

Wood Products

# PAULOWNIA TREE PRODUCTS

Brought to you by  
BioEconomy Solutions



**BIOECONOMY  
SOLUTIONS**



**5  
YRS**

**FROM GREEN HOUSE TO MARKET**

# “Aluminum” of lumber

Light yet strong

Termite resistant

Fire resistant

Water / rot resistant

Renewable resource

Good insulator

Wood veneer



## OVERVIEW

The wood products produced from Paulownia trees are superior in many ways to any one of the Paulownia species. Our hybrid paulownia trees have:

- ~15% increased growth rate
- ~20% increase in wood fiber length that produces ~30% increase in wood strength
- ~400% increase in atmospheric carbon sequestration

**30% Stronger** than pine

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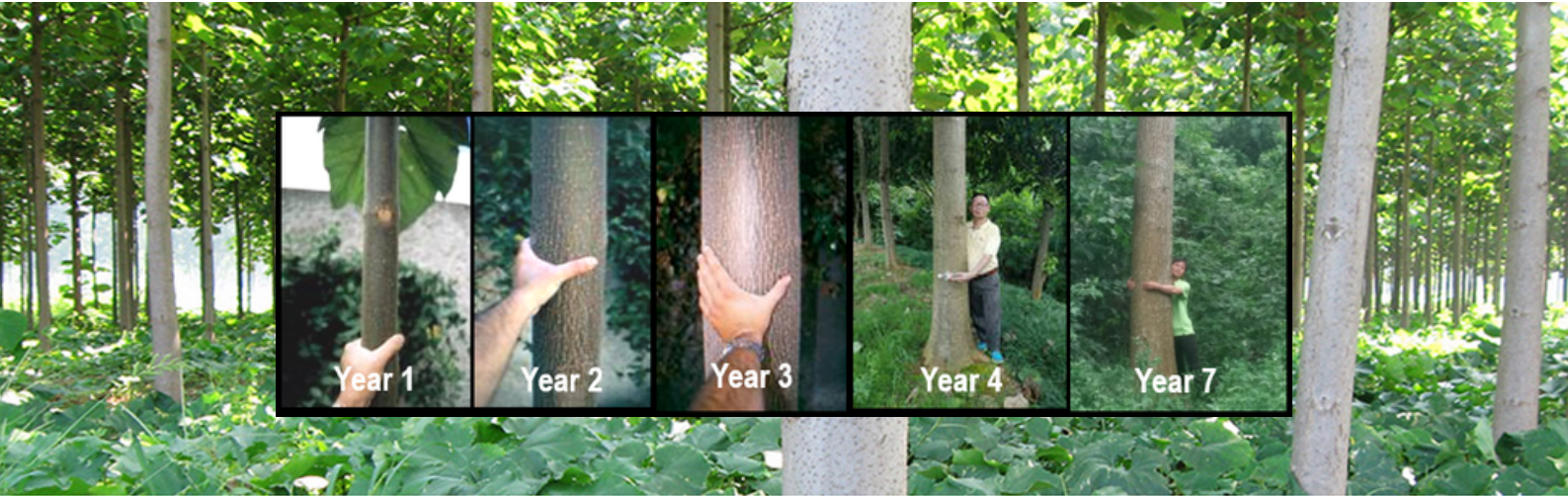
**40% Lighter** than other hardwoods

# OUR OBJECTIVE

We are using sustainable finance for timber projects to create new forests and jobs.

Our trees mature in 5 years and create timber products.

The introduction of this high yield short rotation (HDSR) tree to the global commercial timber products market is our primary goal.



# OUR HISTORY

Our team has been pioneering the MegaFlora paulownia tree business in the United States already in China since 2012.

As of March 2020, over 15 million Megaflora paulownia trees have been planted by Dr. Allen's Chinese team in 7 different provinces and 17 different locations from the City of Yantai on the coast to the Town of Qeimo west of the Gobi Desert.

Paulownia is growing in the United States at multiple locations.



# PAULOWNIA WOOD PRODUCTS USES AND BENEFITS

## Paulownia Wood Products

- Paulownia trees produce a blond timber with a long straight grain without knots, which air dries quickly with low shrinkage and does not easily warp, crack or deform.
- Paulownia wood is used in the production of musical instruments, furniture, windows, doors, venetian blinds, dimensional lumber, plywood, cabinetry, roofing, siding, and crown mouldings.



The wood accepts stains and adhesives easily.



Fast Growing MegaFlora® Fire Resistant  
(BIOECONOMY SOLUTIONS) Dr. Ray Allen



# EXCELLENT SOURCE OF WOOD FOR MANUFACTURING PRODUCTS

Excellent source of biomass for timber products:

- Because of its fast growth rate, Paulownia trees reach ideal harvest stage for milling a wide range of manufactured wood products in 5 years.
- Paulownia wood is ideal for milling dimensional lumber, veneer for plywood, furniture, cabinetry, roofing, siding, blinds, doors, door & window frames, wall moulding, and wooden musical instruments.
- Because Paulownia wood has excellent characteristics for many types of wood products – light-colored and mostly knot-free, strong and even-grained, density between that of balsa and poplar (15 to 19 pounds per cubic ft.), which is about half the density (weight) of pine but equal in strength to pine, insect and fire resistant – it possesses unlimited applications.
- Because of its naturally low moisture content (~25%), the period time requires for drying Paulownia wood prior to milling for some purposes such as cabinetry or flooring is significantly decreased.



# PAULOWNIA TREE PRODUCTS



Paulownia wood is a light, strong hardwood that is also considered the “aluminum of lumbers”.

Its fast growth rate, carbon sequestration and soil enhancing properties make it an ideal eco-timber, appealing to green consumers who desire environmentally friendly alternatives.



Paulownia trees produce a blond timber with a long straight grain without knots, which air dries quickly with low shrinkage and does not easily warp, crack or deform.



Wood density is low, making it one of the lightest timbers available on the market. The commercial importance of this wood is high due to its strength to weight ratio, high R-value properties and resistance to warping.

# PAULOWNIA TREE PRODUCTS



World Architecture Festival  
World Architecture Festival 2019  
Finalist

Paulownia wood was featured recently as a World Architecture Festival 2019 Finalist

Veneers

# veneer WOOD

Paulownia wood is used in the production of musical instruments, furniture, windows, doors, venetian blinds and crown moldings.

It can be peeled as a veneer to a 1/32 of an inch in thickness.

**MegaFlora wood can be peeled for veneer to a 1/32 of an inch in thickness**

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## Veneer Thickness Comparison Chart

Piece of paper (<sup>1</sup>/<sub>250</sub>" or 0.004" or 0.1 mm)

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**1/42"** (0.024", 0.6 mm)

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**1/32"** (0.031", 0.8 mm)

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**1/24"** (0.042", 1 mm)

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**1/16"** (0.063", 1.5 mm)

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**1/8"** (0.13", 3 mm)

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**1/6"** (0.17", 4 mm)

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Veneers



# CONTACT US

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