

WWW. ITS CHRISTMAS KEEP IT REAL.COM

Research 2019-2020



A representative example demonstrating inhibition of Phytophthora growth in the presence of soil rhizosphere bacteria, in a dose-response experiment. The number of colonies the Phytophthora was exposed to is indicated by the label on the Petri dish: 0, 2, 4, and 8. For this Phytophthora/bacterial species interaction test, the only growth from the introduced Phytophthora inoculum was from the "0" treatment. Note also that the Phytophthora only grows away from the colonies of bacteria present in the other treatments



Fraser fir trees produce cones that disintegrate in the fall, leaving unsightly stalks on the tree.



Over 5000 branches, from top performing trees in regional CoFirGE plots, were tested for superior needle retention characteristics. This data will be used in the selection process for seed orchard candidates.

Like many aspects of life, COVID-19 restrictions impacted Christmas tree research funded by the CTPB, due to limited travel, limited access to field plots, and other restrictions at university facilities for researchers. Many projects funded by the CTPB in 2019 – 2020 will continue into fiscal year, 2020-2021. However, some researchers were still able to make significant progress.

Producer interest in biological and sustainable methods for controlling Elongate Hemlock Scale (EHS) led to CTPB funding a proposal at Connecticut Agricultural Experiment Station. EHS are insects that affect the marketability of Christmas trees, because they may cause yellow spots to form on needles, can cause needles to shed, and their shipment across state lines on infested trees may be prohibited. In field tests, Dr. Rich Cowles found that dinotefuran was the only systemic insecticide, of those tested, that was effective when applied as a basal bark spray. Application in this manner minimizes the risk that systemic insecticides can present to pollinators, by limiting the application to the Christmas trees and preventing contamination of nearby flowering plants. A second avenue for EHS control being studied, the isolation of pathogenic fungi affecting EHS, is ongoing.

Firs grown as Christmas trees are susceptible to a root disease, phytophthora root rot. CTPB funded experiments at the Connecticut Agricultural Experiment Station, and North Carolina State University, demonstrated that the addition of elemental sulfur to acidify the soil to a pH of 4 has a dramatic effect in improving the health of

susceptible trees when grown in a soil harboring this disease. This effect may be due to enhanced mineral nutrient availability to the tree, direct inhibition of Phytophthora spp growth at low pH, and a dramatically changed microbial community associated with the roots of these fir trees, which might favor better root health. Some of these remarkably diverse bacteria found in fir tree root zones are antagonistic to the growth of Phytophthora spp. These need to be further studied to determine whether they can become a practical tool as a root dip at the time of planting to protect the roots from infection.

Control of coning in Fraser Fir at Michigan State University is a multi-year research project supported by CTPB funds. The results indicate that plant growth regulators that inhibit Giberillic Acid can disrupt cone formation in Fraser fir. Depending on the level of coning on a given farm, the cost of application could compare favorably with manual cone removal. Upcoming trials will compare the potential of additive effect of combining soil and foliar applications. Investigation of other methods of coning control are ongoing. Researchers have identified post-emergent herbicides and rates that can kill 90% or more of developing cones without

causing injury to trees. In 2020, planned growercooperator, operational-scale trials using tractormounted sprayers, were postponed due to Covid-19 travel restrictions. This work will resume in 2021. A delayed coning seed orchard is in development and environmental control of coning studies are ongoing including the study of tree water stress in Abies spp. and cone formation.

Virginia pine, an important Christmas tree species in southern regions of the U.S., is short-lived when planted as an orchard tree, requiring serial grafting to maintain current genetics. A CTPB funded research project at Texas A&M Forestry Service is providing for both the preservation of selected parents in the current breeding program, as well as the identification and capture of additional select individuals for use in breeding and improved seed orchards.

A continuation of the ongoing **CoFirGE** research (North Carolina State University, Washington State University, Oregon State University, Penn State University, Michigan State University, and the Connecticut Agricultural Experiment Station), is measuring needle retention characteristics of the top performing trees from established plots, that have been identified as potential candidates for inclusion in grafted seed orchards. These plots are in every major Christmas tree growing region of the U.S.Trees with poor needle retention will be eliminated from further consideration. These regional CoFirGE plots provide a unique opportunity to determine if sources of trees that exhibit superior needle retention characteristics in one region, exhibit similar patterns in other regions.

With CTPB research funding, Penn State University continues to work closely with Pennsylvania and mid-Atlantic Christmas tree growers to address Spotted Lanternfly (SLF) issues, and to minimize the negative impact on the Christmas tree industry. Surveys of Pennsylvania Christmas tree farms were conducted for the second season. Research results are supporting the claims that Christmas trees are not a preferred host for Spotted Lanternflies, and it is highly unlikely that a Spotted Lanternfly would inhabit or lay eggs on a Christmas tree. Scientifically accurate Spotted Lanternfly information in the form of a

fact sheet was developed and widely distributed to media, growers, and retailers.

