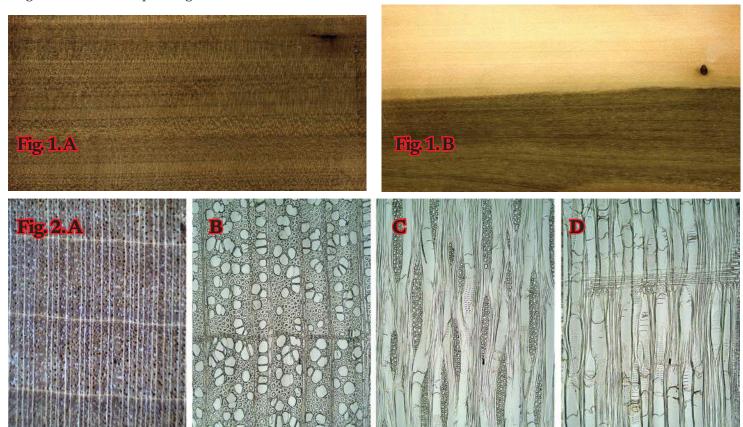


Please look at the pictures (Figs. 1&2). Can you recognize this wood? Email your answer to <u>aichbauer.schmid@planet.nl</u>. Solution is in next issue of *World of Wood*, together with a listing of those who solved this puzzle correctly! Size of figured specimen (Fig. 1 a & b) is a scan of sample of IWCS format both species been sanded. Microphotographs section and magnification of the pictures (Fig. 2 A - D): A, cross section 15x; B, cross section 100x (transverse section); C, tangential surface 100x; D, radial section 100x. Magnified 15x means an image area of 8.3x5.5 mm = 45.5 mm² and Figs. 2B-D are magnified 100x corresponding to 0.9x 0.675 mm = 0.6075 mm².



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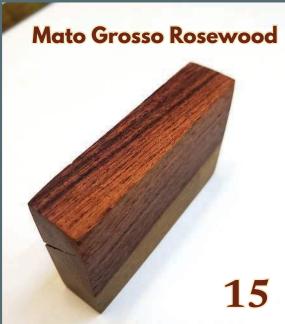
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On the cover: Gateway Group - US Central Regional Meeting. Spice cabinet made of Bubinga & Machiche, the center drawer is Bubinga burl veneer. - Article starts on page 19.







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## President's Message

Well, I wish I could inform you that we are getting some good rains in Central Texas. Unfortunately, Kendall County, just north of San Antonio where I have a shop, barn full of wood and house, remains in the exceptional drought category — a situation we have been in for over a year now. One of our main agriculture reservoirs in the area, Medina Lake, is only two percent full. Almost all our rivers, creeks and stock ponds have gone dry. Even my well has gone dry. A US \$10,000 fix included replacing a burned-out submersible pump, a booster pump, new wiring and dropping the new pump 40 feet (~ 12 m) deeper into the aquifer. This situation is really dire as it has the potential to change the forest composition in the Hill Country as I see many of our mature live oaks, cedar elms and escarpment cherries perish. Unfortunately, it usually takes a hurricane coming from the Gulf of Mexico that brings flooding rains to break our droughts.

On a brighter note, we look forward to several scheduled meetings. Our President-Elect, John Lyons has informed that, "The Australia Annual General Meeting is scheduled for the fourth week in October 2024, so running from Sunday 20



October until Saturday 26 October and is located in the tiny town of Gellibrand at the Otways Tourist Park. This is in the heart of the Otway Ranges about 100 miles (~ 160 km) west of Melbourne in the state of Victoria. We'll soon have a promotional flyer ready to go in the *Downunder* and *WOW*." I plan on attending to pass on the gavel to John, and hope to see many of you there. Australia will also host the IWCS, Australasian Meeting in Hahndorf SA on Monday 16th to Friday 20th October 2023.

Do not forget this year's IWCS Annual Meet in Shocco Springs, Talladega, Alabama to be held 25-29 September 2023. Rick and Rhonda Long have been hard at work to make this event one of the best. So don't forget to sign up. They will also host the IWCS 2024 Southeast Regional Winter Woodfest on February 12-16 at the usual venue at the Lake Yale Baptist Conference Center in Eustis, Florida.

We are still needing to fill the USA Northwest Regional Trustee position. The All-Mail Auction Committee Chair and the Webmaster post remains to be filled. So, if you or someone you know are interested in filling these positions, please let me know.

For those of you who do not have an e-mail address on file with the IWCS please send it to Patty Dickherber. Doing so will help expedite information to you and save the cost of office supplies when we need to get a hold of you (especially overseas members).

Have a great rest of summer and see you at the meets.



**Mark Duff #6409** 

### A Note to Contributors

Please submit articles as you complete them. They could be placed into future editions so each edition will present a balance of topics.

## As in a small family, Athrotaxis is with three, one of which is a hybrid. The genus has an outstanding wood.

## General description

The Tasmanian conifer genus *Athrotaxis* consists of two species, *Athrotaxis selaginoides* D.Don. (King William Pine or King Billy Pine) and *Athrotaxis cupressoides* D.Don (Pencil Pine), and a hybrid, *Athrotaxis × laxifolia* Hook. The latter is seen as a natural hybrid between the other two, mainly for the reason of the shape of the leaves that is clearly intermediate between those of the other two species, and for the reason of its growth area. The hybrid often occurs as scattered solitaries where the growth areas of the other species are near or overlap.

However, because all specimens in the wild show almost the same characteristics, with so little or no morphological variation, has the same chromosome number as the other two species, and produce fertile seed, it is argued that this species, even though it is genetically a hybrid, is well on its way to being an independent species. For this reason, the hybrid status is controversial. It is the least common of the three species mentioned.

Common names for this hybrid species are Summit Athrotaxis, Yellow-twig Athrotaxis, Intermediate Pencil Pine and Tasmanian Cedar.

The genus *Athrotaxis* is in the Cupressaceae family (formerly in the Taxodiaceae family).

The genus name *Athrotaxis* is a contraction of the Greek word 'athroos' = 'closely covered' and 'taxis' = 'arrangement.' It points to how needles and seed scales are set on the twigs and seed cones. In the specific epithet *laxifolia* 'lax' means 'flexible.'

Athrotaxis × laxifolia is an evergreen tree occurring on the Central Plateau in west Tasmania, in an area 900 – 1,200 m (3,000 – 4,000 ft.) above sea level, with abundant rainfall. The tree grows to 10 - 20 m (33 - 66 ft.) tall with a straight trunk up to 0.5 m (20 in.) in diameter in older specimens. Thick, slightly drooping branches form a cone-shaped, dense crown. Older specimens are more open and have a rather irregular shape.

The scale-like leaves are long, 5 - 7 mm (0.2 - 0.3 in.) long, the tip, although slightly curved inwards, slightly set away from the twig. The female cones are 12 - 20 mm (0.5 – 0.8 in.), about as long as wide,



Fig. 1. Wood specimen of *Athrotaxis* × *laxifolia*. Wood grown in the Blijdenstein Pinetum, Hilversum, the Netherlands. Figw. 1-9 by Nelis Mourik.

maturing from green through yellow and red-brown to brown. The seeds are wind-dispersed.

#### Grown

In XYLOS, wood specimens of *Athrotaxis* × *laxifolia* are offered for sale. The wood of these specimens is not from Tasmania, but from the Blijdenstein Pinetum in Hilversum, the Netherlands, where it was a tree of about 5 m ( $\sim$  16') tall and a maximum stem diameter of about 15 cm ( $\sim$  6"). The tree died due to unfortunate circumstances. The tree dates back to the time when the then administrator Mr. Nico Schellevis conceived plans to set up a Tasmanian garden around the entrance of the



Fig. 2. A live specimen of *Athrotaxis* × *laxifolia* in the Tasmanian garden in the Blijdenstein Pinetum in Hilversum, the Netherlands



Fig. 3. Stem base of *Athrotaxis*  $\times$  *laxifolia*.

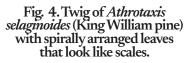






Fig. 5. Twigs of *Athrotaxis* × *laxifolia* with still immature, female (foreground) and male (background) cones. Intermediate size leaves.



Fig. 6. Twigs of *Athrotaxis cupressoides* (pencil pine). Short leaves.



Fig. 7. Bark of Athrotaxis × laxifolia.

greenhouse. That was around 1989. The final realization of this garden dates from 2001 and forms a unique outdoor botanical collection in the Netherlands.

## **Wood properties**

Athrotaxis in general shows a rose-red heartwood and a light brown to yellowish brown sapwood, quite sharply contrasting. For a conifer, this wood is soft, moderately fine to fine textured. Grain is straight. Specific gravity is ca. 400 kg/m³ or 25 lb/ft³, airdry.



Fig. 8. Stem section of *Athrotaxis* × *laxifolia*.



Fig. 9. Small off-cut of first growth King William Pine, 6.5 cm (2.5 in.) long and 5 cm (2 in.) square, taken home from a Tasmania tour by a friend. The wood shows an average of 100 growth rings in 2.5 cm (1 in.), or 4 in a mm.

The wood dries easily with only little shrinkage. It can be worked easily with all kinds of tools, splits easily, glues easily and can be finished to a smooth surface. The heartwood is durable.

