

Florida Arborist

A Publication of the Florida Chapter ISA Volume 24, Number 4, Winter 2021

Winter 2021 In This Issue :

UF Study
President's Message
Memo Board
Florida Chapter Board Shorts
Moving Water English/Spanish
Timmmmmberrr!
Consultant's Corner
News From International
Florida Chapter Education Schedule
New Florida Chapter Members
Arborist Certification Committee Report

UF study: Disease-carrying mosquitoes abound in deforested lands

Brad Buck, UF/IFAS Communications



Photo <u>UF/IFAS</u>

8

13

14

16

17

18

19

Most disease-transmitting mosquito species live in deforested areas, a finding that may influence decisions on where and when to cut down trees, a new University of Florida study shows.

Deforestation occurs when people remove trees to make way for neighborhoods, farms, shopping centers and other land uses, said Nathan Burkett-Cadena, a UF/IFAS entomologist and lead author of the study.

For their study, Burkett-Cadena and Amy Vittor, a UF assistant professor of infectious diseases and global medicine, synthesized and examined data from prior studies that had looked at how many pathogen-carrying mosquito species made their homes in forested lands vs. non-forested lands in 12 countries worldwide, including the United States.

They found that about half — 52.9 percent — of the species were more abundant in deforested habitats. Of those species that favored deforested areas, more than half — 56.5 percent – carry viruses harmful to humans, the study showed. More importantly, all of the species that carry multiple human pathogens were more common in deforested land, said Burkett-Cadena, a faculty member at the UF/IFAS Florida Medical Entomology Laboratory in Vero Beach, Florida.

"This research shows that when we convert forest to other uses, we make habitat for the mosquitoes that carry our diseases," said Burkett-Cadena. "The takeaway message is that our forests provide benefits above and beyond the biodiversity they sustain, the products they provide — such as food, lumber and medicine — and the recreational opportunities that they provide. Forests are poor habitat for most of our disease-carrying mosquitoes."

"Humans need to take this into account as we make decisions and policies about what we do with our remaining forests," Burkett-Cadena said. "Given the rapid *Disease continued on page 4*



Hello Florida Chapter ISA!

The first cool breezes of the 2021 dry season have made their way to South Florida, and I hope you have enjoyed the same beautiful mornings as I have. I can hardly believe almost a year has gone by since taking over as president of the Florida Chapter. I am honored to have had the opportunity to lead such a remarkable group of talented professionals and give back to an organization

that has given me so much, both personally and professionally, throughout my career. Our Chapter is vibrant and strong in large part because of our incredible volunteers. This year we have accomplished so much, despite the lingering effects of the pandemic:

- held successful Trees Florida Conference and Trade
 Show
- approved Executive Transition Strategy to move us through 2023
- increased social media presence to grow membership awareness and Chapter participation
- convened several in-person seminars to provide networking and continuing educational opportunities
- created Student/Early Career Arborist Task Force to prepare students and emerging professionals for successful long-term careers in arboriculture.
- continuing progress on Tree Care Licensing in Florida

Our work is focused on enriching your experience as members, so we are always open to feedback on our current services and how we can better serve you. Feel free to reach out to me, any of our Chapter leaders, or our great staff if you have ideas or would like to get involved.

Thanks to each one of you for your time, energy, and commitment to making our Chapter—25 years strong—what it is today. You inspire me in so many ways and I look forward to again working alongside you. Best wishes to incoming President Jonathan Frank for an exciting year ahead!

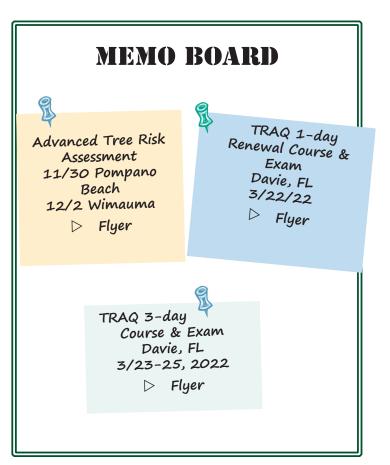
Yours In Service,

Kimberly Pearson

President, Florida Chapter ISA 2021 Florida Chapter ISA President









Florida Chapter ISA

2021 Board of Directors

Executive Committee

Kim Pearson, President (*21) City of Fort Lauderdale 101 NE 3rd Avenue Fort Lauderdale, FL 33301 Phone: 954-828-5798 kpearson@fortlauderdale.gov

Rob Calley, Past President ('21) Backridge Tree Service Inc. 717 Edge St. Ft. Walton Beach, FL 32547 Office Phone: 850 240-2829 Personal Phone: 850 699-2474 backridge17@gmail.com

Jonathan Frank, Vice President ('21) Bartlett Tree Experts 566 NE 42nd Court Oakland Park, FL Phone: 954-459-5178 jfrank@bartlett.com

Alison Summersill, Treasurer ('20-'21) Advance Tree Pros 7242 Gardner Street Winter Park, FL 32792 Phone: 407-276-2459 ali@advancetreepros.com

Directors

Gareth Coggan, Commercial ('21-'23) Florida Tree Care Company PO Box 1097 Windermere, FL 34786 Phone-407-494-3582 mail@fltree.com

Lori Ballard, Consulting Arborist Representative ('19-'21) E Sciences 2329 Sunset Point Rd. Clearwater, FL 33675 Cell: 727-403-5980 Iballard@esciencesinc.com.