An ongoing two-year study, at Washington State University, of preharvest applications of Harvista (I-MCP) to reduce ethylene-induced needle loss on Douglas-fir, balsam fir and Canaan fir was funded by the CTPB. Preliminary results indicate that while some improvement has been observed on trees with poor needle retention, preharvest spray application of I-MCP has not proven very effective for preventing needle loss.

The Douglas-fir twig weevil, is the subject of a CTPB research grant at Washington State University. The name of this pest is misleading as it has now been found on every tree species grown in the PNW. Currently control of twig weevil is based on multiple applications of insecticides due



largely to the lack of information relating to critical stages in the life cycle of this pest. This research project is clarifying the diversity of twig weevil populations on different Christmas tree species, developing a degree day model for critical twig weevil life stages and a twig weevil scouting and management guide for growers. Population structure, distribution, and life cycle is critical to optimizing control of this pest.

COVID-19 travel restrictions delayed a project at Oregon State University that will survey Hawaii for the presence of Oregonian slugs, in hopes of removing their quarantine status that impact Christmas tree shipments to Hawaii.

A list of research projects funded in FY 2020-2021 includes:

Washington State University	Regional variation in needle loss CoFirGE planting sites – Year 2	\$ 15,563
Michigan State University	Managing cone formation in Abies Christmas tree species	\$ 24,384
Washington State University	Ethyl formate fumigation in eradicating elongate hemlock scale	\$ 5,946
Oregon State University	1Think We Have a Winner! New Trojan Fir Collections	\$ 17,173
Washington State University	Economic Impacts of the Three Christmas Tree Growing Regions of the U.S.	\$ 40,000
Virginia Tech	Spotted Lanternfly Education Pilot Program for Christmas Tree Growers in Virginia, West Virginia, and Maryland	\$ 5,993
North Carolina State University	Effect of Growing Media Properties and Container Geometry on Fraser Fir Germination and Transplant Success	\$ 41,331
Washington State University	Improving the viability and vigor of Nordmann and Turkish fir seeds in long-term storage.	\$ 33,339
West Virginia University	Isolation and development fungal biocontrol for elongate hemlock scale	\$ 40,000
University of New Brunswick	Genetic variation in Balsams: Needle retention and bud flush	\$ 12,133
Washington State University	Viability and vigor of heat-treated Nordmann and Turkish fir seed	\$ 19,583
Texas A&M Forest Service	Breeding to produce the next generation of Virginia pine for the Texas/Oklahoma Christmas tree markets	\$ 7,061
Connecticut Agricultural Experiment Station	Rhizosphere bacterial inoculants to protect fir roots and enhance growth	\$ 22,000

Currently a Research Topic Survey for growers is ongoing, and can be found on our website, https://www.christmastreepromotionboard.org/research/ Results of this survey are distributed to potential Christmas tree researchers prior to our annual request for research proposals (RFP) in early May. Results of this CTPB Research Topic Survey for growers are incorporated into the RFP to set research proposal funding priorities. New researchers, and the number and quality of research grant proposals continues to rise each year.

Campaign 2020





When you and your t photobombe



The It's Christmas. Keep it Real campaign, encouraging greater demand for fresh cut Christmas trees, got off to a fast start and was a part of a very strong year for Christmas tree sales. In 2020. CTPB was able to successfully build on the growth from past years. The campaign remained focused on its main objectives of increasing the value and demand for fresh cut Christmas trees and building a lifelong real tree customer base, specifically with Millennial families.

The CTPB unveiled a redesigned consumer website and partnered with a wide variety of different influencers and outlets. And, with five years of work under their belt, the CTPB has become a trusted source for the news media.

Partnerships

How Does it Grow - The Christmas tree episode of this popular YouTube channel with more than 400,000 subscribers debuted on November 25. The piece is visually stunning, while providing an inside look at Christmas tree production. A short companion piece focused on selecting, caring for and recycling a Christmas tree went live on December I.

These videos have racked up 130,000 views and are available for consumers to view year-round. They will be an asset for the industry for years to come.

Dad, How Do I? - The CTPB partnered with popular YouTube influencer, Rob Kenney; an "answer dad" with more than 3 million followers. Rob shares personal experiences of selecting a real tree and provides how-to pointers to first time real Christmas tree buyers. Rob's Christmas tree video was viewed 36,000 times and will remain available for viewing year after year.

