

Kwizda

Agro



KITZBÜHEL 2022

TRICO® FORESTRY CAMPUS

GROW TOGETHER

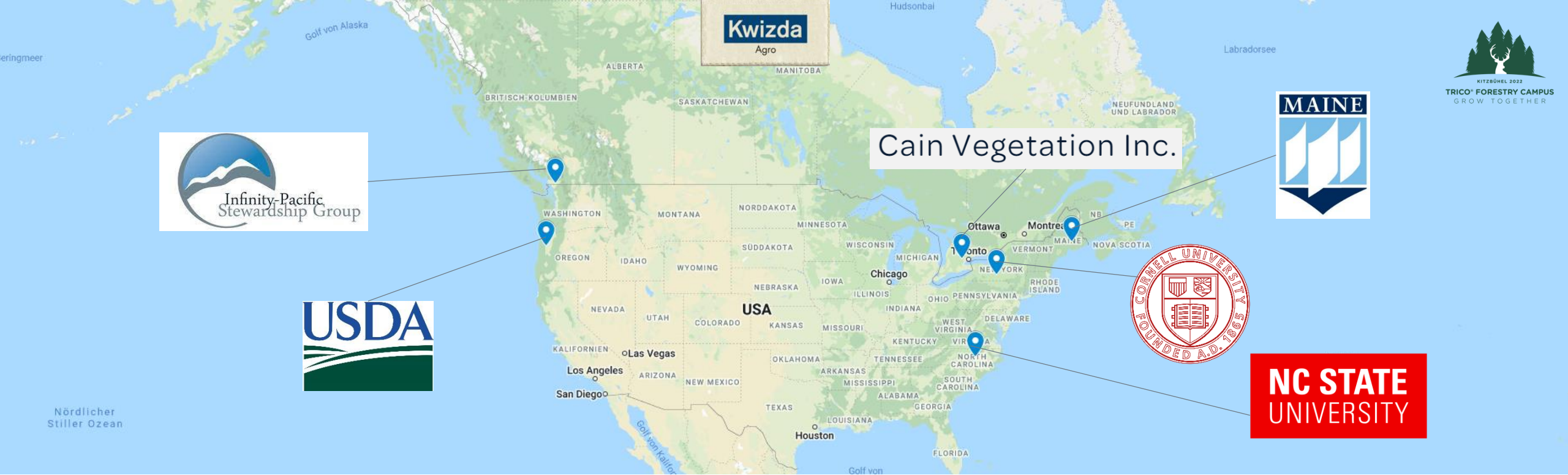


KITZBÜHEL 2022

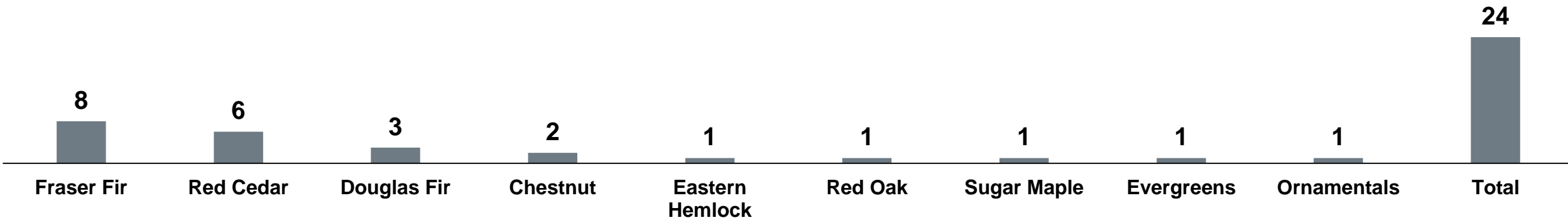
TRICO® FORESTRY CAMPUS
GROW TOGETHER

RESULTS OF AMERICAN ACADEMIC STUDIES ABOUT TRICO®

JULIA HENGL, SPECIALIST BIOLOGICAL DEVELOPMENT KWIZDA AGRO

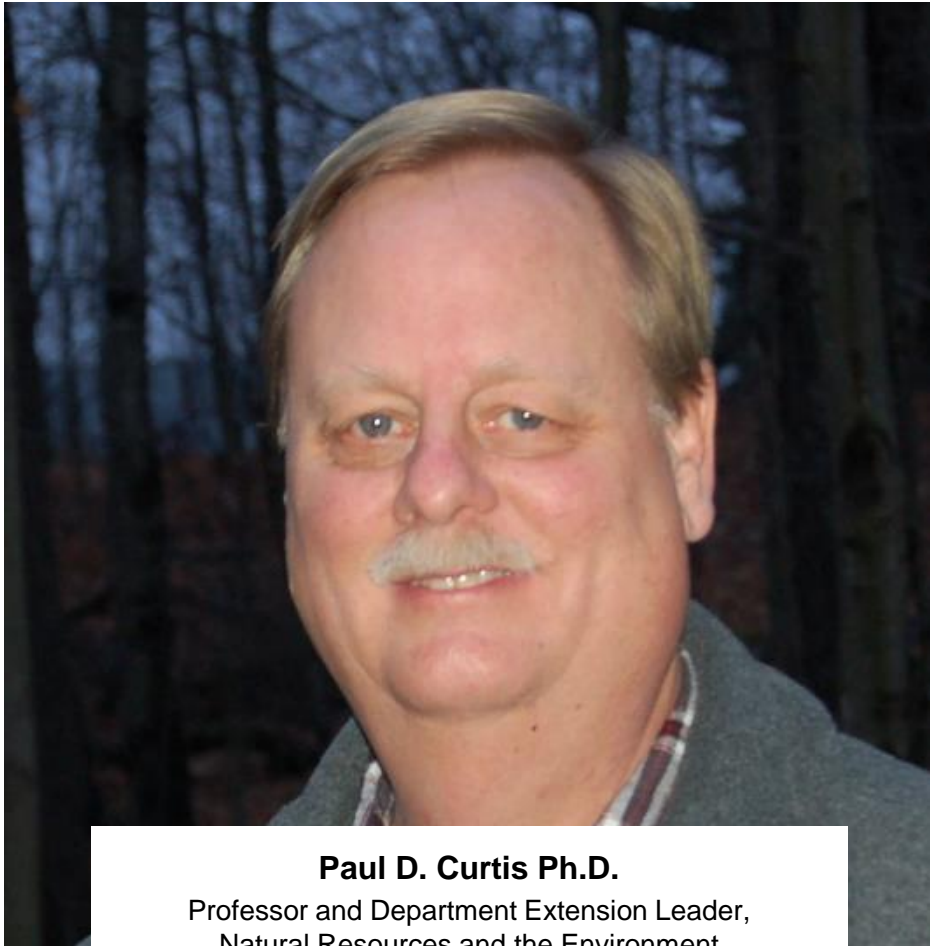


Trico North American Academic Trials, 2017-2022



Source: 24 Registration trials or trials with official academic institutes such as Infinity-Pacific Stewardship Ltd., USDA APHIS Wildlife Research, Cain Vegetation Inc., University of Maine, Cornell University, North Carolina State University in USA and Canada

MULTIPLE RESEARCH IN FORESTRY AND HOME LANDSCAPES BY CORNELL UNIVERSITY



Paul D. Curtis Ph.D.
Professor and Department Extension Leader,
Natural Resources and the Environment