Michael Marshall, Grower Representative ('21 - '23) Marshall Tree Farm 17350 SE 65th Street Morriston, FL32668 Phone: 352-528-3880

Michael@marshalltrees.com Dr. Andrew Koeser, Educator Representative ('19 − '21) University of Florida 14625 CR 672

14625 CR 672 Wimauma, FL 33598 Phone: 813-633-4150 <u>akoeser@ufl.edu</u>

Matt Anderson, Municipal Arborist

Representative (*20-*22) City of Clearwater 507 Vine Street Clearwater, FL 33755 Matt.Anderson@MyClearwater.com

Barry Grubb, Utility Arborist Representative ('20-'22) Florida Power & Light PO Box 1119 Sarasota, FL 34230 barry.lgrubb@fpl.com

Brian Gould, Climbing Representative ('21 – '23)

Tree Care Technologies, LLC 8037 Crushed Pepper Ave. Orlando, FL 32817 Phone: 407-285-1713 bgould@treecaretechnologies.com

Justin Freedman FUFC Representative ('19 - '21) E Sciences, Inc. 224 SE 9th Street Fort Lauderdale, FL 33316 Phone: 954-484-8500 Jfreedman@esciencesinc.com

Jeffery Van Treese II Attorney Representative ('19-) PO Box 971252 Boca Raton, FL 33497 jvt2law@gmail.com

Quatisha Oguntoyinbo-Rashad,

At Large ('21) City of Miami 444 SW 2nd Avenue 3rd Floor Miami, FL 33130 Phone: 305-763-5159 Qoguntoyinbo-rashad@miamigov.com

Bonnie Marshall, At Large ('21)

Juniper Landscaping 2504 64 Street Court East Bradenton, FL 34208 Phone: 352-316-0264 Bonnie.marshall@juniperlandscaping.com

Florida Chapter Trustee: Mr. Rick Joyce Florida Chapter Standby Interim Director: Dr. Andrew Koeser

Administration

Norm Easey, Chief Executive Officer Jan Easey, Admin. Assist. Patty Morrison, Admin. Assist.

We honor and thank the Florida Chapter ISA Past Presidents

2020 - Rob Calley 2019 - Adam Jackson 2018 - Scott Shultz 2017 - Lori Ballard 2016 - Bonnie Marshall 2015 - Celeste White 2014 - Dr. AD Ali 2013 - Patrick Miller 2012 - Eric Hoyer 2011 - Don Winsett 2010 - David Reilly 2009 - Mike Robinson 2008 - Mary Edwards 2007 - Rick Joyce 2006 - Rick Joyce 2005 - Bruce Smith 2004 - Michael Marshall 2003 - Perry Odom 2002 - Perry Odom 2001 - Loren Westenberger 2000 - Dane Buell 1999 - Dr. Ed Gilman 1998 - Richard Bailey 1997 - Joe Samnik 1996 - Joe Samnik

Florida Arborist newsletter is published quarterly by the Florida Chapter of the International Society of Arboriculture, Inc., 7853 South Leewynn Court, Sarasota, FL 34240, and is intended as an educational benefit to our members. Information may be reprinted if credit is given to the author(s) and this newsletter. Please submit all requests and articles to: Norm Easey, 7853 South Leewynn Court, Sarasota, FL 34240, Fax (941)342-0463 Email: Jan@floridaisa.org. Articles submitted will not be returned and are preferred in electronic format via disk or e-mail. The Florida Chapter reserves the right to refuse or edit submitted articles or advertising as seen fit. All pictures, articles, advertisements and other data are in no way to be construed as an endorsement of the author, products, services, or techniques. Likewise, the statements and opinions expressed herein are those of the individual authors and do not represent the view of the FL-ISA, its executive director, board of directors, its chairman, this newsletter or its editor.

Florida Arborist

Disease continued from page 1

pace of global land-use change and deforestation, it is imperative that these dynamics are better understood to mitigate disease risk and guide land-use policy."

Mosquito-borne diseases account for more than 17 percent of infectious diseases in people, according to the World Health Organization. The most common virus, dengue, is estimated to infect 390 million people per year, according to a 2013 study led by an Oxford University researcher.

The UF/IFAS study is published in the journal Basic and Applied Ecology. \clubsuit



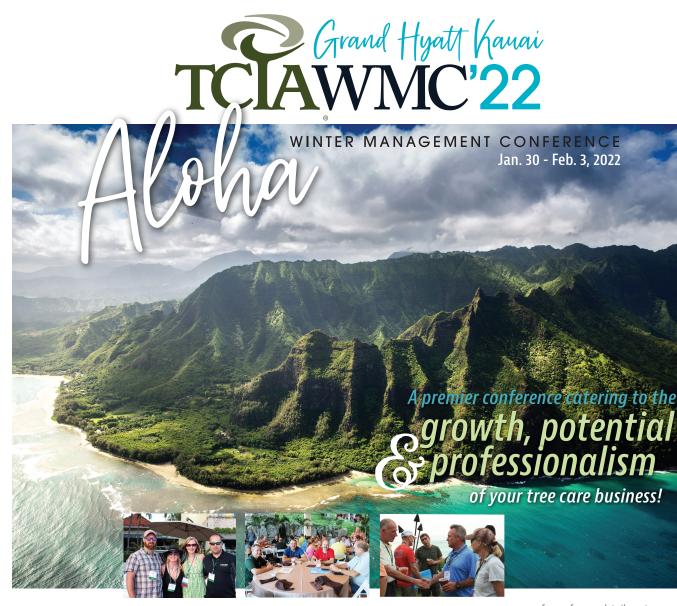


ISA Tree Risk Assessment Qualification FORT LAUDERDALE: 1-DAY RENEWAL

TUESDAY, March 22, 2022

Fort Lauderdale: UF-IFAS Fort Lauderdale Research & Education Center 3205 College Avenue - Davie, FL 33314

> CEUs: Certified Arborist, Municipal Specialist or Tree Worker Specialist: 5 BCMA: Mng-2 / Pract-2 / Sci-1



Join TCIA and hundreds of like-minded tree care pros for five days of world-class knowledge and custom solutions for your tree care business. Share this incredible adventure with your top-level, hardworking employees to grow and connect with industry peers from across the U.S. What better way to create long-lasting bonds and reward your best with this premier conference in the stunning location of Kauai, HI?! for conference details go to: wmc.tcia.org

or scan this code:



Get ready for your next adventure Register today! 800.733.2622 | WMC.TCIA.ORG



Florida Chapter Board Updates

BOARD SHORTS:

DATE CHANGE



November board meeting has been moved to December 10, 2021. This in-person meeting can be attended virtually if needed. If Florida Chapter members want to attend, please contact the Chapter office

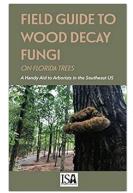
for planning purposes.