#### **Wood anatomy**

In Athrotaxis × laxifolia growth rings are distinct due to a pronounced latewood ring (Fig. 10). The latewood tracheids are very thick-walled with a narrow lumen, up to 5 μm, and radially strongly compressed. Tracheids in the early wood measure up to 70 µm radially in cross section and a maximum of 15 µm in the latewood. Tracheid pitting is sparsely present in the earlywood tracheids, numerous in the latewood. Axial parenchyma occurs in all growth ring zones as scattered individual parenchyma strands, predominantly in the second half of the earlywood ring. Axial parenchyma cells have a reddish-brown content (Fig. 11-13). The rays are exclusively uniseriate and 2-15 (max. 20) cells high (Fig. 12 & 13). Cross-field pitting is predominantly taxodioid, in the latewood also piceoid. The ray cells are also partially filled with red-brown contents. Exudation of this resinous content is a common feature, sometimes seen as a disadvantage of the wood when in use. The wood anatomy is supposed to be equal to the other Athrotaxis species.



Fig. 10. Lens view of *Athrotaxis × laxifolia* (sapwood). Photo by Raimund Aichbauer.

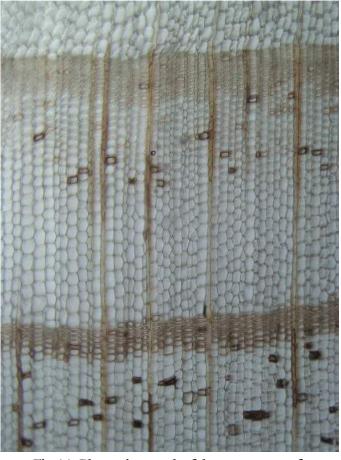


Fig. 11. Photomicrograph of the transverse surface. Photo by Raimund Aichbauer.



Fig. 12. Photomicrograph of the tangential surface. Photo by Raimund Aichbauer.



Fig. 13. Photomicrograph of the radial surface. Photo by Raimund Aichbauer.

#### Uses

The wood of *Athrotaxis* × *laxifolia* must be suitable for the same purposes as King William Pine, but has never been offered in trade, at least not under its own name. Wood use would be fine carpentry purposes where a durable wood is needed, as in furniture and boat building. However, due to scarcity and government protection in National Parks, King William Pine is nowadays used in only very small quantities. King William Pine was an especially sought-after wood for piano, guitar, and violin soundboards and for bending, furthermore for beehives, barrels, windows and window frames, doors, shutters, roof shingles and other exterior panelling, because it is lightweight and durable. Nowadays King William Pine is mainly used for heritage restoration work.

## Literature Tree descriptions

Forest Trees of Australia, D.J. Boland, M.I.H. Brooker, and others

The Gymnosperm Database https://www.conifers.org/cu/Athrotaxis\_laxifolia.php
Conifers of the World, James E. Eckenwalder
A Handbook of the World's Conifers, Aljos Farjon

Conifers around the World, Zsolt Debreczy & István Rácz

## **Wood descriptions**

Identification of Living Gymnosperms on the Basis of Xylotomy, P. Greguss The Commercial Timbers of Australia, I.H. Boas Wood in Australia, Keith R. Bootle Australian Rainforest Woods, Morris Lake http://www.plantsoftheworldonline.org/ https://scsearch.csiro.au/ CSIROau?q=Athrotaxis%20 s&site=All&start=0&sort=score%20desc https://cites.org/ https://insidewood.lib.ncsu.edu/



## Solution to WOOD QUIZ 01 (WoW76-3)

by Raimund Aichbauer #10142 and Willem Hurkmans #8761-L

This wood has a very wide distribution area in the entire Mediterranean including Northern Africa and Middle East. *Pistacia terebinthus* L. the Turpentine Tree or Terebinth.

Figure 1,3,4 &5 show sapwood and heartwood. Both the sapwood and the heartwood have a very variable appearance. Usually, the sapwood is very broad, light coloured with a reddish or greenish tinge. The transition to the heartwood is often smooth. The heartwood varies from light brown to maroon, usually with a strong green tinge and very dark streaks. The wood has a very decorative appearance. It is a pity that these features are not specified for this species in the InsideWood database.



Fig. 1. *Pistacia terebinthus* L. the Turpentine Tree or Terebinth Photo by Willem Hurkmans

Although some features are not specified in InsideWood, the list of InsideWood features overview has been retained for determination. For the description of the InsideWood features, I follow the features as described in the InsideWood menu in consecutive order of numbers.

Growth ring boundaries distinct. The wood is ring-porous, with a tendency to semi-ring-porous, (but sometimes it comes up to diffuse-porous) {Fig. 2A}. Vessels in tangential, diagonal and or radial pattern and clusters are also present as vessels in dendritic arrangement and vessels in radial groups of 4 and more {Fig. 2A and 2B}. (This vesselsarrangement can be observed in varying amounts in many of the 11 Pistacia species.) Helical thickenings in vessel element present, through the vessel elements and in the narrower vessel elements (Fig. 2D), Vessels up to 200 µm diameter (Fig. 2B), Fibres thin- to thick-walled (Fig. 2B), Axial parenchyma scanty paratracheal (Fig. 2B), Rays up to 10 cells wide {Fig. 2C}, Body ray cells procumbent with one row of upright and/or square marginal cells {Fig. 2D}, 4 to 12 rays per 1 tangential mm {Fig. 2B and 2C}, radial canals present {Fig. 2C}.

InsideWood Features: 1p 3p 6p 7p 8p 10p 11p 13p 36p 37p 39p 42p 69p 78p 98p 106p 115p 130p. (Features 196p 201p and 202 is the description of the colour of the heartwood but is not described in InsideWood.)

(6v 7v 8v 10v and 11p are specified as variables in InsideWood because they do not always have to be present and can exist in different variations. It is purely coincidental that all these features from different vascular distributions are present here.)

Jim Schubert (#8613) correctly identified the genus.









Microphotographs (Fig. 2A-D): A, cross section; B, cross section (transverse section); C, tangential surface; D, radial section. The magnification of the pictures is 15, 100, 100, 100x. Magnified 15x means an image area of 8.3x5.5 mm = 45.5 mm² and Fig. 2B-D are magnified 100x corresponding to 0.9x 0.675 mm = 0.6075 mm².

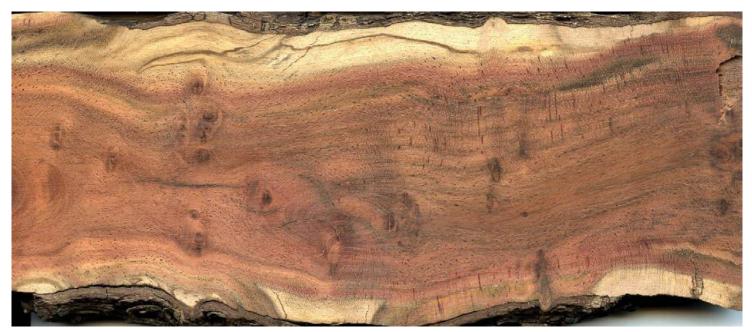


Fig. 2. Part of a 7-cm thick trunk of Pistacia terebinthus L. - Photo by Raimund Aichbauer



Fig. 3. Pistacia terebinthus L. - Photo by Willem Hurkmans



Fig. 4. Pistacia terebinthus L. Note pale part of outer heartwood. - Photo by Willem Hurkmans

Recently I was able to attend Bob & Judy Chastain's annual Sawmill Day at their home in Ladoga, Indiana, USA. I arrived the day before to help with any milling and stacking chores, and we were able to cut up a couple of Osage Orange logs at that time. I was also treated to a nice tour of the family farm and property, which included an awesome stand of hardwood trees with large Walnut, Catalpa, Ash, Maple and Sycamore trees, as well as other species scattered around the property.



Fig. 1. Sawmill Day



Fig. 2. Sawmill Day



Fig. 3. LT50 Hydraulic Portable Sawmill (Wood-Mizer, USA)

When I first joined the IWCS while attending one of the winter meetings at Camp Yale in Florida as an invitee of Dave Barriger, I was quite impressed that there was a sawmill on site and members were busy cutting logs into boards and cookie rounds and that everything was sold or auctioned off to the members present. I knew this was the kind of thing I enjoyed, and it didn't take long that day for me to decide to join and become a member of the IWCS.

I had heard about the Chastain's annual Sawmill Day on various occasions over the last several years but was never able to have time away from work to attend, until this year.

I must say to watch the mill cutting and see the next surprise inside the log is a lot of fun and work, and to my surprise there were three sawmills set up in a line along one edge of the farm adjoining a corn field right behind the barn. Bob stated that he had a fourth mill scheduled to be there until just shortly before the big day when he was unable to reconfirm their attendance. Can you imagine running four sawmills and cutting up logs all at the same time and location? Three mills were impressive to see as it was, there were also two tractors on site which were operated by Bob's son and grandson steadily moving and loading logs onto the three sawmills and removing the cut boards as needed. One of the mills was run by another grandson. Attendees were able to purchase wood that had already been cut and stacked or some folks just went to the log pile itself and purchased the log(s) they wanted from Bob and had them cut to their requirements. Some of the species that were



Fig. 4. Sawmill Day

available for purchase included Northern Catalpa, Maple, Walnut, Cedar, White Oak (including a nice piece of white oak burl that I was able to acquire), Kentucky Coffee Tree, Poplar and Osage Orange. I'm sure there were other species, but they seem to slip my mind right now. I think everyone in attendance that was buying wood was also helping with



Fig. 5. Walnut slab



Fig. 6. White Oak burl

the other chores of moving, stacking and loading vehicles for others as well. One young gentleman, Dick Vandersale, a member of the local woodworkers group that Bob belongs to, was doing his best to keep me busy. He spent much of the day working with me to remove the cut boards from the mill and stacking and loading as needed. He didn't seem to slow down much or want to take any breaks; as a 63 year old I had trouble keeping up with him.

