



Trees of the Bible: A Cultural History

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In your backyard, within parks, hidden in forests, and along roadways, are local trees related to those mentioned in the Bible. More than 36 trees are mentioned throughout the Old and New Testaments. Some of these trees have relatives living here in the Southeastern United States.

There is significant disagreement across time about identification of tree species mentioned in the Bible. In multiple translations from many places using different sources, some authors have reached different conclusions about what specific trees were mentioned in the Bible. The Bible is not a botanical treatise, and so modern tree identification accuracy is not relevant.

Ancient Land

The land of the Bible 3,000 years ago was starting to experience human development pressure, soil erosion and over-grazing which would lead to the landscapes of the modern Middle East. Natural resources present in great supply of the distant past have now dwindled to isolated remnants, including many tree species. Trees mentioned in the Bible can still be found in the wild places of the Middle East today. The Middle East area of the Bible can be generally described as historic Palestine.

The area of Palestine today is made of several nations and many peoples. Historic Palestine was at the Eastern end of the Mediterranean Sea where Africa, Asia, and the Mediterranean Basin meet. This area has been cross-roads for plant and plant-product trade over millennium. In the last 10,000 years, this area has been home to lush forests, large savannahs, open grasslands, and many water features. But, ecological features of the area have continued to change.

Human Changes

Biblical ecosystems contained a diversity of plants and animals, some of which also lived across North Africa and Central Asia. Unsustainable intensive cultivation, heavy grazing, timber harvest, severe soil cover loss and erosion have all lead to a much different landscape today than described in the Bible. As intensity and duration of human impacts have increased, climatic factors have also shifted, yielding poor soils, rapid rain runoff, fewer refuges of native trees, and more intensive agriculture and horticulture.

The climate in this area is based upon two primary seasons for trees: a moist Winter growing season (October through May); and, a dry Summer dormant season (June through September). Freezing and deep cold are not major factors except at high elevations. Near the Mediterranean coast, good amounts of Winter rains come ashore with Summer periods of hot dry conditions. Further inland, rain is sparse and Summer heat can be oppressive.

Heritage of Trees

Tree species most people think of from the Bible are cedars of Lebanon. Lebanon cedar (*Cedrus libani*) is a true cedar like the Himalayan cedar (*Cedrus deodara*) found planted in many yards and communities. Cedars were the symbol of majesty, fertility and abundance. Today a relict grove of 400 trees still survive on Mount Lebanon which are reputed to be more than 2,000 years old. Growing with the cedars, and included together with their wood in buildings, were Cilician fir (*Abies cilicica*) and the Phoenician juniper (*Juniperus phoenicea*).

There has been a problem in translating names of trees into modern English. Many trees shared the same or similar common names. For example “wild olive” or “olive wood” mean the Aleppo pine (*Pinus halepensis*), while “olive” means the traditional black olive (*Olea spp.*). Willow could have referred to Euphrates poplar (*Populus euphratica*) in some passages and native stream-bank willows (*Salix spp.*) in others.

Confusion Trees

Three native pines of importance in the Bible are Italian stone pine (*Pinus pinea*), Aleppo pine (*Pinus halepensis*) and turkish pine (*Pinus brutia*). Aleppo and turkish pines are closely related. Italian stone pine was also called the holm tree. These tree species were usually included with firs, cedars, and junipers as a valuable forest type.

American sycamore (*Platanus occidentalis*) which every school child knows, does not grow in Palestine. The sycamore of the Bible is sycamore fig (*Ficus sycomorus*). It produces smaller, less sweet figs than traditional table figs (*Ficus carica*). Sycamore figs were food of the poor. Plane trees, another common name of sycamores today, were actually flowering viburnums (*Viburnum spp.*) and oriental plane (*Platanus orientalis*) trees in the Middle East. Also mentioned is the sycamine, which is black mulberry (*Morus nigra*).

Lost in Translation

Poplar trees of the Bible are the same invasive / exotic white poplar (*Populus alba*) you can find growing and sprouting all over poor sites in Georgia. But “poplar” also has been translated as snowbell (*Styrax spp.*), which is related to our native snowbells. In this case, the name poplar was used for two distinctly different tree species.

Translators also confused tree names by using common tree names of their own region. Chestnut (*Castanea spp.*), boxwood (*Buxus spp.*), and hazel (*Corylus spp.*) trees are mentioned in some Bible versions. These trees did not grow in Palestine, but occurred around homes of translators in Europe.