MEMBER BENEFIT



Florida ISA is pleased to announce a new diagnostic tool for Florida arborists. Through the funding of the Florida Chapter Grant Program, Dr. Jason Smith, with Dr. Ed Barnard and Katy Deitz, Research

Assistant, have written "*Field Guide to Wood Decay Fungi in Florida Trees*", a diagnostic tool that can assist in determining the possibility of tree failure by identifying types of fungal disease. The book offers easy to understand text and clear full-color photographs and descriptions of 89 of the most common tree fungi found in Florida and the Southeast United States.



When ready the book will be sent to all Florida Chapter members in electronic form (PDF) for easy use on your cell phone while in the field. The book will also be available for purchase as a soft-cover printed book on <u>Amazon</u> and other book seller websites.

In addition, Florida ISA is scheduling a companion seminar which will

provide in-depth coverage of the information in the book. The seminar is being planned in two locations: <u>February</u> 22, 2022 in <u>Gainesville</u> and <u>February 24 in the Tampa</u> <u>area/Wimauma</u>.

FACEBOOK AND SOCIAL MEDIA



The Florida Chapter has hired a marketing company who has increased our activity on all the big social media websites, Facebook, Instagram, LinkedIn and Twitter. We hope you "like" the greater outreach and "share"

with others as well. We've got a lot to say, and a lot planned as the calendar page flips to 2022.



Trees Florida 2022 Conference and Trade Show

June 20-21-22

Sheraton Sand Key Resort Clearwater Beach

Watch for updates in early 2022 www.treesflorida.com

SAVE THE DATE!!



OUR TEAM

JOHN HOLZAEPFEL, CA, TRAQ (352)238-0917

ERIC HOYER, CA, RCA, TRAQ (863)670-0734

CHARLIE MARCUS, CA, TRAQ (850)570-5963

STAN ROSENTHAL, TRAQ (850)508-6771

> JAY VOGEL, CA (352)238-0458

LEGACY ARBORIST SERVICES

A DIVISION OF NRPS FOCUSED ON PROVIDING INNOVATIVE SOLUTIONS FOR MANAGING THE URBAN FOREST Tree Inventories and Management Plans

Tree Protection Strategies

Tree Appraisals and Risk Assessment

Tree Ordinance Analysis

Tree Health Care Treatments

Expert Witness Testimony

Educational Workshops

i-Tree/Environmental Analysis



CREATING A LEGACY, GROWING YOUR FUTURE SINCE 1974

www.NRPSforesters.com

Moving Water from the roots to the top, how this is possible? Henry Mayer, UF/IFAS Miami-Dade Urban Commercial Horticulture Extension Agent

Water is the most limiting abiotic (non-living) factor to plant growth and productivity, therefore, plants have developed an effective system to absorb, translocate, store, and utilize water. Per example, some large rainforest trees can use nearly 1,200 litters (317 gallons) of water in a single day!

In general, the maximum daily transpiration rates tend to range from **500-2,000 liters** (130-520 gallons) for individual trees depending on species and age, (Figure 1).

•	Conifers	26 gal
•	Eucalyptus	106 gal
•	Palms	132 gal
•	Mature deciduous tree	10,570 gal/season

Figure 1. Amount of Water Loss in different species, courtesy of Dr. AD Ali

It's unbelievable to recognize that plants retain less than 5% of the water they absorbed by roots, the remainder passes through plants directly into the atmosphere, in a process referred to **transpiration**. So why if water is so important to plant growth and survival, they waste so much of it? The answer to this question lies in another process vital to plants - **photosynthesis** (Figure 2).

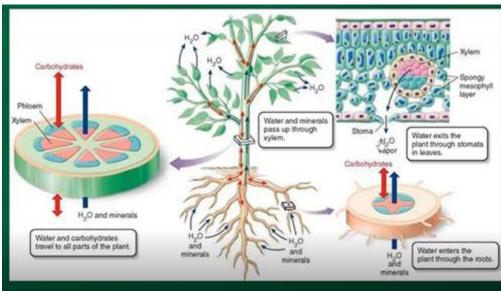


Figure 2. Water and Nutrient Movement in the plant, courtesy of Dr. AD Ali

To make sugars, plants must absorb carbon dioxide (CO2) from the atmosphere through small pores in their

leaves called stomata (Figure 3). When stomata open, water is lost to the atmosphere at a prolific rate relative to the small amount of CO2 absorbed; across plant species an average of 400 water molecules are lost for each CO2 molecule gained. The balance between **transpiration** and **photosynthesis** forms an essential compromise in the existence of plants; stomata must remain open to build sugars but risk dehydration in the process.

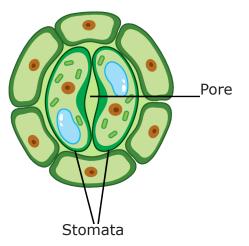


Figure 3. Stomata diagram, courtesy of Vecteezy

How do plants carry water from the roots upwards? Plants contain a vast network of conduits, which con-

> sists of xylem and phloem tissues. This pathway of water and nutrient transport can be compared with the vascular system that transports blood throughout the human body. But unlike animals, plants lack a metabolically active pump like the heart to move fluid in their vascular system. Instead, water movement is passively driven by pressure and chemical potential gradients (Figure 4 and 5).