The wood was sold to raise money for the local 4-H Clubs (youth development organization for ages 5 to 18) in three separate counties in the surrounding area that the Chastain's help support, and I can't think of a much better organization to be supporting.

I was able to visit with several IWCS members who were present, as Indiana, Illinois and the Great Lake Region boasts many active members who usually make it to Sawmill Day as well as Florida for the Lake Yale meeting.

Judy put on a big spread of food and cold drinks for a wonderful lunch break as well as coffee, cookies and doughnuts in the morning. If you left there hungry it was your own fault as Judy had quite a bit of groceries with a good variety of food and desserts for all in attendance.

The same holds true for the wood. If you went home without any, it was your own fault.

As it turns out everything I had heard about the Sawmill Day was true, and I had a great time connecting with old friends and making new ones. Bob, Judy, and their entire family were wonderful hosts, and I really enjoyed my time there.

Now I need to figure out how to make this an annual trip, and I'm going to do my best to make that happen.

I'm not a doctor, never played one on TV, and am not big on product endorsement, but when I find something that works I like to get the word out. Years ago, I got a splinter that went straight into the palm of my hand and broke off under the skin. I dug for it with a sewing needle until I couldn't stand the pain any longer and went to the doctor. He dug around with a syringe needle enough to bring tears to my eyes and finally declared that there was no splinter, but I knew better. Many months later I poked at the dark spot where the splinter entered with a needle and the pus encapsulated splinter jumped right out. Our bodies don't like foreign objects.

There cannot be a woodworker on the planet who hasn't encountered a splinter. Some are easy to remove – just grab the end with your fingernails and pull it out. Others can be challenging and annoying if not painful. I received one of those difficult ones from a piece of old "hard pine" several months ago in the web between my thumb and index finger. It was a dagger that broke off under the skin when I attempted to pull it. Several times I dug around trying to remove it to no avail. A week ago, I went to the doctor for another matter and brought this up. "Eventually it will work its way out" was the answer.

A week after the appointment I was determined to remove it and spent an hour with a needle, alcohol, cotton balls, magnifiers, tweezers, etc. and finally gave up. At least I gave it a reason to hurt! I Googled "splinter removal" and found lots of information about everything I already knew. Eventually I found a YouTube video posted by a grandmother removing a large splinter in her grandson's back using Ichthammol Ointment or drawing salve. I Googled "Ichthammol Ointment" to find that my local CVS Pharmacy carried it for \$10 a tube. I read the consumer reviews, mostly five-star, and was skeptical but drove to town and bought the ointment, a box of 100 Band-Aids, and two rolls of adhesive gauze wrap. The claims were that it worked within 24 hours, but I'd give it a week.

At noon I put a dab of the black, stinky salve on the area, covered it with a Band-Aid and wrapped it with the gauze and wore it under my gloves so I could work. I repeated the application without gauze at bedtime. Next morning, I pulled the Band-Aid off and rinsed under the faucet to find the butt end of the splinter protruding from the skin. Giddy, I grabbed the protruding end with tweezers and painlessly pulled it out. I was shocked and amazed. The claims were 100% correct!

So, what is this stuff? Ammonium bituminosulfonate 41 is a synonym. It is a product of the distillation of sulfur-rich shale oil. It is sometimes called drawing salve or black ointment. Indeed, it is black in color and has an unpleasant bitumen odor. Note that there is a completely different compound called black salve which is a corrosive paste intended to destroy skin tissue. Some people dangerously use black salve as a cure for skin cancer with sometimes disastrous results. So, it is important to see the active ingredient, as in, read the label.

Ichthammol dates back several hundred years but came into widespread use in the late 19<sup>th</sup> century. It has many dermatological uses and is often compounded with other medications for use in humans and animals. There are so many uses that I won't attempt to list them all, but most common are treatment of eczema and psoriasis and for drawing boils and splinters and thorns. The tube I bought at CVS is labeled "Ichthammol Ointment/Drawing Salve/For drawing out splinters and slivers/Helps soothe skin upon application". Other pharmacy chains offer the same product but label it for a variety of other uses, some not including splinter drawing.

My impression is that this is one of those old-time remedies that everyone had on hand but has fallen by the wayside in favor of more expensive medications made by pharmaceutical companies. In fact, I found very little information on how it draws out splinters. One article I read seemed to poke fun at this quality. Several sources state that this ointment merely softens the skin so a splinter can work its way out. I read nothing to back this up, but I feel that the skin is softened and the entry pathway for the splinter is opened, and the body pushes it out. I've not found a better explanation. All I can say is that it worked for me, and it will be a permanent addition to my medicine cabinet, and I will never dig around for a splinter again.

Here's another tip: Woodworkers often get a speck of wood in their eye. Twice, this sent me to the hospital emergency room with positive results. However, I once got a speck in my eye and worked for some time to remove it and an "old-timer" told me how to remove it: Chew a piece of gum until most of the sugar is gone then make a small "swab" (think Q-Tip) on a blunted toothpick or pull the cotton from a real Q-Tip and wrap a small amount of chewed gum around it. You can painlessly rub the soft gum over the eye and under the lids until you finally find the tiny speck stuck to the gum. One of the best pieces of advice I ever received!

Hello to All,

I am having trouble identifying some wood samples and thought I would present them to the IWCS experts.

Brief background, approximately 30 years ago I worked in an exotic woods store. I worked for the Frank Paxton Lumber Co. in Albuquerque from 1976 to 1998. That store used to have a pretty impressive selection of woods, especially the early years. Paxton went out of business around 2000. I changed careers, but had lots of wood samples. Unfortunately, I did not do a good job of labeling everything. While I worked there, I traded a lot with others, many of whom are no longer around. I am now retired and sorting through the boxes. Hoping for some help.

This small sample was only marked as "Motto Grosso". The name Mato Grosso comes up as a state in Brazil. I cannot find any wood listings for Motto Grosso, or Mato Grosso. The wood is dense, diffuse porous, and has a sweet odor, similar to Rosewoods.

The sapwood is a uniform gray color. I have compared this to other Rosewoods, but it does not match. Kingwood and Mexican Kingwood are close, but not the same.

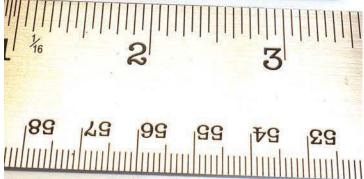
Attached are three photos. One front view, one side view and one microscopic end grain.

Unfortunately, this is the only piece of this I have. Anyone wanting more photos, just let me know.

Any help would be appreciated. Maybe, I can send questions about additional unidentified woods in upcoming *WOW* publications. Thank you so much, tmcbgolden@yahoo.com









Endgrain. 200x smartphone magnifier, phone magnification to 2x

## Shrubwoods of the World

## **Beauty Bush**

by Nelis Mourik #7460HL

## A shrub prized for its outstanding spring flowers. The wood of the thin, straight stems is hard and tough.

The botanical name of Beauty Bush is Kolkwitzia amabilis Graebn. It is the only species in the genus. In 2013 it was suggested that Kolkwitzia, along with a few other genera, be placed in the closely related genus *Linnaea*, then the new name being *Linnaea amabilis* (Graebn.) Christenh. According to Plants of the World Online (2023), the name Kolkwitzia amabilis still is the accepted name. Kolkwitzia amabilis is native to SE China but appears to be rare in the wild. The Chinese name is 蝟实属, wei shi shu. The genus *Kolkwitzia* is in the Caprifoliaceae or Honeysuckle family.

The genus name *Kolkwitzia* is in honour of Richard Kolkwitz (1873 - 1956), a professor of botany in Berlin, Germany in the early 1900s. The genus name *Linnaea* is in honour of the great, well-known Carl Linnaeus (1707 - 1778), latinized to Carolus Linnaeus. Linnaeus was the author of *Species Plantarum* (1753), with which he was the founder of modern binomial nomenclature. The specific epithet *amabilis* means 'lovely.'

Beauty Bush is a spreading, bushy shrub with a large number of thin stems to 2.5 - 3 m ( $\approx$  8 - 10 ft.) tall and wide. The many, almost unbranched stems have a light brown, flaky bark. The leaves are opposite, simple, ovate, 1.5 - 7.5 cm (0.6 - 3



Fig. 2. Transverse section of a 32 x 38 mm (1.25 x 1.5 in.) wide stem disc of *Kolkwitzia amabilis* from near the ground.

in.) long, entire or with a few sparse shallow teeth. Flowers are light pink, bell-shaped, about 2.5 cm (1 in.) long, growing in pairs. They form numerous showy sprays along the ends of the curving stems. The fruit is a hairy, ovoid capsule, about 6 mm (0.25 in.) long.