Sweetness

One tree from the Bible which should be known to every person in the Southeast is balm. The balm, or sometimes mistakenly called the balm-of-Gilead, was the sweetgum tree (*Liquidambar styraciflua*). Sweetgums of the Middle East are almost identical to our sweetgum tree which grows everywhere across Georgia. In the Northern United States there is a poplar (*Populus x jackii*) hybrid tree named “balm of Gilead” but it is native only to North America. Our sweetgum is a botanical link to sweetgums of the Bible.

Trees of Value

Frankincense (*Boswellia carteri*), myrrh (*Commiphora* spp.), and cassia (*Cinnamomum cassia*) are perfume oils, resins or gums taken from trees and shrubs. Collection of these materials usually included cutting or scarring the stems. These woody plants do not grow as natives in Palestine, but their products were imported with great hardship along caravan routes from farther South. Ebony (*Diospyros melanoxylan*) wood is also mentioned in the Bible. It was imported for carvings and decorations. Ebony is related to our common persimmon (*Diospyros virginiana*).

Bible Trees

Based upon a preponderance of evidence by multiple sources, the following tree-forms are thought to represent Biblical tree species. Note the line between what is a tree and what is a shrub is difficult to establish in arid locations such as Palestine. Trees are listed in alphabetical order by scientific name.

<i>Acacia nilotica</i>	acacia
<i>Acacia seyal</i>	acacia, shittah tree
<i>Acacia tortilis</i>	acacia, shittah tree

Acacia is a tree mentioned more than 26 times in the Bible but never clearly defined. Acacia is the shittah tree which produced shittim wood associated with building the Ark of the Covenant and its incense altar. Acacia produces a hard, slow growing, fine grained, yellowish-brown colored wood which takes a fine finish. Acacia are also tapped for resin products and slow burned into a high quality charcoal. Other names include thorn, bush, babul, and mimosa.

<i>Balanites aegyptiaca</i>	Jericho balsam, desert date, balm
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This tree is scrubby, thorny, and short. The oily gum from this tree was called the balm of Gilead. The oil from the fruit was used to make soap and massage oil. Wood is hard and used for small wooden items like tool handles. The tree is also used as a living fence to corral animals.

<i>Boswellia carteri</i>	frankincense, olibanum
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This tree generates a resin product famous for its fragrance when burned, and for its medicinal and cosmetic uses. Frankincense is a small scrubby tree growing in Southern Arabia and Somalia. It was a valuable product of trade in Biblical times. Its mixture with other resins were required for some religious ceremonies.

<i>Cedrus libani</i>	cedar of Lebanon
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This tree is one of the last five true cedars on Earth and is not directly related to our native red-cedars and white-cedars. It is a mountain slope tree and once reached up to 100 feet in height and 7 feet in diameter. The fragrant wood was used for both massive building projects and individual homes. Temples, stores, stables, furniture, ships and

chariots were all made of cedar. Cedar wood is salt water and decay resistant, fine-grained, resinous smelling, and reddish in color. It was widely traded around the Mediterranean. Today, almost all mature trees are gone in old-growth forests and as large individual trees. Harvesting without regeneration and heavy understory grazing eliminated the cedar of Lebanon from later history.

Cistus creticus myrrh, ladanum

This tree produces a resin product which is fragrant and bitter. There are many tree species in Palestine and further South which generate resins sold in marketplaces. In commercial trade of the past, it may have been used to adulterate the more valuable *Commiphora myrrh*.

Commiphora africana bdellium African myrrh (white resin)

Commiphora myrrha myrrh

Commiphora opobalsamum balm, balsam, balm of Gilead

There are many tree resin products sold in the historical marketplace, some of high quality and some less so – some sold together and some sold separately. These resins came from short scrubby trees, first managed by shepards scrapping bark to generate commercial resins. From the Bible, it is difficult to determine which tree resin was used for which use. Real myrrh (*Commiphora myrrha*) is a resin which does not keep well and is usually made into a dark oil which can be transported. The resins and oils of all species are bitter and aromatic. In commercial trade of the past, these tree resin products may have been adulterated with more common and less valuable *Cistus creticus* resin.

Cupressus sempervirens cypress, gopherwood

Cypress was a good lumber tree used for houses, ships, and musical instruments. Cypress is a durable and decay resistant wood. The doors of St. Peter's basilica in Rome, the gates of Constantinople, and Noah's ark were all of cypress. An oil from cypress was also distilled.

Diospyros ebenum

Diospyros melanoxylon ebony

The heartwood of ebony can be a deep solid black color, or sometimes a lighter streaked black color. The fruit is edible. This black wood was in historic commercial trade, and used for many small wood objects and inlay work. Our own native persimmon (*Diospyros virginiana*) is a genus mate of these two ebony tree species.