The upward movement of water passes through the xylem which

is composed of elongated cells. Once the cells are formed, some die but the cell walls remain intact and

Moviendo agua desde las raíces hasta arriba, ¿cómo es esto posible? Henry Mayer, UF/IFAS Miami-Dade Urban Commercial Horticulture Extension Agent

El agua es el factor abiótico (no vivo) más limitante para el crecimiento y la productividad de las plantas; por lo tanto, las plantas han desarrollado un sistema eficaz para absorber, trasladar, almacenar y utilizar el agua. Por ejemplo, algunos árboles grandes de la selva tropical pueden usar casi 1200 litros (317 galones) de agua en un solo día. En general, las tasas máximas de transpiración diaria tienden a oscilar entre 500 y 2000 litros (130-520 galones) para árboles individuales según la especie y la edad (Figura 1).

•	Conifers	26 gal	Es
•	Eucalyptus	106 gal	L3
•	Palms	132 gal	
•	Mature deciduous tree	10,570 gal/season	

Figura 1. Cantidad de pérdida de agua en diferentes especies, cortesía del Dr. AD Ali

increíble reconocer que las plantas retienen menos del 5% del agua que absorben por las raíces, el resto pasa a través de las plantas directamente a la atmósfera, en un proceso que se denomina transpiración.! Entonces, ¿por qué si el agua es tan importante para el crecimiento y la supervivencia de las plantas, desperdician tanto? La respuesta a esta pregunta radica en otro proceso vital para las plantas: **la fotosíntesis** (Figura 2).

dióxido de carbono (CO2) de la atmósfera a través de pequeños poros en sus hojas llamados estomas (Figura 3). Cuando los estomas se abren, el agua se pierde a la atmósfera a un ritmo prolífico en relación con la pequeña cantidad de CO2 absorbido; en algunas especies de plantas, se pierde un promedio de 400 moléculas de agua por cada molécula de CO2 ganada. El equilibrio entre **transpiración y fotosíntesis** constituye un compromiso esencial en la existencia de las plantas; los estomas deben permanecer abiertos para formar azúcares, pero corren el riesgo de deshidratarse en el proceso.

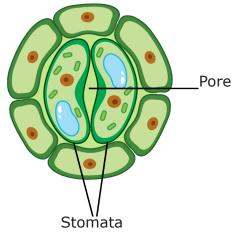


Figura 3. Diagrama de estomas, cortesía de Vecteezy

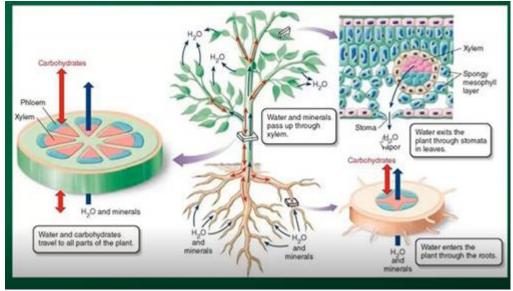


Figura 2. Movimiento de agua y nutrients en la planta, cortesía del Dr. AD Ali

Para producir azúcares, las plantas deben absorber

¿Cómo llevan las plantas el agua desde las raíces hacia arriba? Las plantas contienen una vasta red de conductos, que consiste en tejidos de xilema y floema. Esta vía de transporte de agua y nutrientes se puede comparar con el sistema vascular que transporta sangre por todo el cuerpo humano. Pero a diferencia con los animales, las plantas carecen de una bomba metabólicamente activa como el corazón para mover líquido en su sistema vascular. En cambio,

el movimiento del agua es impulsado pasivamente por la presión y los gradientes de potencial químico (Figuras 4 y 5).



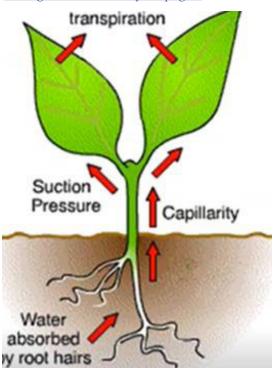


Figure 4. Water Forces Inside the Plant, Courtesy of Dr. AD Ali.



serve as an excellent pipeline to transport water from the roots to the leaves. A single tree will have many xylem tissues, or elements, extending up through the tree. Depending on the species, each typical xylem vessel may only be several microns in diameter.

Essentially all the water used by plants is absorbed from the soil by roots which consists of a complex network of roots that vary in age along their length. Roots grow from their tips and initially produce thin and non-woody fine roots. Fine roots are the most permeable portion of a root system and are thought to have the greatest ability to absorb water. Fine roots can be covered by root hairs that significantly increase the absorptive surface area and improve contact between roots and the soil. Some plants also improve water uptake by establishing symbiotic relationships with mycorrhizal fungi, which functionally increase the total absorptive surface area of the root system.

The bulk of water absorbed and transported through plants is moved by negative pressure generated by the evaporation of water from the leaves (i.e., **transpiration**) — this process is commonly referred to as the **Cohesion-Tension (C-T)** mechanism.

This system can function because water is "cohesive" — it sticks to itself through forces generated by hydrogen bonding. (Figure 6). These hydrogen bonds allow water columns in the plant to sustain substantial tension (up to 30 MPa or 4,350 psi when water is contained in the minute capillaries found in plants) and helps explain how water can be transported to tree canopies 100 meters (328 feet) above the soil surface. Scientists call the continuous water transport pathway the **Soil Plant Atmosphere Continuum (SPAC)**.

