

# ***Wood***

*By Miriam Blanca.*

# What is wood?

Wood is a raw material of plant origin. It is composed of cellulose fibres, which is like the skeleton of all plants, and lignin, which makes it hard and rigid.



# Classifying wood

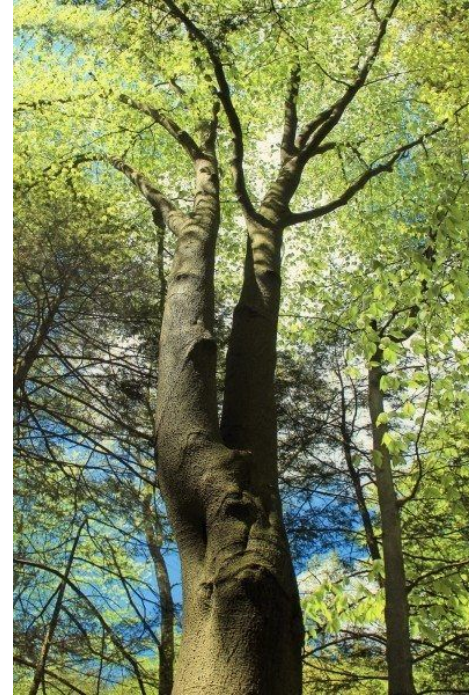
We divided wood in two different types of it: Hardwoods and Softwoods.

**What is "hardwoods"?** Hardwoods usually come from deciduous trees. They grow slowly and have thick, compact trunks. They contain little resin and can be many different colours.

# Types and uses .

the first one is called **Beech** .

Beech is used in furniture and floors because it bends and is easily shaped. Also used to make toys, kitchen utensils, tool, handles, etc



# Types and uses .

The second one is called **Oak**.

Oaks is used in  
furniture,doors,windows,parquet  
floors,boats,barrels,etc



# Types and uses .

The third one is called **Mahogany**

Mahogany is used in joinery, luxury, furniture, handmade objects, musical instruments (pianos, clarinets and violins), etc



# Classifying wood

## What is **Softwoods**?

Softwoods are usually from conifer trees, with needle-shaped leaves. They grow quickly, contain a lot of resin and are pale-coloured. They are light and easy to work with.

# Types and uses .

The first one type of softwoods is called **Pine**.

The pine is used in furniture, electrical post, boats, floors, etc





# Types and uses .

The second one is called **Silver fir**

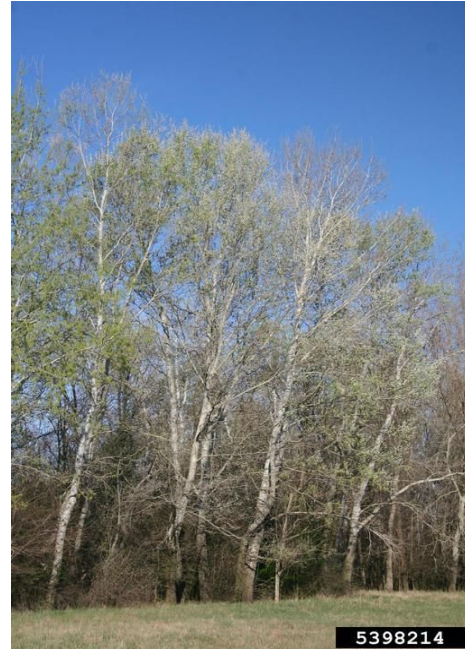
Used in building,boats,simple furniture,carpentry,boxes,paper,e tc.



# Types and uses .




The third type is called **white poplar**

**Used in furniture frames,plywood,paper,etc.**



# Derivatives of wood

Derivatives of wood include **engineered wood** and **cellulose materials**

Type	Sources	Characteristics
	Formed by gluing together thin sheets with synthetic resins. The fibres on each sheet are at a 90 degrees angle to each other. Very resistant	Can warp due to changes in humidity.
	Made with wood shavings and chips which are glued together by compression.	Fragile but not easily deformed. Rough surface. Affected by humidity.
	Fibres come from grinding chips. This produces tiny wood threads which are glued together using synthetic resins to make planks	polished surface, fine texture. Very resistant to humidity.

# Cellulose materials

These are made from the cellulose of wood. They include paper, cardboard, silk paper, and card.

Wood is pulped and mixed with water and chemicals to make a cellulose paste. This paste is compressed and made into a machine so that it turns into sheets.

# Properties of wood

Density: the average are soft hard and engineered

Resistance and toughness . Are very resistant and needs protection in soft, hard and engineered.

Waterproof : are not waterproof in soft hard and engineered

Colours: are great variety in hard and engineered and little variety in soft

Electrical conductivity: are insulator in soft hard and engineered.

Thermal conductivity: are insulator in soft, hard and engineered.

# Properties of wood

Acoustic conductivity: is conductor in soft, hard and engineered.

Easy to work with: requires ability in hard, needs some care in soft, hard and engineered, is easy to work with soft and engineered.

Recyclable : are yes in soft,hard and engineered.

Biodegradable : are yes in soft hard and in engineered.

reusable: are yes in soft, hard, and engineered.