

**CHESTNUT CHAT SERIES:**  
**CHAT 25: CONTROLLED POLLINATIONS**  
**DATE: FRIDAY, JUNE 18, 2021**

<b>ORIGINATOR</b>	<b>QUESTION / COMMENT</b>
Clark Beebe:	Jules, Good morning! Clark.
Jules:	Hi, Clark! Glad you're here!
Jules:	Will post a link to the specific Journal shortly.
Jules:	Link to "Chestnuts and Light" article in TACF's Journal from May-June 2021: <a href="https://acf.org/wp-content/uploads/2016/09/Volume-XXVI-No.-3-May-June-2012.pdf">https://acf.org/wp-content/uploads/2016/09/Volume-XXVI-No.-3-May-June-2012.pdf</a>
Jules:	2012, that is!
John Hempel:	Are these seedlings making pollen within a year of starting the extreme photoperiod?
Lisa Thomson:	John, can you drop this question in the Q & A? And hi!
Jules:	Hi John, would you mind sharing your question in the Q&A box (It's to the left of the chat bubble)?
Clark Beebe:	When I was in high school, we raised and sold certified crown vetch seed. My father always said he wanted the plants to be stressed because they would produce more seed. His idea was fear of death caused the plants to put all their energy into procreation.
Andrew E. Newhouse:	Great job Dakota!
Brian Roth:	Carry on. My bad!
8Amishshield:	I have great success spraying compost tea on plants with pests and other naughty visitors!
Marty:	can you use ladybugs against aphids?
Jules:	Hi, Marty. Can you please put your question in the Q&A box to the left of the chat bubble?
Andrew E. Newhouse:	Jules, I don't know if it's just me, but I'm not seeing anything from any attendees in the Q&A or chat. Is there anything that's supposed to be there? No big deal for me; just wondering if there's a setting to be changed or whatever. Thanks!
Lisa Thomson:	I don't think there is a way for attendees to see the Q & A.
Lisa Thomson:	That's why Sara would always have to read them out.
Jules:	That's what I was thinking. Thanks for answering, Lisa.
Andrew E. Newhouse:	No problem! I thought I remembered seeing the Q&A in the past, but maybe that's when I was a panelist. Carry on!
Jules:	Hey Andy! I think Lisa's right. I'm seeing 13 questions as of now and have gotten a few comments.
nurul faridi:	Are the transgene seedlings homo or heterozygous for the blight gene?
nurul faridi:	How can we identify homozygous for the transgene?

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Jules:	Hi Nurul, can you add those questions to the Q&A? It's to the left of the chat bubble.
cabell:	what do you expect to be the range of trees ?
Jules:	Cabell, can you add those questions to the Q&A? It's to the left of the chat bubble.
Hannah P:	We used over one year old pollen last pollination season using T1 pollen that was produced in 2019. We got offspring from those crosses. So older pollen should work fine too.
Hannah P:	2018*
Hannah P:	Probably not as good as "refresher," pollen though.
Hannah P:	Oops sorry for the chat!
Jules:	No worries, Hannah. Thanks for sharing!
Candy:	thank you have to go learned along - from a shade tree committee member in NJ
8Amishshield:	<a href="https://biochar-international.org">https://biochar-international.org</a> . Start here. One inoculates biochar with compost or worm castings tea amongst other inoculates. You can make your own biochar or purchase at an aquaponics supply.
8Amishshield:	Good definition: <a href="https://en.m.wikipedia.org/wiki/Biochar">https://en.m.wikipedia.org/wiki/Biochar</a>
Clark Beebe:	As far as increasing the level of CO2 in the growth chambers, it would not be necessary to seal the growth chambers. If some escaped, so what? CO2 is cheap and not toxic at relatively low levels.
Jules:	Back on but it keeps kicking me off, then back on. Sorry about this!
8Amishshield:	Organic farmers may have additional tips for indoor pest as crops grown in hoop/green houses are grown with the same principles as in the field. Also, Bison Soil (not sure if still in business) used to donate biochar to researchers at the University of Kentucky. There are other sources and btw, inoculation moves beneficial microbes into the nooks and crannies of biochar housing.
Jules:	I'm here but it's unstable. Still, LMK if I can help with anything.
Bruce:	Please let me know if my two Dunstan chestnut trees in Silver Spring would be useful for research purposes. They are both healthy, approximately 8 inches dbh, 30 feet tall, producing burrs and easily accessible by a cherry picker. <a href="mailto:bruce.b.cohen@gmail.com">bruce.b.cohen@gmail.com</a>
Clark Beebe:	Is there a way I can upload some files? I have some great stuff on biochar.
Jules:	Are they links? If so, you can copy & past those.
Jules:	Not sure about other files, like documents.
hmc nab:	Please ask Tom to explain more about the USDA permitting process.
Clark Beebe:	No, not links, files. word documents of biochar experiments.

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Jules:	I've shared this with Lily but can you also add your comment to the Q&A? That's what she is monitoring right now.
Clark Beebe:	Here is a link to some info on biochar: <a href="https://drive.google.com/drive/folders/1gjqi-scxabM0LZ9z9uVkkJgMyEzxDe5_?usp=sharing">https://drive.google.com/drive/folders/1gjqi-scxabM0LZ9z9uVkkJgMyEzxDe5_?usp=sharing</a>
Andrew E. Newhouse:	Good description!
Clark Beebe:	Tie a cat to every tree to keep the squirrels away.
Jules:	We should wrap this up no later than 1:30, if possible.
Clark Beebe:	Maybe you could get members to make mesh bags. Send out instructions and a few details and I'm sure many members would make them for you.
Clark Beebe:	I'd certainly be willing to make some mesh bags.
Jules:	Jared is here.
Jules:	Want him to answer?
John L Vanco:	Thanks so much for a fascinating and informative series of presentations.
Jules:	About the CRISPR.
Jules:	Never mind, it's ok.
8Amishshield:	Thank you! This was a great chat!! Jessica