The next time you see a tree, imagine all these processes working in sync. Appreciate nature and the incredible trees!

Moving Water continued on page 12





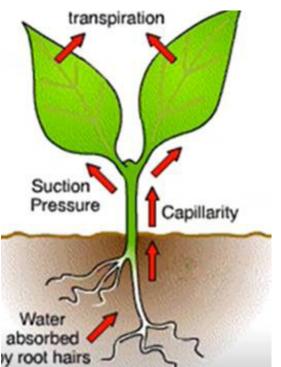


Figura 4. Fuerzas del agua dentro de la planta, cortesía del Dr. AD Ali.

El movimiento ascendente del agua pasa a través del xilema, que está compuesto de células alargadas. Una vez que se forman las células, algunas mueren, pero las paredes celulares permanecen intactas y sirven como una excelente tubería para transportar agua desde las raíces hasta las hojas. Un solo árbol tendrá muchos tejidos o elementos de xilema que se extienden hacia arriba a través del árbol. Dependiendo de la especie, cada vaso de xilema puede tener solo varios micrones de diámetro.

Básicamente, toda el agua utilizada por las plantas es absorbida del suelo por las raíces, que consiste en una compleja red que varían en edad a lo largo de su longitud. Las raíces crecen desde sus puntas e inicialmente producen raíces finas delgadas y no leñosas. Las raíces finas son la parte más permeable de un sistema radicular y se cree que tienen la mayor capacidad para absorber agua. Las raíces finas pueden estar cubiertas por pelos radicales que aumentan significativamente la superficie de absorción y mejoran el contacto entre las raíces y el suelo. Algunas plantas también mejoran la absorción de agua al establecer relaciones simbióticas con hongos micorrízicos, que aumentan funcionalmente la superficie de absorción total del sistema radicular. La mayor parte del agua absorbida y transportada a través de las plantas se mueve por la presión negativa generada por la evaporación del agua en las hojas (es decir, **la transpiración**); este proceso se conoce comúnmente como el mecanismo de **Cohesión-Tensión (C-T)**.

Este sistema puede funcionar porque el agua es "cohesiva": se adhiere a sí misma a través de las fuerzas generadas por los enlaces de hidrógeno. (Figura 6). Estos enlaces de hidrógeno permiten que las columnas de agua en la planta mantengan una tensión sustancial (hasta 30 MPa o 4,350 psi cuando el agua está contenida en los diminutos capilares que se encuentran en las plantas) y ayudan a explicar cómo se puede transportar el agua a las copas de los árboles a 100 metros (328 pies). por encima de la superficie del suelo. Los científicos llaman a la vía continua de transported de agua el Continuo de la Atmósfera de la Planta del Suelo (SPAC).

La próxima vez que veas un árbol, imagina que todos estos procesos funcionan sincronizados. Aprecia la naturaleza y los increibles árboles!

Moviendo agua continued on page 12





RPG Trees Are Superior Performers In Your Landscapes

- Hardening-off Trees - Improving Quality - Research & Education

Now More Than Ever... Look for the RPG Tag for Quality!

2015-2016 Grower Members

The Arbor Group Orlando/407-235-8492

Nature Coast Tree Corp Bell/386-935-9349

BE-MAC Farms Odessa/813-920-2247 SMR Farms Bradenton/941-708-3322

Fish Branch Tree Farm Snapper Creek Nursery Zolfo Springs/863-735-2242 Ft Pierce/772-216-9993

Marshall Tree Farm Morriston/800-786-1422

Spectrum Tree Farms Live Oak/800-753-1379

Stewart's Tree Service Brooksville/352-796-3426

Associate Members

Cherokee Manufacturing General Cordage Graco Fertilizer Company Grass Roots Nurseries Treemart

RPG Growers are committed to enhancing the image and quality of field-grown trees through the hardeningoff process. Research continues to show that hardened-off field-grown trees are more wind resistant, use water more efficiently at planting, establish faster after planting, and when planted with container trees in a situation of limited water or irrigation will have dramatically higher survival rates.

To Subscribe to the RPG Times Newsletter or to request copies of the Tree Grading, Planting or Pruning Cue Cards contact an RPG member or visit www.rootsplusgrowers.org

Moving Water continued from page 10 Moviendo agua continued from page 11

Literature re-

Species	Speed (ft/hr)
Red Oak	92
Ash	85
Willow	10
Maples	8
Pine	6
Hemlock	3

Figure 5. Tree Species and Water Movement, Courtesy of Dr. K. Coder

Figura 5. Movimiento del agua en diferentes especies, cortesía del Dr. K. Coder

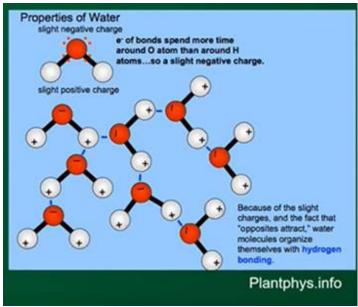


Figure 6. Water Molecular cohesion forces, courtesy Dr. AD. Ali

Figura 6. Fuerzas de cohesión molecular del agua, cortesía del Dr. AD. Ali

view / Literatura

Water Uptake and Transport in Vascular Plants https://www.nature.com/scitable/knowledge/library/water-uptake-and-transport-in-vascularplants-103016037/

How Much Should You Water Your Tree? https://www.deeproot.com/blog/blog-entries/howmuch-should-you-water-your-tree/



Timmmberrr! ... UF experts try to take subjectivity out of tree-falling assessments

Brad Buck, senior public relations specialist for UF/IFAS Communications



In the eye of hurricane season, you need hardy trees that can withstand the strong winds that come with the storms – and which can topple trees.