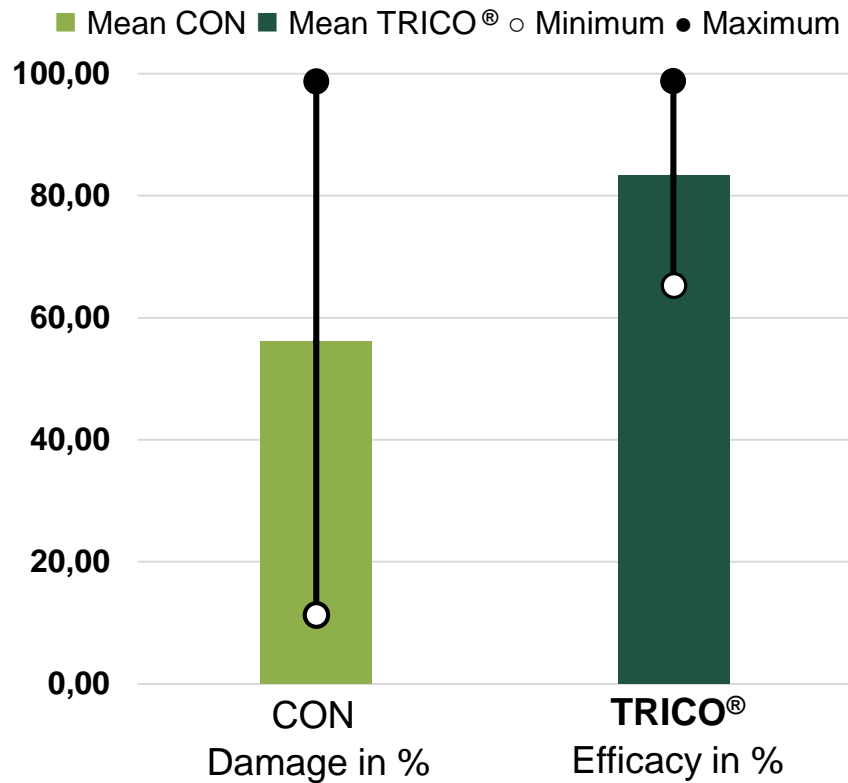


Brian Eshenaur
Extension Associate, Senior,
CALs NYS Integrated Pest Mgmt

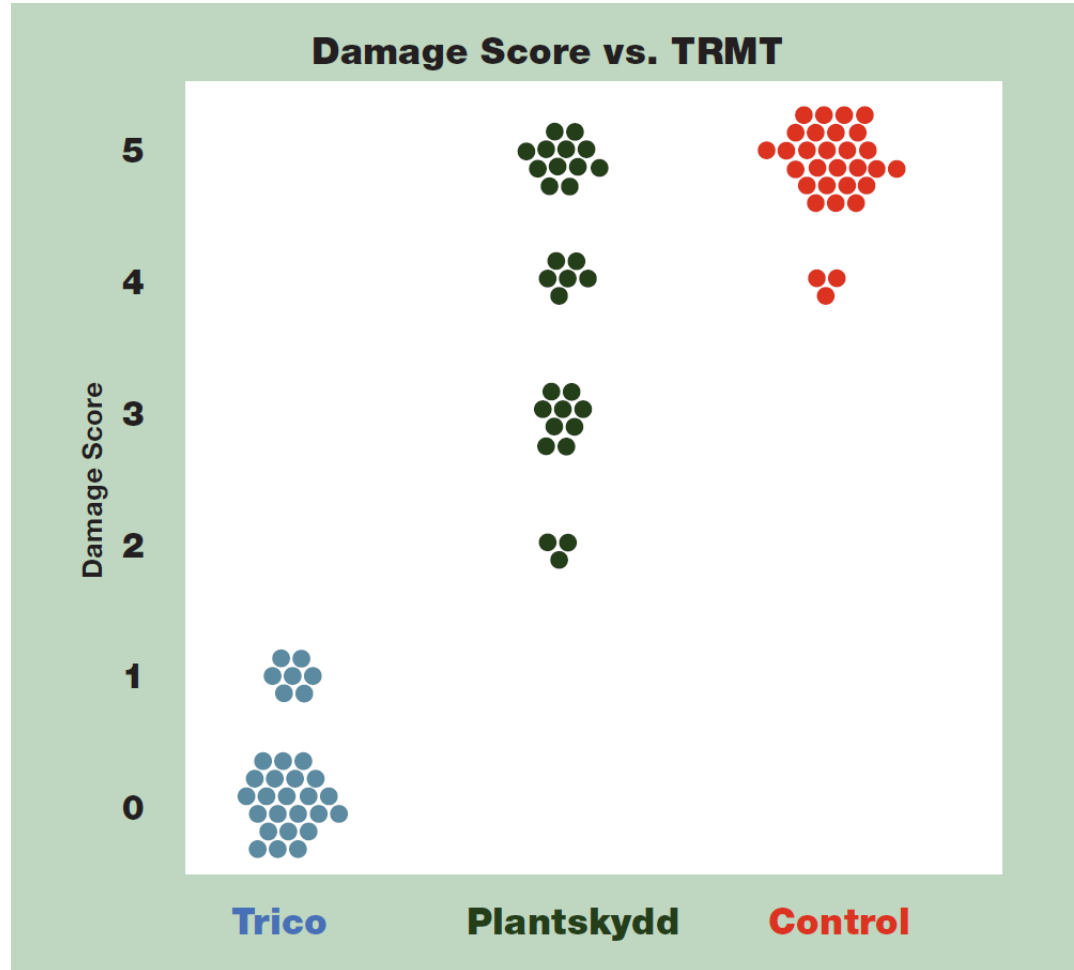


EFFECTIVE FOREST PROTECTION

Efficacy (%) against Winter Browsing by Deer and Elk
10 trials, 2017-2022 in USA and Canada



TRICO® endorsed by Cornell University for use in Christmas trees



Damage scores for white-tailed deer browsing on fir trees by treatment during winter 2020-21 at the Sweeting Farm near Wellsville, New York. Black dots are scores for individual trees, and damage scores were 0= no damage, 1= 1-20% limbs browsed, 2= 21-40% limbs browsed, 3= 41-60% limbs browsed, 4= 61-80% limbs browsed, and 5= >80% limbs browsed.