The sapwood of Beauty Bush is off-white to very light brown. The heartwood, which is sharply contrasting to the lighter sapwood, is light brown. Stem diameters reach 3 - 5 cm (1.2 - 2 in.), the latter only near the base. Between the nodes, the stems have a 3 - 5 mm (0.1 - 0.2 in.) wide pith, open or filled with soft pith material. Growth ring boundaries are distinct, due to generally lighter coloured tissue near the end of the growth ring. The wood is diffuse porous. The vessels are exclusively solitary. Vessel diameters vary between 20 and 50 μm, scattered throughout the growth ring, so not decreasing towards the latewood. Perforation plates are exclusively scalariform with around 20 (- 40) bars. Axial parenchyma is diffuse, diffuse-in-aggregates and scanty paratracheal. Rays are 1 - 3 (-4) seriate. The uniseriate rays consist of upright cells only; multiseriate rays consist of procumbent cells, ending up, or being interconnected with short to long uniseriate parts of upright cells. Sheath cells also occur. Rays can be up to several mm high. Ground tissue consists of thickwalled fibres with distinctly bordered pits on both radial and tangential walls.

The wood is hard and heavy (specific gravity 900 - 950 kg/m³ or 56 - 59 lb/ft³, airdry). Grain is straight, texture is very fine. It is tough and strong. Due to the fact that the stems hardly branch, larger knots are absent. The round stem pieces dried without much cracking and splitting; end-sealing is recommended. The wood works well with all kinds of tools, provided cutting edges are sharp. It glues well and can be sanded to



Fig. 1. Longitudinal surface of a flatsawn, glued up *Kolkwitzia amabilis* wood specimen. The wood is from a private garden in the Netherlands. a very smooth surface. The wood is moderately durable. Due to its hardness, it is not very attractive to

wood borers.

In China, the wood is used for small items like buttons, knife handles and other shorter and longer tool handles. The shrub is planted for the beauty of its abundant flowering. In the first decades of the 20th century, it was a very popular shrub in the eastern US.



Fig. 3. Lens view (10x) of *Kolkwitzia* amabilis wood endgrain

## Shrubwoods of the World

#### Willow-leaved Jessamine

by Nelis Mourik #7460HL and Michael Nee #9863

Said to be an important shrub to South American natives, used for smoking earlier than tobacco, and one of the most amazingly flowering perennials in horticulture. It has a pretty looking very light brown wood.

The botanical name of Willow-leaved Jessamine is *Cestrum parqui* L'Hér.

Cestrum is a genus of 228 accepted species (Kew website POWO, 2023), native to the tropical and subtropical parts of the Americas, from Florida, the West Indies and Mexico far south into South America. The native range of Cestrum parqui, the southernmost species in the genus, is from Peru, Bolivia and southern Brazil south to central Chile and central Argentina, growing primarily in the subtropical biome. It has quite a range of English and Spanish common names, English like Chilean Cestrum, Green Cestrum, Green Poison Berry and Willow Jasmine. Spanish common names are Palqui, Palqui blanco, Palque, Parqui, Cestrum Verde, Hediondilla (stinker) and Duraznillo Negro (black peach). The common name Jessamine or Jasmine is because of the apparent resemblance of the flowers of Winter Jasmine (Jasminum nudiflorum). It is quite possibly the most rampantly blooming species in the genus, at least of those hardy in western Europe.

In cultivation in the United Kingdom, in 2017 *Cestrum parqui* has gained the Royal Horticultural Society's Award of Garden Merit.



Fig. 2. Full-grown, flowering shrub of *Cestrum parqui* in a western European botanical garden. Photo by Michael Nee.

The genus *Cestrum* is in the Solanaceae or Nightshade family. As with *Solanum* species, *Cestrum* species are also often hard to distinguish when in cultivation. *Cestrum parqui* (Green Cestrum) may sometimes be confused with *C. aurantiacum* (Orange Cestrum), *C. nocturnum* (Night Cestrum or Lady of the Night), *C. elegans* (Red Cestrum) and, because of its similar flowers, with *Nicotiana glauca* (Tree Tobacco), according to *Weeds of Australia*.

Most species of *Cestrum* are night-blooming, with fragrant yellowish-green flowers or pale flowers and moth pollinated, like *C. nocturnum*, but the rest in cultivation are day-blooming, and some have handsome orange or red flowers without odor.



Fig. 3. Detail of flowers of *Cestrum* parqui of a cultivated specimen in a western European botanical garden.
Photo by Michael Nee.

The genus name *Cestrum* is given by Linnaeus in his *Species Plantarum* in 1753 for the northernmost *Cestrum diurnum* L., Day-blooming Cestrum, and *C. nocturnum* L., which blooms at night.

One explanation of the name is it is said to be the transcription of the old Greek plant name Kestron (a Lamiaceae family member), transferred by Linnaeus to this



Fig. 1. Longitudinal flat-sawn surface of a *Cestrum parqui* wood specimen. The wood is from the Royal Botanic Garden Edinburgh, Scotland, United Kingdom.



Fig. 4. Small young flower head and leaves of *Cestrum parqui* in the Plantentuin Meise, Belgium. Photo by Michael Nee.

South American genus, which was of course unknown to the ancient Greeks.

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In another, more plausible explanation it is said to be directly related to the Latin word 'cestrum', meaning 'grave' or 'grave digger's tool'. For, surely, all parts of this shrub are highly toxic.

Finally, we can also trace it back to the Latin transcription of the Ancient Greek word 'késtros', which meant 'sharpness', after the smell of the crushed leaves.

We know Linnaeus was a genius in sometimes combining two meanings in one plant name.

Regarding the specific epithet parqui, the name of this shrub used by the indigenous Mapuche people is palqui. The Mapuche people are native inhabitants of south-central Chile and south-western Argentina. It is derived from their word 'palquin', meaning 'medicinal shrub'. The name was spelled parqui by the French author, Charles Louis L'Héritier de Brutelle (1746 - 1800); phonetically, the "l" and many pronunciations of "r" are called liquids and are easily interchanged.

Because of the wide range of medicinal purposes, in combination with the shape of its numerous flowers, this shrub was deeply rooted in the worldview of the Mapuche people. By these people the shrub "was characterized as a plant that drives away negative energies, but that also contains the wisdom of the cosmos in its stellar flowers". Hence the syllable 'pal', which is in the Mapuche language a verbal way of referring to the stars, and 'kim', which is synonym for 'to know' or 'knowledge', or even 'to guess'. So, for the Mapuche people the meaning of *palqui* is '(shrub containing the) knowledge of everything'.

Willow-leaved Jessamine is a fast-growing, evergreen to semi-evergreen shrub to 1.5 - 3 m (5 - 10 ft.) tall, or taller in warmer areas. The kind cultivated in Europe has numerous quite glabrous, young shoots and leaves. Their woody stem is slender, sometimes to 8 cm (3.2 in.) in diameter (as was the wood obtained for this description). Mature bark is brown, 1.25 mm (0.05 in.) thick, full of small round and short horizontal lighter-colored lenticels. Leaves are alternate, light green, willow-like, lanceolate to

oblong, entire, 4 - 12 cm (1.5 - 5 in.) long and 2 - 5 cm (0.8 - 2 in.) wide. They have an unpleasant rubberlike smell when crushed, almost like the Jimson Weed, Datura stramonium. (For an example, the botanist Nicholas Jacquin gave plants cultivated in Vienna, Austria, the name Cestrum foetidissimum, meaning 'the stinkiest Cestrum'). The shoots all bear terminal, conical clusters of yellowish-green flowers in late spring and early summer, the cluster being 10 - 15 cm (4 - 6 in.) long. The individual flowers are tubular, 2.5 cm (1 in.) long, consisting of 5 - 6 (-7) petals, dividing at the top, forming a 'star' with a diameter of about 12 mm (0.5 in.) each. The fruits are violet brown to black, egg-shaped berries in late summer and early autumn, 1 cm (0.4 in.) long.

The above description is for plants from the more temperate part of the South American range, which is the origin of the material cultivated in western Europe. The species is complex and puzzling. In Bolivia, the plants growing in arid areas may have dense short pubescence on the young parts, the flowers more densely grouped, and the corolla can be a beautiful orange-yellow, or variously tinged with purple. These plants have been given the names Cestrum lorentzianum Griseb. and Cestrum psittacinum Stapf, but the range of variation seems to be continuous.

The wood of Willow-leaved Jessamine is very light brown. The wood shows a little darker heart, but it is doubtful whether this is real heartwood. In this UK grown wood, growth rings are rather indistinct. The wood is diffuse porous. Vessels are solitary, in radial groups of 2 - 3 (- 4), and in small clusters. Tangential vessel diameter is small, 25 -  $50~\mu m$ . Perforation plates are simple. Axial parenchyma is absent or



Fig. 5. Transverse surface of an almost half disc of *Cestrum parqui* stem wood. The diameter of this stem was 8 cm (3.2 in.).

extremely rare; if present it is scanty paratracheal. Rays are 1 - 6 cells wide. Ray height is up to 1 mm, on average however much less than 0.5 mm. Multiseriate rays consist of procumbent to slightly upright cells with one row of square to upright marginal cells, the latter, very rarely containing prismatic crystals. Ground tissue consists of quite thick-walled fibers with simple to minutely bordered pits.