That's why University of Florida tree scientists Ryan Klein and Andrew Koeser study the variables that can lead to tree failure and how to make tree risk assessments more accurate and reproducible. Trees can "fail" in many ways, including all or parts of the tree falling and hitting structures, vehicles and humans. A welltrained arborist can assess your tree and recommend mitigation that can help to eliminate defects and promote healthy and more structurally sound trees.

"All trees near people and property pose some level of risk, should all or parts of them fall," said Klein, an assistant professor of environmental horticulture at the UF Institute of Food and Agricultural Sciences. "When tree-care professionals assess the risk associated with trees, they commonly evaluate the likelihood of the tree failing and the associated consequences."

Arborists can quantify the likelihood of impact and consequences of tree failure. But rating a tree's likelihood of failure remains subjective. Klein and Koeser — a UF/ IFAS associate professor of environmental horticulture at the Gulf Coast Research and Education Center — are trying to remove that subjectivity.

Among other criteria, arborists need to know a tree's size and species, presence of defects – and many other details – to determine if it might fail.

In their newest study, Klein, Koeser and others surveyed 87 professionals at a national arborists' conference. They asked them to look at defective tree parts and tell — with their naked eyes — the diameter of the tree part.

Then, researchers asked the arborists to rate the potential consequences of the parts of trees failing. That rating – "negligible," "minor," "significant" or "severe" — reflects how likely the branch is to hurt people and property in its path when it falls. About 75% of the participating arborists accurately assessed the likelihood of the trees to fail and the potential impacts once the tree topples.

From that finding, Klein gives this takeaway from the study: By adding ratings for tree size and fall distances to common tree assessments, we could help increase the accuracy and reproducibility of tree risk assessments and make them less subjective.

"Currently, tree-risk assessments can vary between assessors," he said. "The best way to avoid some of this variability is to vet the tree care professionals that you seek to hire to ensure that the have the proper training and experience to perform a tree-risk assessment. Being proactive with your tree maintenance, rather than waiting for a major tree-related issue, will save you money and hep you prolong the benefits associated with the tree — while still minimizing any potential risk of the tree falling."



BEYOND DAUBERT

It is not necessary that you be a testifying expert well credentialed in a particular subject matter or a marquee consultant known across the land for your brilliance and au fait. You should have at least a passing knowledge of the landmark court case, Daubert (versus Merrill Dow Pharmaceuticals Inc.). Daubert is a United States Supreme Court case determining the standard for admitting expert testimony in certain courts.

For the uninitiated, Jason Daubert and Eric Schuller had been born with significant birth defects. They and their parents sued Merrill Dow Pharmaceuticals. In the proverbial nutshell, they claimed the drug Bendectin had caused the birth defects. They produced numerous expert witnesses who testified to that fact. Their opinions were based upon animal studies, pharmacological studies, and a reanalysis of other published studies. These methodologies had not yet gained acceptance within the general scientific community. Merrill Dow introduced their own expert who reviewed volumes of published material. His opinion was that the drug did not cause birth defects. The Ninth Circuit Court upheld the court decision.

What came from the hearings and judgment was that for an expert's testimony to be relied upon in a court of law, those opinions must be generally accepted within the relevant scientific community, have a known error rate, have been published, peer-reviewed, and be independent of the litigation subject to testimony.

However, if you look behind the green curtain there are other and no less equal requirements of testimony (and report writing for that matter). These requirements include that the opinions will help the trier of fact (a judge, jury, or your client) understand the evidence/opinions or to determine a fact in issue; the opinion(s) must be based on sufficient facts or data (including a colleague's data), it must be the product of reliable principles and methods, and that these principles and methods were reliably applied to the facts of the case or assignment.

Also, behind the curtain, are the opinions out of research conducted independent of the litigation or report writing, or were they developed expressly for the purpose of testifying or writing the report; has the opinion been unjustifiably extrapolated from an accepted premise to an unfounded conclusion, and whether obvious alternative explanations were considered by the expert or author. And especially pertinent to our industry of arboriculture, whether the field of expertise claimed by the expert or report writer is known to reach reliable results for the type of opinion the expert or author is giving.

Always recall that the focus of your report writing, fact-finding, or testimony must be based not on the conclusions generated but rather the principles and methodology used to generate them.

Also please recall that I am not an attorney. I am not qualified to give legal advice. This article was written for educational purposes only and my apologies to the attorneys and other crafts qualified to do so. \Leftrightarrow

To advertise in the Florida Arborist contact the Florida Chapter office at 941-342-0153.

Our electronic version of the Florida Arborist allows for an active link directly to your website!!

Single Issue advertising rates are as follows: Full Page - \$250/issue Half Page - \$200/issue Quarter Page - \$150/issue Business Card - \$75/issue Classified Ad - \$25/issue

Discounts for a commitment of 4 consecutive issues: Full Page - \$200/issue Half Page - \$150/issue Quarter Page - \$100/issue Business Card - \$50/issue Classified Ad - \$25/issue

Prices include one link from the ad to your website. Additional links are \$25/link per issue.

> call 941-342-0153 or email *jan@floridaisa.org*

Vedgle Direct-Inject TREE INJECTION SYSTEM

Our advanced technology for tree treatment allows you to

INCREASE THE NUMBER OF TREES YOU TREAT IN A DAY!

- No drilling damage
- No mixing at job sites
- No guarding or return trips
- No waiting for uptake
- Treats most trees in five minutes or less!
- Successful and most profitable add-on service

Multiple injection tips designed for all types of trees, conifers and palms

Insecticides • Fungicides • PGRs • Antibiotics • MicroNutrients

AVAILABLE AT:

NFIELD[™] 855-880-0048

www.winfieldpro.com

ArborSystems

ArborSystems.com

News From International

CALL FOR ABSTRACTS FOR THE 2022 ISA ANNUAL INTERNATIONAL CONFERENCE

ISA is excited to announce we will have the opportunity to meet together, in person, in Malmö, Sweden for the ISA 2022 Annual International Conference on September 11-14, 2022. As we prepare for next year's conference, we need your expertise to help make this conference one to remember. ISA is seeking proposals from leaders in arboriculture, urban forestry and related fields who want to share their research, best practices, expertise and passion for the industries with the arboriculture community.