Scary Mommy and The Dad - These social channels, very popular with young moms and dads were a logical place to share the It's

Christmas. Keep It Real messaging. The campaign created two fun and sweet social posts for these channels and they also featured several of the "Kids Videos" that were created for this season's campaign. This partnership garnered more than 50,000 engagements, 6 million impressions and the posts performed better than the average sponsored posts on these

Satellite Media Tour - Now an annual project, the SMT took place on November 24, just prior to Thanksgiving. Nicole Jolly, host of How Does it Grow, joined veteran Christmas tree retailer, Fran Wolff in more than 25 live television and radio interviews from coast to coast. This tour secured 1,337 placements and nearly 14 million impressions.

City Moms Collective – This year the CTPB partnered with City Moms Collective - an affiliated group of "mom" influencers that have strong followings in a number of markets around the country. Nineteen members of this group posted stories and photos of their families' real Christmas tree experiences and aligning with CTPB campaign messages, securing more than 50,000 engagements.

Great Press Coverage in 2020

The CTPB experienced a busy and successful media year, with positive coverage for real Christmas trees on the NBC Nightly News, Good

fresh Christmas tree get d by your family.



to select the tree.

of the pandemic.



interactive Retail Locator including all types of retail experiences. The CTPB will be working toward getting more retail locations represented on the locator for the 2021 season.

The site also includes a new Species Guide where 20 of the most popular species are featured with beautiful photos and description for consumers to enjoy.

Campaign funds were earmarked to successfully drive on-line traffic to the website. The website experienced more than 242,000 page views. In November and December, the Retail Locator received more than 38,000 page views with an average time on the page of I minute and 30 seconds. The Species Guide received 26,000 page views with nearly 3 minutes average viewing time!



And Plenty of Fun Social to Share

As in previous years, the *It's Christmas, Keep It Real* social channels (Facebook, Instagram, YouTube) were important ways to communicate with customers! The campaign debuted a series of adorable videos featuring kids and their thoughts about real Christmas trees. These were supported with a series of social posts of "Mom and Dad Truths."

View the Campaign Summary Video and see links to all of these projects at:

www.christmastreepromotion board.org/promotion/

View the Campaign website:

www.itschristmaskeepitreal.com



Morning America, The Today Show, ABC with

David Muir, the Associated Press and ABC Radio;

more than 3,000 stories in all. Most stories were

positive in nature: focusing on the joy surrounding

a fresh Christmas tree and fun of the family outing

The success of the media season stems from a

Release based on the consumer survey sponsored

statistics on consumer attitudes toward Christmas

and real Christmas trees, particularly in the context

number of factors, however the CTPB Press

by the CTPB in the summer of 2020 was the

primary driver. Media outlets were provided

The *It's Christmas. Keep it Real* campaign has a new forever home website. The site features an







WWW.CHRISTMASTREEPROMOTIONBOARD.ORG/PROMOTION/

Consumer Research

The CTPB invested \$35,000 to conduct consumer research in July 2020 to: 1) Understand how the pandemic might shift consumer purchase plans for real Christmas trees; 2) Determine if pandemicdriven shifts in consumer priorities aligned with perceived advantages of real trees; 3) Test messaging for real trees during a "COVID Christmas." Such insights would be imperative for a campaign to resonate with the target audience, equip

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21% of consumers were projected to switch from an artificial Christmas tree - or no tree at all – in 2019 to a real Christmas tree in 2020, projecting an increase of new customers for growers and retailers.

marketers to sell effectively, and garner compelling media coverage.

During the summer of 2020, it was impossible to predict how the pandemic would affect the real Christmas tree industry. If people were still staying at home by December, would they buy more real trees? Or would sales drop if they had concerns about public shopping venues - even if outdoors? What about the recession? What messages would be relevant in the "new normal" of the pandemic? CTPB partnered with FleishmanHillard's True Global Intelligence to conduct the research; a 50+ question online survey of 2,019 American adults ages 21 to 49 who celebrate Christmas. The survey covered Christmas tree preferences (real, artificial or both), to year-over-year purchase habits, shopping habits (e.g., type of retailer visited) and questions about if and how the pandemic would shift tree buying habits. The responses suggested overwhelming enthusiasm for real Christmas trees in 2020 and allowed CTPB to shape PR messaging appropriately. Research highlights included:

- 92% expected Christmas to be different [in 2020], and these differences made consumers twice as likely to put up a real Christmas tree.
- · Consumers surveyed showed an increased desire to create experiences (82%) and to purposefully create good memories (72%), aligning with perceptions of Christmas real trees. 76% describe real Christmas trees as an

experience rather than a product, and 76% describe Christmas real trees as special rather than normal, far outpacing artificial Christmas trees (which fewer than half of consumers consider an experience or special).

• 21% of consumers were projected to switch from an artificial Christmas tree - or no tree at all - in 2019 to a real Christmas tree in 2020, projecting an increase of new customers for growers and retailers.