Fig. 6. Lens view of *Cestrum parqui* wood endgrain (8x).

Willow-leaved Jessamine wood is quite hard and quite heavy (specific gravity 830 kg/m³ or 52 lb/ft³, airdry). Grain is straight, texture is fine. The wood, cut along the pith when obtained, showed no negative effects from drying. It worked well with all kinds of tools. It glued well and it sanded to a very smooth surface. Durability is unknown, but it is not expected to be high.

The wood has no known uses. In many tropical and subtropical parts of the world the shrub is planted for its beauty. Or at least it was. Now, as it is in Australia, it is declared a noxious weed because it is highly invasive, and it is dangerous, because it is toxic to livestock if eaten.

The shrub has a wide range of medicinal purposes to South American native people. It is said leaves of *Cestrum parqui* were used to smoke by the natives of Chiloé Island off the Chilean coast before real tobacco was introduced (from *Nicotiana tabacum*), and later as a replacement in case of lack.



by Violet Oman #10063 and Patti Dickherber #8719, photos by Violet Oman

Many thanks to Garry and Shelly Roux (#6466L,HL) for hosting what has turned out to be an annual event, the IWCS Gateway Group Regional Meeting! We all know it took a lot to put on this two-day event June 24 & 25. Garry has a way of getting his IWCS crew and family together to help prepare for this meeting. Several Great Lakes members from Indiana attended. There were about 36 in attendance and one new member signed up.

It was a fun filled weekend of turning and carving, with special demos: How to Best Prepare a Turning Block with Resin to Achieve Outstanding Results by John Ferreira and his fine assistant (Deb) (Fig. 1.), and Pen Turning with "So Smooth" Magical Finish by Jeff Nasser (Fig. 2), and a carving session by Michael Short (Fig. 3), which kept Garry (Fig. 4) busy for well over an hour!

Shelly's BINGO room (Fig. 5) was full of fun and prizes. The best place to be in an air-conditioned room on that upper



Fig. 1. Demos: How to Best Prepare a Turning Block with Resin to Achieve Outstanding Results by John Ferreira (#8842) and his fine assistant Deb



Fig. 2. Special demo: Pen Turning with "So Smooth" Magical Finish by Jeff Nasser (#9665)



Fig. 3. Carving session by Michael Short (#9368) - Michael is at work.



Fig. 4. Carving session by Michael Short (#9368) kept Garry Roux busy for well over an hour!



Fig. 5. Shelly's bingo room

90s day (~ 36° C)! Shelly also had sewing class for a *Kitchen Towel Scarf* project. Independent turning sessions (Fig. 6) were available for the turnings of bottle stoppers, pens (Fig. 7), seam

rippers, ice cream scoops and more. All kits, glue, etc., were donated or bought by the Gateway Group. Thank you Lucy Cruise for your generous donations.



Fig. 6. Independent turning session. Dave Munger (#9029) turning a wine stopper and Thom Bundza (#10274)



Fig. 7. Pen turning blanks

Many items were on display confirming how talented our IWCS members are (Fig. 8,9 & 10). Their projects always blow me away. Mike Luecking's spice cabinets and chests which were donated to IWCS pretty much take your breath away for anyone that has an eye and the love for beautiful wood grain (Fig. 11 & 12).



Fig. 8. Bob Chastain's display



Fig. 9. Bob Marsh's (#10255) ukulele: Koa body and Indian Rosewood fretboard



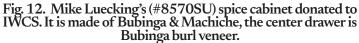
Fig. 10. John Ferreira's work: At the back is a pine root ball with red epoxy fill. The bowl is stabilized, dyed spalted maple. The hollow form is cherry burl.



Fig. 11. Mike Luecking's (#8570SU) Bigleaf Maple burl and Walnut chest donated to IWCS



Fig. 15. Shelly's Kitchen Towel Scarf project participants: From L to R: Shelly Roux, Pam Munger, Judi Bundza, Judy Chastain, Brenda Stumph, and Deb Ferreira – photo by Patti Dickherber



The "always spirited" wood auction was led by Garry Roux and was so much fun (Fig. 13 & 14).



Fig. 13. Wood for the Auction



Fig. 14. Wood auction by Garry Roux



Fig. 16. Bob Dickherber (L) and Lloyd Marshall (R)

It was a great day once again to catch up on old friendships Fg. 16 & 16). We missed members who weren't able to attend the event and hope to see them next year. Many thanks to everyone who worked and donated to the auction and unbelievable support from members that were not in attendance!

The food was catered from a local restaurant, Bert's Chuckwagon and it was excellent. Saturday lunch was Smoked Chicken with Coleslaw and sides. Saturday supper was Bacon Warped Meatloaf mashed potatoes and gravy Green Beans and Cupcakes dessert, Sunday lunch Turkey Sandwich, Coleslaw and potato chips. The Coleslaw was made from cabbage grown in Garry's garden. Patti Dickherber also made chocolate chip cookies for all meals.

Special thanks to the American Legion Post 365 in Collinsville, IL. It was the perfect venue for our meeting.

We've attached photos for your enjoyment. And we are always happy to see members from other regions, so let us know if you want to attend. Contact Violet Oman (violet.oman@me.com) or Garry Roux (garryroux@gmail.com).

A while back I got an email from Jennifer the Head Gardener at <u>Barnes Arboretum</u> which is part of Saint Joseph's University in Merion, Pennsylvania, not far from where I live. She wanted to know if the First State Woodturners (FSW) chapter of the American Association of Woodturners (AAW) was interested in some Evodia (*Tetradium daniellii*), Honey Locust (*Gleditsia triacanthos*), Scarlet Oak (*Quercus coccinea*), or Cork Tree (*Phellodendron lavallei*) as the arboretum had to cut the trees down.

Jennifer had found my name on the Internet as I was the Vice President of the FSW, and my email address was listed on the FSW website's contact page. She was interested in finding a group interested in harvesting the wood from trees the arboretum was being forced to cut down due to disease or dying from old age. The arboretum did not want to see the wood being carried away by the arborist who felled the tree, under contract, to be chipped up or taken to the dump. The Barnes arboretum is astonishingly diverse for its size and is home to more than 2,500 taxa of woody and herbaceous plants, many rare. The peony, lilac, and fern collections, which date from the early 1900s, are important genetic resources for conservation and study, and their herbarium contains more than 10,000 specimens that supplement teaching and research at the university. In 1922, when Dr. Albert C. Barnes and his wife, Laura Leggett Barnes, purchased the property, it already housed a collection of specimen trees of its previous owner, Captain Joseph Lapsley Wilson, who had started assembling different species in the 1880s. While Dr. Barnes concentrated on his art collection, Laura Barnes devoted herself to the arboretum. Her legacy lives on in the beauty of the landscape and in the horticulture school that she founded in 1940. The Barnes arboretum staff has maintained detailed records of the plants in their care to include records inherited from Captain Lapsley and the Barnes family. The records have been made available to me as the trees have been harvested.

I sent an email out to the 122 members of the Chapter and IWCS I trade wood with to see who was interested in obtaining some of the wood as the trees had already been cut down. Around 15 members of FSW and several members of the IWCS expressed interest in obtaining some of the species being offered. Mark Peet and Gary Green of course provided detailed requirements for the pieces they wanted in order to make specimens.

To help the Head Gardener to continue to get financing for the extra actions required to allow the IWCS to receive wood to make samples out of, Gary Green sent a letter to the arboretum thanking them for contributing the wood to the IWCS. The arboretum and university staff were genuinely grateful for the gratitude expressed by the IWCS.

The arboretum staff has continued to contact in advance about trees and shrubs that are required to be cut down. The arboretum staff pays the arborist to cut the tree down, mulch any branches smaller than about nine (9) inches (~ 23 cm) in diameter and to move the logs into the parking lot. After the individuals interested in obtaining pieces of the logs have obtained their pieces, I would then contact the arboretum to say we were done with the logs of that species. The arborist would then haul away any logs or pieces remaining. On most occasions there has been no need for the arborist to come to collect the pieces left over. Because the arboretum has been growing plants for well over 100 years, several times the quantity of the logs were so large that we contacted other AAW Chapters in the area to come collect some wood. I received an email that a Chinese Toon (Toona sinensis) also called Chinese Mahogany, a species from eastern Asia, needed to be removed. I researched information about the species and told the arboretum that we would be very interested in collecting wood from the tree. The wood is a light red and is valuable for making furniture and for the bodies of electric guitars. Two weeks later the arboretum informed us that most of the trunk would be used to make a conference table for the university, but the large branches would be made available to us. The branches turned out to be fairly large and have turned out to be a favorite wood for members of the chapter. Items rough turned from the provided logs dried very rapidly to the point that they could be finished. The thirteen (13) inch (~ 33 cm) bowl in Figure 1 was turned two years ago from a crotch piece where the crotch flame displayed a lot of curl. When the chapter members showed up to collect the wood I asked if anyone else was interested in the large crotch and was surprised that no one else was interested in fighting me for the piece. Large crotches in log form with the two branch protrusions are a challenge to cut with a chainsaw but the resulting flame pattern in the wood is usually the prettiest cut in a tree. The bowl is one of my bosses' (wife's) favorite pieces



Fig. 1. Chinese Toon (*Toona sinensis*) Bowl turned by the author

and all the Toon pieces as it has turned out to be on one of her favorite woods.