CLIMBERS: GET READY FOR THE NEXT TCC WITH THE GEAR CHECK BEST PRACTICES VIDEO

The Gear Check Video is a complimentary resource that covers how to properly conduct a gear check for a Tree Climbing Competition (TCC). Led by expert and International Tree Climbing Championship (ITCC) Head Safety Technician Phillip Kelley, this video is an excellent resource for competitive and non-competitive tree climbers. As head safety technician, one of Kelley's responsibilities is to take the lead on ensuring that tree climbing gear coming to events is safe, being used properly, and moving the industry forward. In the video, he demonstrates how a gear check can be done effectively, what to look for if you are training others, and the best practices when submitting gear for ISA competitions. Additionally, the video goes over what gear inspectors should look for on daily and interval inspections and the retirement criteria for equipment.

"This video is really about management of gear on a personal level," Kelley said. "This topic is really critical for the success of [arborists] as an industry. We discuss all different aspects of gear inspection from PPE to hardware to textiles."

Kelley said he hopes viewers gain a greater understanding of manufacturers' recommendations and guidelines; inspection intervals and why we have spot inspections versus scheduled inspections; as well as an appreciation of compatibility and configuration.

Although this video is geared towards TCC competitors, this video is an excellent resource for tree climbers who climb for fun as well. The Gear Check Video is also available for ISA Components to use for local TCC Gear Checks and training opportunities. �

ISA Tree Risk Assessment Qualification FORT LAUDERDALE: FULL 3-DAY COURSE

WEDNESDAY, March 23, 2022 thru FRIDAY, March 25, 2022

Fort Lauderdale: UF-IFAS Fort Lauderdale Research & Education Center 3205 College Avenue - Davie, FL 33314

> CEUs: Certified Arborist, Municipal Specialist or Tree Worker Specialist: 14.5 BCMA: Mng-6 / Pract-6 / Sci-2.5



Florida Chapter ISA - 2021 Education Schedule

*The schedule below is tentative and subject to changes.

View Florida Chapter Seminars Online

Date	Seminar/Class	Location (s)	Open for Registration
November 30, 2021	Advanced Tree Risk Assessment	Pompano Beach	Register Online
December 2, 2021	Advanced Tree Risk Assessment	Tampa	Register Online
January 21, 2022	Adv. Arboriculture Biomechanics	In person - Orlando OR Live Streaming	
February 22, 2022	The New Fungi ID Guide	Gainesville	
February 24, 2022	The New Fungi ID Guide	Tampa Area	
March 2022	Florida Grades & Standards (Update)	ТВА	
March 2022	Florida Grades & Standards (Update)	ТВА	
March 22, 2022	1-Day TRAQ Renewal	Ft. Lauderdale	Register Online
March 23-25, 2022	3-Day TRAQ Course FULL	Ft. Lauderdale	Register Online



New Florida Chapter Members

Below are the individuals that joined the Florida Chapter during the third quarter of 2021. If you see a name from your area of the state, look up their phone number online* and give them a call. Introduce yourself and find out what aspect of arboriculture the new member is involved in. Let's make the Florida Chapter friendlier.

We're all working in different ways for the same goals. Get to know other Chapter members! You might make some helpful connections for the future.

We would like to also thank our renewing members throughout the past year. We sincerely appreciate your support of the Florida Chapter.

Jeremiah Anderson, Deland, FL Ruben E. Asencio, Miami, FL Kristin Aubuchon-Neron, Altamonte Springs, FL Jaime Aviles, Orlando, FL Jennifer Bolstad, Brooklyn, NY Joshua A Bott, Pembroke Pines, FL Stephanie Cadaval, Gainesville, FL Marvin Calderon, palm coast, FL Juan C. Carrero, Orlando, FL Jeremy R. Colangelo, DeLand, FL Robert Conner, Panama City Beach, FL Mathew Corea, Miami, FL Rachel Daly, North Port, FL Christopher T. DiFilippi, Miami, FL Thomas Dominy, Silver Springs, FL Laura M. Duplain, Tampa, FL Emily Ebinger, Hollywood, FL Javier A. Estronza, Bartow, FL Shane Fahey, Jupiter, FL Mike E. Ford, Daytona Beach, FL Damian Freniere, Sarasota, FL Fabian SW Gamez, Bonita Springs, FL Alan E Gehrke, Wytheville, VA Benjamin Gillenwaters, West Palm Beach, FL

Anthony F. Green, Port Orange, FL John Hackerson, St Augustine, FL Curtis L Hamlin, Lake Monroe, FL Sally Hampton, Lakeland, FL Aaron Hankin, Palm Coast, FL Truman Henson, Summerfield, FL Craig R. Huston, Santa Rosa Beach, FL Christopher Jackson, Deland, FL Trea Jones, Lake Worth, FL Casto M. Juncal, Cutler Bay, FL Ian M. Kelly, High Springs, FL Jeffrey T. Kish, Raleigh, NC Brian J. Lennon, Clearwater, FL Daniel C. Lewis, Lake Worth, FL Todd R. Little, Jacksonville, FL Juan Maciel, Naples, FL Shane Martin, Satellite Beach, FL Larsen McBride, Gainesville, FL Paul McKelvery, Saint Augustine, FL Jon Motlagh, Saint Augustine, FL Norimichi Nagaishi, Tokyo, Japan Jeffrey Naples, Lakewood Ranch, FL Derek Gaben Nelms, Gulf Breeze, FL Adam Painter, Orlando, FL Kyra Paris, Naples, FL Jeffrey Patrick, Orlando, FL