What to Watch for from the CTPB

Seedling Survey - The CTPB funded a survey of seedling producers last year and plans to repeat it each year. This will create an important planning resource for the industry by understanding how many trees are being planted. The first survey results are expected to be presented soon and will be announced to the industry.

Research Library - After funding more than \$1 million in Christmas tree

research, the CTPB will be unveiling a library of research reports and findings. This library will be found on the industry website.

Summer Meetings - Following a year of cancelled meetings and travel restrictions, the CTPB staff, board members and committee members are planning to be attending most, if not ALL, state and regional Christmas tree meetings. This is an important

opportunity to speak one-on-one with growers and hear from you!

Retail Locator - In its first year, the new Retail Locator on the campaign website had strong consumer traffic. The goal for 2021? Significantly increase the number of retail locations listed on the site by providing an earlier sign-up window, in-person opportunities at state meetings and a summer campaign for wholesale growers.

2019-2020 Financials

The CTPB is required to have an independent Certified Public Accountant audit its accounting records each fiscal year in accordance with Generally Accepted Government Auditing Standards. The fourth audit of CTPB was

Net assets without donor restrictions, end of year

completed in October of 2020 by Propp Christensen Caniglia, Roseville, CA. They issued a clean opinion of CTPB's financial statement, also known as an "unmodified report" in accounting terminology. These highlights from the audit

provide an overview of CTPB's financial status at the end of its 2019-2020 fiscal year. Please visit the CTPB website to see the full audit report http:// www.christmastreepromotionboard.org (the audit is posted on the Industry Information page).

STATEMENTS OF REVENUE AND EXPENSES – MODIFIED CASH BASIS For the Year Ended July 31, 2020 and 2019

2020 2019 Revenue: Assessments 1,937,885 1,729,684 Interest Income 10,168 9,688 Total Revenue 1,948,053 1,739,372 Expenses: Promotion Committee 1,005,247 1,013,168 Research Committee 234,616 253.590 Industry Relations Committee 28,151 73,795 Special Projects 4,357 1,275 Professional Services 213,027 175,080 Independent Evaluation 30,000 Education 14,706 **Board Meetings** 28.703 20.406 Compliance Auditing 62,378 Bank Fees 5,174 4,873 1,576 1,576 Insurance Office Expenses 2,482 3,464 19.091 Other Administrative Costs 6.277 **USDA** Fees 79,449 83,067 Total Expenses 1,716,143 1,649,385 Change in unrestricted net assets 231,910 89,987 Net assets without donor restrictions, beginning of year 1,200,359 1,110,372

STATEMENTS OF ASSETS, LIABILITIES AND NET ASSETS – MODIFIED CASH BASIS

\$ 1,432,269

July 31, 2020 and 2019					
Assets:	ASSETS	2020		2019	
Current Assets: Operating Cash Cash Reserves Total Assets		\$ 1,481,275 228,515 1,709,790		\$ 1,096,928 298,514 1,395,442	
	ABILITIES AND NET AS	SETS			
Current Liabilities: Accrued Expenses Net Assets without donor restrictions: Designated by the Board for cash reserves:		277,521		195,083	
Reserve for future projects Reserve for Research		107,318 121,197		177,318 121,196	
Undesignated		1,203,754		901,845	
Total Net Assets		1,432,269		1,200,359	
Total Liabilities and Net Assets		\$ 1,709,790		\$ 1,395,442	

\$ 1,200,359



Information

Meet the Board

Eastern Representatives:

Chuck Berry, Georgia Renee Campbell, North Carolina Charles Fowler, North Carolina Gary Westlake, Pennsylvania

Central Representatives:

Derek Ahl, Wisconsin lane Neubauer, Ohio

Western Representatives

Mike Coco, California Roger Beyer, Oregon Bill Brawley, Oregon Bob Schafer, Oregon

Mark Schmidlin, Oregon

Importer Representative

Larry Downey, Quebec, Canada

Meet the Staff:

The CTPB is managed by Gray Management, LLC: Marsha Gray - Executive Director, marsha@christmastreepromotionboard.org Cyndi Knudson - Director of Research

Research@christmastreepromotionboard.org

Jenny Tomaszweski – Administrative Assistant jenny@christmastreepromotionboard.org

Beth Kohn, BAK Bookkeeping - Bookkeeper

Contact Us:

Christmas Tree Promotion Board

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E- Newsletter - All growers (even small farms that are exempt) are encouraged to sign up for the CTPB e-newsletter. The e-newsletter is the best place to get up-to-the-minute details on our promotion and research. To find sign up, please make your request at:

info@christmastreepromotionboard.org 800-985-0773