## Pears 2016 David Ulmer, M.D.

I love pears and hope that you don't give up on them just because we have had a couple of bad years due to fireblight. In about 2000, I lost four Asian pears to the ground (all planted in the same hole). Subsequently, I lost young trees of Conference on two occasions and have lost several apples on dwarfing rootstock (mainly M9 or M9 clones). In 2014, I lost mature trees of Belle Lucrative and Passe Crassane plus a 3 year old Abbe Fetel. I also had a major strike on Seckel. Several varieties topworked on other trees blighted.

Then 2015! The following mature trees had severe strikes and look like they should be removed from the orchard – Orcas, Butirra Precoce Morettini (BPM), Fin de Siecle, Dana Hovey, White Doyenne, Chojuro and possibly Seckel. I cut to the ground Des Urbanistes with over 20 varieties top worked on it! I also had to remove five 4 year old trees and one other Asian cultivar - Kikusui.

In the midst of all this carnage, many varieties did not have any problems. Warren, Tenn, Honeysweet, Shinko, Ayers, Comice, Beierschmitt, Magness, Popenoe Duchess and many one to 4 year old varieties topworked to other trees were completely spared.

Bosc, Winter Nellis, Korean Giant, Ya Li, Hosui all had manageable strikes.

As many of you know, I started my fruit growing mania in the southeast US where fireblight limits pear growing to only those varieties with a fairly significant resistance to the disease. There are a group of sand pear hybrids that have been grown in the south for many, many years. Most are firm pears with fair flavor, good for canning and cooking, but with limited dessert value. Names like LeConte, Hood, Baldwin, Monterrey, Pineapple, Leona come to mind.

Several breeding programs have worked on better quality blight resistant pears through the years. The USDA program in Maryland /West Virginia has released several varieties and a breeding program in Tennessee in the 1920's -1960's also released several varieties. There have been many varieties released by other programs and private individuals as well.

Here are a few blight resistant pears with release date origin if I know it. I added my opinion if I have experience growing it.

1.SHENANDOAH USDA WV 2003 High quality late pear. I want to add it to

my trials. Anyone have a stick? I have been unable to find a source that will ship to California,

2. **HONEYSWEET** Purdue, IN 1980's I think. I have it growing blight free. So far I have not picked the fruit at the correct time and it has not been as flavorful as when I grew it in MS where I found it to be close to Seckel in quality with larger size.

**3.WARREN** MS 1976 Released by my mentor, TO Warren. One of my favorites. It will blight and I know of trees killed in the South, but is highly resistant and does very well for me in Sebastopol. Look below under Magness. Available locally.

**4.POTOMAC** USDA 1993; Moonglow X Anjou cross. Some say "The <u>highest</u> <u>quality fireblight resistant variety available</u>." I have a one year graft. Looking forward to this one! Available locally.

**5. MOONGLOW** USDA 1960 One week earlier than Bartlett. Productive. Grew well for me in Miss. Not the best flavor. My "Moonglow" tree is mislabeled. See NOT MOONGLOW below.

6.**MAXINE** Ohio 1845. AKA Starking Delicious. It did not blight for me in MS, but I didn't think it was a very good pear. I have not added it to my collection here.

7.**MAGNESS** USDA in 1960 Excellent quality, similar to Warren. Known to be susceptible to trunk blight. I grew it in MS and have a 16 or 17 year old tree here that is doing fairly well. Both Warren and Magness are pollen sterile and unattractive to bees. I play bee most years dabbing Comice pollen around the lower blossoms that I can reach and usually have several dozen fruit set. Ripens after Bartlett. It and Warren are our favorite varieties to dry. I think it has really excellent quality.

8.**DAWN** USDA 1960 I had a 2 year graft killed by blight this year. It was released as fireblight resistant. However, it is not as resistant as others released by the USDA program and is even listed as blight sensitive by some. I have never fruited Dawn.

9.**BLAKE'S PRIDE** USDA and Ohio State 1999 I have a small tree on OHxF333 that is growing slowly without evidence of blight. But, I also had a 2 year graft topworked on an Orcas tree that blighted to the graft union. I had a

dozen other varieties grafted on the same tree, none of which are thought to be particularly blight resistant that did not blight. Go figure! Available locally.

**10.HARROW DELIGHT** and **HARVEST QUEEN** Agriculture Canada Harrow, Ontario 1981. Several varieties have been released by this station. I grew these two and two others prior to their introduction while living in MS. They did not blight. That said, I had 3 Harrow Delight limbs grafted on my BPM pear that all died of fireblight this year.

11.**KIEFFER** 1883 Sand pear x Bartlett – canning, I have a pear I think is Kieffer that I grafted in 1998 as a Harrow Delight. I now have it topworked to other varieties. Has done well as a rootstock so far. Not a dessert pear!

12.**SECKEL**1790 East Coast. Reported as blight resistant and I grew it for almost 20 years in MS without a strike. My 12 year old tree here in Sebastopol has been badly affected the past two years. Many so called blight resistant pears owe their resistance to Seckel which is moderate at best.