Fabian E. Perez, Davenport, FL Aaron B. Petersen, Pinellas Park, FL Mark Pilcher, Ponte Vedra Beach, FL Fred J. Pree, Saint Petersburg, FL Small S Randy, Pompano Beach, FL David H. Rothaug, Palm Harbor, FL Michele Russo, Sarasota, FL Brian Rutherford, Vero Beach, FL Armin Schwab-Hill, Miami Beach, FL Jodie Spross, Ambler, PA Nathan Stoner, Southwest Ranches, FL Jason Sutton, Maitland, FL Ryan Tyson, Jonesboro, TX Clifford E. Vann, Gainesville, FL Daniel Vickers, Punta Gorda, FL Bonnie Cook Wells, Cocoa, FL James White, Islamorada, FL Carson Winn, Orlando, FL

*Go to <u>http://www.isa-arbor.com</u>, then go to "Members Only" and log in. Then go to ISA membership directory. If you do not know your log in for members only, contact ISA headquarters at (888) 472-8733. Once you log in, you can update your address, check your CEU's, edit or verify Certified Arborist information and search the membership list.

Letters to the Editor

We welcome your thoughts about Florida Arborist articles, about your Florida Chapter, or about tree issues in general.

Email your letters to: jan@floridaisa.org

or mail to: Florida Chapter - ISA 7853 S. Leewynn Court Sarasota, FL 34240

Please remember: Letters should be no longer than 300 words. We reserve the right to condense letters, or to edit as necessary.

An invitation to all members to attend a

Board of Directors Meeting! Call 941-342-0153 for specific times and locations

Up-coming 2021 Board Meeting - Dates & Locations

December 10, 2021: Orlando

Arborist Certification Committee Report

By Norm Easey, Florida Certification Liaison

<u>Click here to view all scheduled exams</u>; clicking on the "state" column will group all Florida exams together for easy searching. Relatively few in-person exams are currently scheduled; look into taking your exam at a Pearson Testing Center (throughout Florida - most are open with COVID safety precautions).

See the <u>ISA International</u> website for more information about the various ISA arborist credentials and how to earn them.

Florida Chapter currently has 2191 Certified Arborists.

The Florida Chapter would like to congratulate the following 45 Florida or Florida Chapter individuals for earning their certifications during the 3rd quarter of 2021 as Certified Arborist, Board Certified Master Arborist and Utility Specialist as well as TRAQ Qualified:

Certified Arborist

Francisco Alejandre, Parkland, FL James Carey, Arcadia, FL Jason Cherestal, Tampa, FL Matthew Dancho, Deerfield Beach, FL Ralph Dix, Port Saint Lucie, FL Emily Ebinger, Hollywood, FL Jennifer Gamez, Bonita Springs, FL John Hackerson, St Augustine, FL Laurie Hall, Alachua, FL Christopher Jackson, Deland, FL Joshua Lange, North Port, FL Cal Leggett, Orlando, FL Brian Lehmann, Dania Beach, FL Todd Robert Little, Jacksonville, FL Shane Martin, Satellite Beach, FL Kenia Medina, Miami, FL Jeffrey Naples, Lakewood Ranch, FL Carolina Olivera, Weston, FL Kyra Paris, Naples, FL Mark Dennis Pritchard, Gulf Breeze, FL Amador Reyes, Jr., Thonotosassa, FL David C Richardson, Lee, FL Tracy Rivera, Bunnell, FL Leigh Ryser, Zephyrhills, FL Leigh B Saint, Bristol, FL Jovan C Sands, Monroe, GA Tyron Lavalle Summerall, Winter Haven, FL Jason Sutton, Maitland, FL Alyssa Vinson, Bradenton, FL Roger Waddell, Belleview, FL Bonnie Cook Wells, Cocoa, FL

Dana Willson, Gainesville, FL Jonathan Woodruff, Mount Dora, FL Matthew Yosten, Muenster, TX

Board Certified Master Arborist

Amber Carson, South Daytona, FL Thomas Konar, Valrico, FL

Utility Specialist

Robert Goodson, Winter Garden, FL David B. King, Weirsdale , FL Thomas Krzeminski, West Melbourne, FL Andrew Marquis, Maitland, FL Rhiannon A. Stover, Thonotosassa, FL

TRAQ Qualifications

Jose Garcia, Cabo Rojo, PR Sally Gonzalez-Miranda, Mayaguez, PR Justin Gabriel Romero, Tampa, FL Lori Moreda, Tampa, FL



Are you thinking about becoming certified? <u>Visit the International ISA website</u> To access the certification application handbook with further information.

International Society of Arboriculture Florida Chapter

Our Mission: "To Promote and Improve the Scientifically Based Practice of Professional Arboriculture"



Arborist Code of Ethics

Strive for continuous self-development by increasing their qualifications and technical proficiency by staying abreast of technological and scientific developments affecting the profession.

Not misuse or omit material facts in promoting technical information, products or services if the effect would be to mislead or misrepresent.

Hold paramount the safety and health of all people, and endeavor to protect property and the environment in the performances of professional responsibilities.

Accurately and fairly represent their capabilities, qualifications and experience and those of their employees and/or agents.

Subscribe to fair and honest business practices in dealing with clients, suppliers, employees and other professionals.

Support the improvement of professional services and products through encouraging research and development.

Observe the standards and promote adherence to the ethics embodied in this code.



Florida Arborist Florida Chapter ISA 7853 South Leewynn Court FLORIDA CHAPTER Sarasota, FL 34240