south. There are also private efforts being born by <u>Grimo Nursery</u> and of course yours truly, <u>Z's Nutty Ridge</u>.

This letter was to inform you about how the eastern half of the continent and beyond can obtain hazelnut cultivars from many sources. Hopefully, these new plantings will be in a permaculture way. What you do is up to you. Just planting a tree is a wonderful thing that you can do to benefit you, all of us and future generations at the same time.

So, we have restocked our store to help you and others get trees to plant for spring planting. You now know the great care we take in getting you the best genetics. We just hope you plant trees and very much appreciate if some come from Z's Nutty Ridge. Also, do not forget our gift cards if you want to encourage someone to plant trees. We have some Truxton available now and will have NITKA available when we dig them up next March. We also hope to have many tissue culture trees available soon. We thank you for your support!

Enjoy the Holidays and time with Family and Friends.