One of the large branches of the Toon tree had a sap line the entire length of the branch. In a lot of species, a sap line this thick results in the wood splitting along the line. This resulted in the other wood harvesters not wanting any of the branch. I thought it looked really different and collected most of the branch. After milling the branch, removing the pith and sealing the ends and setting the wood aside to dry, none of the pieces split along the sap line as they dried. One of the first pieces turned from the Toon wth the sap lune is shown in Fig. 2 (back cover). The photo was taken right after the bowl was turned and its paler color compared to the bowl on Fig. 1 illustrates how much darker the Toon gets after being exposed to the air. After showing the bowl to the other members of the turning chapter at a Show & Tell session, several members asked for pieces with the sap line to turn and it quickly disappeared. The wife named the bowl 'The Witch's Pot" and the sister-in-law took the piece home during her next visit.

I am looking forward to seeing the university's Chinese Toon conference table and am thinking of donating one of my pieces, that my wife is willing to part with, for the table's center piece.

Another species we were lucky enough to receive from the Barnes arboretum was a Japanese Plum-Yew (*Cephalotaxus harringtonia*) shown being loaded onto members trucks and trailer in Figure 3. The gentleman with the beard apprenticed as a wood worker in Japan and so we gave him first choice of the woods originating from Japan. The Plum-Yew was surprisingly large and made some great bowls and of course a bottle stopper and lidded box for my wood collection. A couple years ago the family was up in Philadelphia, which is about an hour's drive north of where we live in Maryland, and saw some massive London Plane (*Platanus* × *acerifolia*) trees in a park close to the Liberty Building. As soon as we got home,



Fig. 3. Japanese Plum Yew (Cephalotaxus harringtonia)

I did some research on the species and found out the species is thought to be of a cultivar origin between American Sycamore (*Platanus occidentalis*) and Oriental Plane (*P. orientalis*). Unlike the American Sycamore, which is abundant in the area here on the east coast, the bark is similar to Sycamore but is more of a gray-green color. In addition, while the wood has the same wide rays as Sycamore, the cell walls have a reddish-brown tint.

The Barnes arboretum Head Gardener emailed me that the University had to take down a 110-year-old London Plane tree and would we be interested in harvesting some of the tree? My response was to ask when we could come up and get some of the tree. It turned out the tree base was over 50 inches (~ 127 cm) in diameter and the arborist who was taking down the tree thought the tree was too large to leave on the campus grounds. They would transport the logs to their yard where we could come collect them. They asked that we not bring a lot of people with chainsaws to their yard for safety and insurance reasons. So, I borrowed my neighbor's trailer, and we picked up one large log and most of the branches greater than twelve (12) inches (~ 30.5 cm) in diameter. Upon arriving at the arborist's yard they offered to load the logs for us. Worried about the weight of the logs I selected one of the smaller logs which they loaded on the trailer for me. Figure 4 is where the logs are being loaded onto the trailer by the arborist.



Fig. 4. Loading the London Plane

Figure 5 shows my pickup truck with the logs in front of the house as I got home too late to unload the logs. The next day I detached the trailer and pulled the logs off the trailer with the pickup using a tow strap. To get the logs placed in the bed of the pickup I had to tie a rope around a tree and drive away, pulling the logs out.

The smaller logs were milled into two-inch-thick (~ 5 cm) slabs that will be offered at the IWCS annual meeting later this year or will become cutting boards when dry. The larger log was sliced up using chainsaws by members of the turning chapter and with a lot of manual labor to lug them home. Since a lot of species check as the wood dries, most of the wood was roughed out into the shape of a bowl, platter or hollow form and set aside to dry. This process was followed with both the Toon bowls.



Fig. 5. London Plane (*Platanus* × *acerifolia*) log from Saint Joseph's University campus.

The members of the First State Woodturners have made items from each species the arboretum has donated and in some instances have given them to the arboretum employees who took the initiative to ensure the trees from the arboretum did not go to waste, as a way of saying thanks for the wood. Figure 6 shows me and another FSW member cutting up some of the Black Oak (*Quercus velutina*). Preparing the logs by cutting them in half does several things. First, it makes the piece light enough to pick up and place in the bed of the pick-up truck and second, the pith is removed so that the checking of the wood is reduced before it is cut up on a bandsaw. To also help reduce checking some members seal the ends of the logs with a wax mixture before loading the logs.



Fig. 6. A Black Oak (*Quercus velutina*) being cut up in the Barnes Arboretum parking lot

The latest species we received from the Barnes arboretum was a Cork Tree (*Phellodendron lavallei*) which was the Pennsylvania State Champion tree and a Himalayan Birch (*Betula utilis*).

The Cork Tree wood is a light yellow in color when freshly cut but turns brown when exposed to sun light as shown in Figure 7. The first tree received from the Barnes arboretum was a small Cork Tree. I turned a couple of small bowls from the wood which over time turned a darker shade of yellow. The pieces were never exposed to direct sunlight. The Cork Tree stump had a fair amount of curl in the grain down one side and made some real pretty pieces of turned art as shown in the back side of the bowl in Figure 8. I have kept the bowl out



Fig. 7. Cork Tree (*Phellodendron lavallei*) logs cut and stacked by the arborist

of the sunlight but the bowl has slowly turned a light brown. Based on how much darker brown the wood has turned in my fire wood pile, I suspect the Cork Tree bowl will darken if exposed to direct sunlight.



Fig. 8. Cork Tree (*Phellodendron lavallei*) bowl turned by the author

Figure 9 shows the Himalayan Birch logs as deposited by the arborist. The logs were about 12-15" ( $\sim 30-38$  Cm) in diameter and every log piece had to be cut in half just to be able to have two people lift the half log into the bed of the truck. I was surprised by the weight and density of the



Fig. 9. Himalayan Birch (*Betula utilis*) logs in front of the Barnes Art Museum building

Himalayan Birch logs. I rough turned several pieces the day after harvesting the wood, wrapped each piece in two layers of newspaper and then set them on a shelf to dry. The two layers of newspaper slows down the drying of the wood enough to stop the piece from checking. After two months the pieces had a moisture content around 12% which is dry enough for me to turn. My home sits on a peninsula at the top of the Chesapeake Bay and the air is normally humid enough that wood does not go below 12% moisture level except in the dead of winter.

I finally turned a couple of the roughed-out pieces while writing this article. One of the pieces, a small Himalayan Birch bowl that is about 5 inches (~ 13 cm) in diameter is shown in Figure 10.

The three Chapters of the American Association of Woodturners (AAW) around the city of Philadelphia PA are grateful to the staff of the Barnes Arboretum from Saint Joseph's University for the wood they have donated. The IWCS has been lucky enough to receive a bountiful share of



Fig. 10. Himalayan Birch bowl turned by the author species for samples and pieces to be auctioned off at previous and future meetings. You can look forward of seeing many of these species at the upcoming annual meeting.

## The World of Palms - Part III

By Raimund Aichbauer (RA) #10142, Willem Hurkmans (WH) #8761-L, Nelis Mourik (NM) #7460-HL & Frans Steenland (FS) #9338

A series of articles was started on palm trees, their growth and their very different, yet exciting stem material. In palms we may not speak of wood, because, by definition, wood (secondary xylem) is formed by a cambium ring, as in hardwoods and softwoods. Palm stems contain much xylem. For convenience, we may sometimes name the palm stem 'wood'.

Palms are major suppliers of organic products. There are regions where they produce staple foods. *Metroxylon sagu* Rottb. in Southeast Asia produces vast quantities of



Fig. 1. Oil Palms *Elaeis guineensis* Jacq. are grown for their fruit, processed for industrial production of palm oil. This truck is loaded with huge fruit clusters of Oil Palm. (WH)



Fig. 2. *Phoenix canariensis* Wildpret, Canary Date Palm, a particularly beautiful specimen in Crete, Greece. (WH)

starch. In some species all parts can be used; others are harvested for one specific product. The Coconut Palm Cocos nucifera L. (of which all parts are used), Date Palm Phoenix dactylifera L. (Fig. 1), and Oil Palm Elaeis guineensis Jacq. (Fig. 2) are famous. However, many species - at least one hundred - produce useful products locally, like edible fruits, raw materials for preserves, juice (unfermented or fermented), sugar and palm wine. Seeds can be edible or be a source of stimulants like Betel Nut, Areca catechu L., gum or medicinal products. In some cases, the 'palm heart' – i.e., the soft meristem – is eaten which causes the plant to die. Sundry materials from palms are fibres, rattan, fat and oil, coconut milk, leaves for cattle fodder, roof cladding, resins, coloring agents, 'wood' for fuel, construction materials, furniture, walking sticks and paper. The best natural wax in

Fig. 3. Fruiting Toddy Palm, *Caryota urens* L. Flower bunch is visible on top. It has multiple inflorescences on top. Once it started flowering and the fruits ripened it will soon die. 18 September 2009 by Praveenp, unaltered, <a href="https://upload.wikimedia.org/wikipedia/commons/d/9/Caryota urens full.ipg">https://upload.wikimedia.org/wikipedia/commons/d/9/Caryota urens full.ipg</a>. Licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license, <a href="https://creativecommons.org/licenses/by-sa/3.0/deed.en">https://creativecommons.org/licenses/by-sa/3.0/deed.en</a>

the world is Carnauba wax from *Copernicia prunifera* (Mill.) H.E.Moore, syn. *C. cerifera* (Arruda) Mart.