13.**ORIENT** 1945 TN breeding program – a sand pear hybrid with acceptable quality if you can't grow Europeans. It grew well for me, was quite productive, but I have not tried it here.

14.**AYERS** TN1954 another release from TN. This is a nice firm sweet pear that I have grown in the past and have recently grafted here. I noticed bloom buds swelling today. It is on Joseph Postman's Curator's Choice list. Excellent blight resistance.

15. **'Dabney,' 'Mooers, 'Hoskins,' 'Carrick,' 'Morgan,'** and **'Mericourt'** are releases from the same TN program. I grew all without blight in MS. None were excellent but Mericourt was quite good. I have not tried any of these here.

15.**NOT MOONGLOW** I grafted a Moonglow scion many years ago – not Moonglow! You may have sampled it at the apple tasting this past fall. It received high marks. I grafted a Moonglow scion on the tree this year – we'll see what shows up. This tree has not blighted at all although 3 Bartlett clones grafted on it died of blight this year. This tree was late coming into fruition.

16.**TYSON** 1700's Pears of NY says this is one of the very best early ripening pears and it is blight resistant. I grew it for over 15 years in MS – no blight and also no fruit! I do have it grafted here.

17.**TENNESSEE** NEVER RELEASED Story is that this pear was in the TN

breeding program mentioned before. No one has confessed to snagging a scion out of the experimental orchard. I grew it in MS under the research number. It did not blight and I did not think it a very good pear. That said, it has become quite popular in the south. I have a 10 year old tree that is quite small on OHxF97. That rootstock is supposed to be a standard size tree. Fruit are small and not particularly good.

18.**GEM** USDA 2014 Latest release from the USDA. I saw this one growing in Oregon August 2014 at the CRFG annual Festival of Fruit. Beautiful. Hope I can get a scion or tree soon.

Here are some notes from my long term fruit friend from Houston TX, Ethan Natalson. Ethan has been growing and researching pears in the deep south for over 30 years. My comments in bold. Those of you in low chill areas may want to look at some of these. Houston is quite low chill.

"The most blight resistant pear in Houston year after year is Tennessee. It is virtually immune. It has bitter skin but a good flavor but is a medium to small pear.

Southern Bartlett was found in the barber's backyard by Travis Callahan.(**lives in southern LA and has the Southern Pear website**) It has good blight resistance and good flavor and can be medium to large in size. Far and away it is the pear the squirrels hit first so they like its flavor. When fully ripened, it has a very good flavor. Both Tennessee and Southern Bartlett are large trees on calleryana.

Southern Queen is a large pear, russetted, firm and a heavy bearer every year. It is a semidwarf on calleryana but has an upright habit. It has blight resistance between Southern Bartlett and Tennessee.

The pear I sent you, Tennousi, is a cross of Tennessee and Housi. It is self-fertile, and when grown alone, has excellent blight resistance. However, when grown next to other pears, it will get some blight. It can be a very large pear and looks externally just like Housi, but is a better pear. It is not as large a tree on calleryana as some of the others. **(I have scions available if anyone wants them)** 

Acres Home is another very large and very uniform pear with fairly good blight resistance. It is firm but with a better flavor than Southern Queen. Ed Fackler likes it and Bob Randall thinks it is the best pear for Houston. (two nationally known fruit growers) It is a fairly large tree on calleryana and is precocious in bearing.

Another old pear that has an outstanding flavor is Carrick. It is listed as a cooking pear. It is very pyriform, can be very large and when fully ripened has an outstanding flavor. It is the opposite of precocious and takes years to bear. (I know I grew it in MS but maybe didn't fruit it) It has blight resistance similar to Southern Bartlett."

ASIAN PEARS

Shinko Is resistant. I have seen lists of blight resistant Asians and have had severe strikes and/or death on most varieties except Shinko. Most commercial Asian pear trees are grafted on Pyrus betulaefolia – in my opinion that rootstock is too vigorous and induces blight.

We have had two bad blight years and may not have another anytime soon. However, this may be due to climate change. We'll see. The beautiful warm weather this week reminds me of a similar warm spell last year followed by rain that I feel was the root cause of our horrendous year.

All of the varieties listed except Shenandoah are available from the Pear Repository in Corvallis. They are not shipping pear propagation material this year.

Links:

Fire Blight resistant list at USDA Pear Repository Corvallis OR. <u>http://www.ars.usda.gov/SP2UserFiles/Place/20721500/catalogs/pyrblres.html</u>

USDA Monograph on Fireblight – lots of good basic information if you really want to learn more. http://naldc.nal.usda.gov/download/CAT79714375/PDF

Here is a link to a good article from UC Davis on Asian Pears http://fruitsandnuts.ucdavis.edu/dsadditions/ Asian Pears/

Dave Wilson Pear List

http://www.davewilson.com/product-information/product/pears

Bay Laurel List - Good mail order source for Dave Wilson Trees if our local nurseries don't have them <u>https://baylaurelnursery.com/pears.html</u>

Old bulletin from the Tennessee Breeding Program discussing several releases <u>http://trace.tennessee.edu/cgi/viewcontent.cgi?article=1167&context=utk\_agbull\_etin\_</u>