EFFECTIVE PROTECTION IN HOME LANDSCAPES

Deer feeding on delicious untreated Hosta plants - TRICO® did not taste good



5 test plots in separate locations
around upstate New York

Absolutely no browsing compared to
control plants (treated with Plantskydd
or non-treated)

Article will be published in the journal
Human-Wildlife Interactions

Source: P. D., Curtis and B. C., Eshenaur (2022): Trico: A Novel Repellent for Preventing Deer Damage to Ornamental Shrubs. Cornell University, Department of Natural Resources and the Environment. New York State Integrated Pest Management Program, New York. The article will be published in the journal Human-Wildlife Interactions.

EFFECTIVE PROTECTION IN HOME LANDSCAPES

TRICO® : A novel repellent for preventing damage caused by white-tailed deer (*Odocoileus Virginianus*) to Japanese yew shrubs (*Taxus media* 'Hicksii')



TRICO®




PLANTSKYDD



CONTROL

Source: P. D., Curtis and B. C., Eshenaur (2021): Trico: A Novel Repellent for Preventing Deer Damage to Ornamental Shrubs. Cornell University, Department of Natural Resources and the Environment. New York State Integrated Pest Management Program, New York. The article will be published in the journal Human-Wildlife Interactions.

NORTH CAROLINA STATE EXTENSION DEER REPELLENT RESEARCH



NC STATE EXTENSION DEER REPELLENT RESEARCH

SUPPORTED BY NCCTA FUNDS & KWIZDA AGRO

JEFF OWEN WORKED ON DEER REPELLENTS FROM 2002 TO 2012

- Worked with commercial deer repellents initially
- Evaluated temporary fencing & integrated commercial repellents
- Tested less-expensive bulk products from the pet food supply chain
 - Inedible egg powder
 - Spray dried red blood cells
- Evaluated backpack, ATV-mounted, & cannon mistblower sprayers

2020 TRICO REPELLENT EVALUATION

- Trico is a European product made from sheep fat
- Set up 4 studies at sites with previous browsing
- Tested Trico against bulk inedible egg, bulk spray-dried red blood cells, and untreated check plots
- Replicated plots were separated by 15 ft. buffers
- Trico was applied in December ONLY
- Bulk egg and blood were applied twice (in December & February)

2021 RESEARCH RESULTS

- Lost one study because trees were trimmed
- Two sites had very light injury (see bar chart)
- Avery site incurred severe deer browse
- Traditional research plot design was problematic
- Deer seemed to largely avoid treatment areas
 - Change from previous research was Trico
- Trico appeared to be more effective with only a single application

2021-2022 RESEARCH PLANS

- Repeat 20-21 treatments in larger block designs
 - Add promising repellents to treatment list
- Monitor growers' scarecrows, flagging tape, etc.
- Dr. Whitehill is studying deer-repellent terpenes

20/21 DEER REPELLENT STUDIES: ASHE & MITCHELL
Percent of trees browsed

Treatment	Percent of trees browsed
Egg	0,0
Blood	1,9
Trico	1,9
Check	8,3
Outside	5,2
Outside	13,5


20/21 DEER REPELLENTS: AVERY COUNTY SITE
Percent of trees browsed

Date	Egg	Blood	Trico	Check
1.1.	0	0	0	0
29.1.	1,9	0	0	0
26.2.	0	0	19,2	0
26.3.	0	0	23,1	0
23.4.	0	0	0	0
21.5.	0	0	0	28,8

20/21 DEER REPELLENTS: AVERY COUNTY SITE
% of trees browsed OUTSIDE study

Date	Egg	Blood	Trico	Check	Outside Plots
1.1.	0	0	0	0	0
29.1.	0	0	0	0	41,7
26.2.	0	0	67,0	0	0
26.3.	0	0	73,8	0	0
23.4.	0	0	0	0	0
21.5.	0	0	0	0	0

A TEAM EFFORT AMONG GROWERS, SPECIALISTS, RESEARCHERS, EXTENSION AGENTS, & TECHNICIANS
www.trico-repellent.com




Jeff Owen
Area Extension Forestry Specialist
North Carolina State University

“Results were incredible, as the deer basically stayed completely off of the plot and ate everything on the perimeter”



Kwizda

Agro



KITZBÜHEL 2022

TRICO® FORESTRY CAMPUS

GROW TOGETHER

THANK YOU