The sweet sap of the Toddy Palm, *Caryota urens* L. (Fig. 3) is used in Southern Asia to produce palm sugar, locally known as jaggery (Fig. 4). It can also be used to make 'palm wine' known as toddy, with low alcoholic strength. This can be distilled, yielding a potent liquor named mayarfeni or feni. Several other species can produce sugary sap.



Fig. 4. Two brands of jaggery. Krishna Grocery, Columbia, SC, USA, May 2023. Photo: Mihaly Czako

The pollination of palms happens mainly by insects, e.g., beetles, flies and bees. *Eugeissona tristis* Griff. has sturdy flowers that remain open for long, and are filled with fermenting juice that may contain up to 3.8% alcohol (Stauffer et al. 2016). These flowers attract insects as well as mammals.

Palms include the largest of the monocots. *Ceroxylon quindiuense* (H.Karst) H.Wendl. may grow as tall as 200' (60 m) and the lianescent species, *Calamus manan* Miq., may reach a length of over 600' (180 m). Palm seeds remain viable for a long time — a seed of *Phoenix dactylifera* L. that possibly was 2,000 years old, still germinated.

#### Literature

Stauffer, F.W., Siegert, S., Silberbauer-Gottsberger, I., & Gottsberger, G., 2016. Floral structure in the Asian palm *Eugeissona tristis* Griff. (Arecaceae: Calamoideae), and the description of a new nectary type for the family. Plant Syst. Evol. 302: 629-639.

For others, see Part II in the July/August 2023 WoW.



## **WOOD MEETS**

## IWCS ANNUAL MEETING September 25-29 (Monday Thru. Friday) SHOCCO SPRINGS Baptist Conference Center Talladega, Alabama, USA

Host and Program: Rick & Rhonda Long +1-812-327-9565 Registration: Rick & Rhonda Long <u>rrlong1994@gmail.com</u>

We will have at least 4 turning demos and 4 craft classes by our talented members: Judy Chastain, Lynn Pletcher, Rhonda Long, and Rick Long & Jim Dominic. We have a Sawmill available to us. We have a speaker from the Talladega National Forest. The always spirited Wood Auction. The Craft Auction. Last but not least, a Cookie Throwing Contest (with fabulous prizes!)

For other activities we have the road trip to Sylacauga Marble Company and Museum, one of the largest in the world. They have a library to tour and an observation deck to visit. We also have the Blue Bell Creameries where you can view the making of the ice cream. You can even get two scoops of ice cream of your choosing for only US\$ 1.00.

The town of Talladega has several buildings on the National Historic Register. There is the Comer Museum and Arts Center - FREE admission. Grist mill, Covered Bridge, and Caverns. Woodcrafters are close by.

ANY VOLUNTEERS PLEASE CONTACT RICK LONG

812-327-9565, <u>rrlong1994@gmail.com</u>

Trees – Our Future
2023 Australasian IWCS Conference
and Annual General Meeting
Monday 16th to Friday 20th October 2023
ADELAIDE HILLS CONVENTION CENTRE at Hahndorf SA
(Only 28 km from Adelaide City Centre)

Conference registration fee A\$ 495 per person. Please note – Registration Fee does not include breakfasts. It also does not include dinners on Wednesday and Thursday nights, as these will be in hotels in the main street of Hahndorf and are A La Carte. Please advise of any special dietary needs.

> IWCS 2024 Southeast Regional Winter Woodfest February 12-16 ( (Monday Thru Friday)

Email ros.allan@bigpond.com Mobile 0428 258 599

LAKE YALE Baptist Conference Center

EUSTIS, Florida, USA, In 2024, it will be held at the Raintree Facility
Early registration is recommended by NOVEMBER 1, 2023
See the Registration Form in this issue.
Registration: Rick & Rhonda Long <a href="mailto:rrlong1994@gmail.com">rrlong1994@gmail.com</a>

# The Australia Annual General Meeting Sunday 20 October until Saturday 26 October

In the tiny town of Gellibrand at the Otways Tourist Park, in the heart of the Otway Ranges about 100 miles (~ 160 km) west of Melbourne in the state of Victoria.

## Members' Listings and Requests

## Members with wood specimens and books for sale

I am interested in expanding my wood collection as funds permit. I collect in the form of transverse slices, commonly known as "tree cookies". I am interested in all woody tree and shrub species, even those not considered commercially valuable. I am looking for slices green or dry about 10-12" (~25 x 30 cm) in diameter, or whatever is representative of that species.

Eli Jensen #10010

Phone:

Email: elijensen@ironwoodforestry.com

I am interested in doing some swaps. I have 2,200 specimens 60 x 6 x 90 mm of all sorts of imported and home-grown woody plants. **Lionel Daniels #6509** 

Windy Heights High Cross, Froxfield, Petersfield, GU32 1EK UK Email: lioneldaniels1@outlook.com

1000-plus different kinds of wood specimens precisely crafted and labeled, most identified from trees in the forest. I have woods from the USA, Mexico, Brazil, Japan, Australia, and others. Contact me for a list.

Alan B. Curtis # 1132HL

Alan B. Curtis #1132HL 2370 Douglas Drive, Eugene, Oregon 97405, USA Email: abcwoods1@gmail.com

I provide wood specimens from around the globe, accurately dimensioned, nicely sanded and labeled. I maintain a mailing list and send notification when new specimens become available. Contact me for a list.

available. Contact me for a list.
Gary Green #6654L,
9923 N 800 E, Syracuse, IN 46567
Email: ggreen3@earthlink.net
www.woodsbygwgreen.com

I have a good range of more than 400 species of Australian rainforest and outback woods in specimen size or as egg blanks. I will also cut to your requirements

Colin Martin #7189 Dorothea Crt, Harristown, Queensland 4350, Australia; Phone: Email: colinrmartin5@gmail.com

For sale: More Useful Woods of the World \$7.00 + postage of \$4.00 USA shipments, and A Man of the Woods (Richard Crow biography) \$7.00 + postage of \$4.00. Both are a total of \$14.00 plus postage of \$5.50 USA shipments.

Dennis Wilson #2324L 1545 Fitzgerald Ln., Alpena, MI 49707-8862, Email: denwils21@ gmail.com

Over 1,000 different wood specimens from around the world. Over one-third are specially figured like blistered, curly, fiddle back,quilted, birds eye, mottled, burled and over 200 species from Vietnam.

Réjean Drouin #3589 333, 19 e rue, Québec, Québec, Canada G1L 2A5 Phone :

Email: fusionstorm@hotmail.com

I have two or more specimens of more than 700 to 800 different woods from around the world in my stock. I would like to exchange or sell. They are standard or other sizes. Contact me for my list.

Dieter Becker #6362 43, Engersgau str., Neuwied, 56566, Germany dieter.becker.iwcs@t-online.de

I have over 1,000 different specimens of wood from around the world for sale or trade. I have some larger pieces of woods for collections of crafts from different wood species. Please send me your list for trade. Contact me for my latest list

Dennis Wilson #2324L 1545 Fitzgerald Ln. Alpena, MI 9707-8862 Email: denwils21@gmail.com

I'm interested in doing trades and expanding my current collection. I have a couple hundred standard-sized duplicates from around the world. Email me for a list or view it online.

Eric Meier #9701

4850 Merilee Dr., Minnetonka, MN 55343; Email: eric@wood-database.

www.wood-database.com/trade/

I have surplus specimens that I would love to trade for specimens not yet on my list. Email me with your list and I'll send you mine and maybe we can swap some.

Herm Stolte #5796 2816 Grant Crescent SW, Calgary, AB, Canada, Email: <a href="mailto:hgstolte@telus.net">hgstolte@telus.net</a>

I grow trees on my farm and own a small sawmill. I'm really looking for regular users of wood, rainforest species, especially Australian Red Cedar and others, Hoop Pine and a few Eucalyptus, but I can also supply some unusual species to wood collectors. Many of these trees I have planted my self.

Bob Whitworth #10085 Qld. Australia.

www.treeplanter.com.au Email: forest@spiderweb.com.au

I sell books on wood; Hardwoods of Australia, Pines of Australia, What Wood is That?, World Timbers, etc. I sell used woodworking tools and rare and exotic native timbers. Please email me. Please don't phone.

Graeme Briton #9149 Launceston, Tasmania, Email: graemebriton@gmail.com

I started recently to collect wood and I'm interested in expanding my collection. Contact me for exchanges or sale.

Francisco Rodrigues #10166 Rua das Casas Novas 104 4590-764 Ferreira, Portugal Email:

francisco.rodrigues@folhasclassicas.pt

XYLOS provides standard size specimens from woods collected by IWCS members Willem Hurkmans, Henk Bakker and Nelis Mourik. Our list will be regularly updated and consists of many exceptional species for the serious collector. For our story and specimens list see the November/December 2020 WoW, or contact us. Xylos intend to submit a list of additional species available.

To avoid repetition, a complete list including everything issued and still in stock, will be available on request.

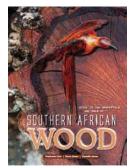
Henk Bakker #6966 Zuiddijk 387 1505 HB Zaandam Netherlands

Email: hlbakker@12move.nl.

Wood for sale: California nutmeg. Very rare: 4/4 to 5/4 x 12" to 16" to 8' long; \$12.50/bd fi.

Dave Mouat #7101 Email: dave.mouat@dri.edu

Now available, Southern African Wood (ISBN 781920217587, Briza Publications, Pretoria, RSA), authored by former IWCS members Stephanie Dyer (#9380), Danielle James and Barry James (#9381). It is a fully illustrated guide to the properties and uses of wood from 140 Southern African tree species. A handful of leather-bound collectors editions remain for \$140.00 US dollars plus shipping and handling, and the standard hard cover books are \$46.60 US dollars plus shipping and handling. These are discounted 20% for IWCS members. Non-members will be charged \$168.50 + S&H for the collectors edition and \$57.57 + S&H for the standard. Each copy will be signed by the authors. All copies will be shipped from Pennsylvania, USA. Reserve your



copy today by contacting
Mark R. Peet #9804L
Email: markrpeet@hotmail.com



28 World of Wood September/October 2023

## Members' Listings and Requests

## Members with wood specimens and books for sale

I offer about 200 samples coming from Cameroon mainly from botanical exploration and identification. Email me for a trading list.

Joey Montagut #10258 25 rue du 24 février 11000 Carcassonne, France Email: joey.montagut@yahoo.fr

I have two sets of Woods of the World Samples I would like to sell, not sure the best way to list them.

They were produced in the 1960s by Family Craft Shop Libertyville, IL.

One set of 76 samples has few if any duplicates. One set of 86 samples has many duplicates. I'd like to sell the sets for US\$150.00 each. Can be seen and

picked up at my store.
Ken Burtch #3382
The Hardwood Connection
1810 W State St.
Sycamore, IL. 60178
Email: kbhardwood@aol.com

I am interested in purchasing rectangular samples (natural, uncoated) of woods of the world for teaching purposes and in receiving small samples of plant exudates of the world, for the following purposes. 1) I teach ethnobotany at Penn State, York and have only a minimal collection of materials to show students. I would like rectangular samples of woods of the world, which are easy to stack and store. If available, please, indicate the cost and the species. 2) One of my research projects is the study of plant exudates (i.e., resins, gums, phenolics, etc.) of the world via nuclear magnetic resonance spectroscopy. I have been doing this in collaboration with Dr. Joseph B. Lambert (Trinity University, San Antonio, Texas. All I need are 100 milligrams (ca. the volume of a new eraser on a traditional yellow pencil).

Jorge A. Santiago-Blay, PhD Research Associate, Department of Paleobiology National Museum of Natural History Washington, DC 20560 USA Email: blayi@si.edu https://naturalhistory.si.edu/staff/ jorge-santiago-blay

New Style of Shirts available. Small to XL \$20.00, 2 XL TO 4 XL \$22.00 With or without name on shirt.
Can be picked up at Shocco Springs AGM Meeting.
Cash or Check, made out to

Rick Long Email: rrlong1994@gmail.com







# Regis-tree New members of the International Wood Collectors Society

Nassau, Omri #10424 | 33 Russell Rd. Somerville, MA 02144-1525, USA

Interests: 1,2,4,7 Email: onassau@historicnewengland.org

**Port, John R.** #10425 21111 Arrington Dr. Brandywine Living Fenwick Unit 424

Brandywine Living Fenwick Unit 424 Selbyville, DE 19975-3615, USA Interests: 1,2,4,5

Email: jrport123@gmail.com

Costa, Adriana #10426 201 Locksley Way Apt 14 Starkville, MS 39759-1935, USA

Starkville, MS 39759-1935, US Interests: 1,5

Email: adc751@msstate.edu

Jones, Dave #10427 Caeffynnon, Whitefields Farm Welsh Saint Donats, Cobridge Vale of Glamorgan UNITED KINGDOM Interests: 1,2,3,4,5

Email: dai.jones@gmail.com



### I.W.C.S. ANNUAL MEETING

## SHOCCO SPRINGS Baptist Conference Center, Talladega, AL. September 25-29, 2023 Monday (Through Friday) Early registration is recommended by July 25, 2023

Name:	IWCS#	Name on E	Name on Badge			
Partner/Guest:	IWCS#	Name on E	Name on Badge			
Address						
City:Stat	te:Zip (	Code:	Country:			
Email address:Home Phone#						
First time to Annual Meeting? YES NO	_	Cell Phone#				
Make Checks Payable to IWCS. Send to Rick Lo	-		ings,AL. 36555-0545			
Email <u>rrlong1994@gmail.com</u> ,or 812-327-9565						
We will accept all major credit cards. But there will be a 5% FEE CHARGE added to it.						
Credit Card number:Exp. Date:						
3-digit security code:						
Registration fee		# of persons	X \$ 50.00 =\$			
Declarate includes vectors used a sud-force						
Package includes rooms, meals and fees: 4 night lodging and 11 meals Monday Dinner thr	ough Friday	Breakfast				
\$353.75 per person - double occupancy	-		X \$353.75 =\$			
\$474.75 per person - single occupancy	•	1 X \$474.75 =\$				
3 night lodging and 9 meals Arriving Day Lunch			·			
\$279.00 per person - double occupancy	-	-				
\$369.00 per person - single occupancy		# 01 pc130113	1 X \$369.00 =\$			
4000.00 per person single occupancy			1 / ψ000.00 =ψ			
EARLY ARRIVALS CONTACT	RICK LONG	- 812-327-9565 ( N	O EMAILS PLEASE )			
Personal Golf Cart Rentals for Meeting		,	•			
3			•			
Put A Checkmark if you want a display table:		TC	OTAL DUE \$			
COMMUTERS, RV's and Guests NOT using page	ckage compl	ete below:				
Commercial, it o and adopte ito i doing par	skago, comp	oto bolow.				
Registration fee		# of persons	X \$ 50.00=\$			
Commuters, RV's & Guest Fees \$8.00 per pers	son per day	# days X # of perso	nsX \$8.00=\$			
DV ''		" 1	ν φοο οο φ			
RV sites are limited, please indicate:		•	X \$30.00=\$			
Check type: MotorhomeTravel Trailer	Length	Iotal Due	\$			
Commuters, RV's & Guests wanting meals must	specify belo	w. Meal prices are	per person rate.			
Monday No Breakfast LunchDin	ner	Total Breakfasts.	X \$9.25 =\$			
Tuesday BreakfastLunchDir			X \$9.25 =\$			
Wednesday BreakfastLunchDin			X \$9.25 =\$			
Thursday BreakfastLunchDin			\$			
Friday BreakfastNo Lunch or Dinr			Ψ			

IWCS 2024 Southeast Regional Winter Woodfest Lake Yale Baptist Conference Center, Eustis, FL. February 12-16, 2024 (Monday through Friday) Early registration is recommended by NOV. 1, 2023

Name:		Name on BadgeIWCS#Name on Badge					
Partner/Gues	st:	IWCS#	Name on Badge				
Address							
City:		State:	Zip Code:C	ountry:			
Email addres	S:		Home Phone #				
First time at I	_ake Yale? YES NO	_ Cell F	Phone #				
Make Checks	s Payable to IWCS. Send to D	on Smith, 2942 E	astland Rd. Mount Dora, FL. 3	2757-2445			
Email dasmith424@aol.com or call 352-636-5253 with any questions.							
We will accept all major credit cards. But there will be a 5% FEE CHARGE added to it.							
Credit Card r	number:		Exp. Date:				
3-digit securi	ty code: Zip	Code	Exp. Date:				
Registration	fee		# of personsX \$50	.00 = \$			
Package incl	udes rooms, meals and fees:						
4 night lodgir	ng and 11 meals Monday Dinn	er through Friday					
\$380.00 per person - double occupancy			' '	# of personsX \$380.00 = \$			
	00 per person - single occupa	-		00 = \$			
	• • •	•	ving Day BreakfastDa				
	00 per person - double occup	•	# of personsX \$296.00 = \$				
	00 per person - single occupa	•		1 X \$370.00 = \$			
EARLY ARRI	VALS NO MEALS (Single	*		00 = \$			
	(Double)		# of persons X \$ 44.0	00 = \$			
Personal Gol	f Carts		\$ 145.00 week	= \$			
			TOTAL DUE \$				
NOTE: There	will be a \$25.00 fee per day	Charged to anyor	ne signing up later than 3 days	before meeting.			
COMMUTER	S, RV's and Guests NOT usir	ıg package, comp	lete below:				
Registration fee			# of personsX \$50.00 = \$				
Commuters &	& Guests Must Pay \$45.00 Pe	•	,				
		# of persons	sX # of daysX \$				
RV sites are	# daysX \$2						
		~	FEES # days X \$1				
ALL RV'S Ha	s (2) Options #1 NO MEAL	S #2 Lunch &	Dinner with Breakfast optional				
Monday		Dinner	Total BreakfastsX \$9	.00 = \$			
Tuesday	BreakfastLunch		Total LunchesX\$12	.00 = \$			
Wednesday BreakfastLunchDinner		Total DinnersX\$15.00 = \$					
Thursday	BreakfastLunch	Dinner	Total Due Meals	\$			
Friday	Breakfast		TOTAL	DUE \$			



Chinese Toon bowl called 'The Witch's Pot" – article by Eric Krum #9467 starts on page 22.