Ficus carica fig

Fig trees grew the large-lobed leaves of modesty covering naked human parts in artworks (although real leaves can cause dermatitis). Fig generates a delicious fruit. Figs were cultivated and eaten fresh or dried, comprising a significant share of a local diet in some places. Figs were a symbol of prosperity and contentment. The fig tree is native of Syria and can reach 25 feet in height.

Ficus sycomorus

sycamore fig

This tree has been misidentified and regionalized by many translators of the Bible. This sycamore of the Bible is a tall fig tree, not a *Platanus* spp (planetree or sycamore). Sycamore figs grow to 40 feet in height, has small unlobed evergreen leaves, and a poor tasting fruit.

Fraxinus ornus

manna ash

This ash tree produced gummy exudate collected and used in medicines.

Juglans regia

nut, Carpathian walnut, Persian walnut, English walnut

Walnuts were a favorite tree of many rulers in the Bible, particularly Solomon. They have been cultivated for millennium and grew in abundance around the Sea of Galilee. Walnuts produced nuts, fruit husks for cloth and hair dying, wood for smoking fires, and small wood pieces. The tree only reaches 35 feet in this area. It was a nut of commerce because it could be transported easily.

Juniperus excelsa

Juniperus procera

juniper, algum, Greek juniper

Junipers were used for building lumber and for making juniper oil. The oil was called cedar oil. Junipers have been sometimes confused with the cedars of Lebanon.

Lauris nobilis

bay tree, sweet bay, noble bay, green bay

Laurel is one of the most ancient of angiosperm trees. It is evergreen with spicy smelling oval leaves. Laurels can reach 40 feet tall. Leaves are used around the world for food flavoring. A bay oil is made from leaves and has for millennium been used for a variety of human and animal ailments. Wreathes, boughs, and garlands of laurel twigs and leaves were signs of victory and honor. The term “baccalaureate” from a college degree means laurel berries.

Malus pumila

apple

There is much confusion about apple from various Biblical scholars. Apple is native to the Caucasus Mountain region in the Republic of Georgia. Apples in Palestine would have been carried by seed and planted. The confusion lies with another tree fruit called an apple or golden apple in historic texts and which grows wild in Palestine, the apricot (*Prunus armeniaca*). It is now believed the Biblical translation of apple means apricot.

Morus nigra

black mulberry, sycamine

This mulberry was a native of Persia and cultivated for centuries. The fruit is used both dried and fresh. Black mulberry is used in making a great traditional sherbert desert. The tree is branchy, crooked, stiff, and short (<25 feet tall). It was also used as a host for silk worm production.

Olea europaea olive

The history of the Mediterranean basin civilizations are intimately tied with cultivation and harvesting of olive trees. Olive trees generate fruit, oil and wood. The tree is long-lived, tough, and reaches 20 feet in height. The wood is fine-grained and colorful, used for small wooden items. Oil pressed from the fruit (75% of the crop) was used for lamp oil and for anointing. Olive fruit and oil made great trade goods. Early in human history, olive became domesticated and grown in orchards. The Garden of Gethsemane was an olive oil press site and olive orchard.

Phoenix dactylifera date palm

Date palms were planted widely and represent one of the earliest cultivated tree-forms. This palm produced date fruits, large leaf fronds for roofing, and fibers for rope making. Fronds are large and flat, and carried on traditional Palm Sunday observances where available. The fruit is a high energy and high sugar content food. Date honey is a liquid made from compressing fresh fruit into a cake. Date honey probably represents the honey mentioned in the Bible, not honey from bees.

Pinus halepensis Aleppo pine, brutia pine (a variant), elm, fir, plane, thick

Pine is represented in the bible by many names and in a variety of contexts. Especially confusing are the translations which list this pine as an elm, fir, or plane tree. This pine can reach 50 feet tall on good sites, but no more than 25 feet on poor sites. Pine wood was used to make musical instruments, lumber, and round wood columns for buildings. The resin product extracted has been called turpentine although it was in a rough, unrefined form.

Pistacia lentiscus mastic tree

Pistacia terebinthus teil tree, turpentine tree

Pistacia vera pistachio (nuts)

This group of tree species generated nuts and resin products used for medicinal, cosmetic, and food uses.

Platanus orientalis chestnut, plane tree

This tree is large, tall, strong, and white-wooded. In translation it is sometimes mis-called a chestnut. Here, we call the native American form a sycamore, further confusing translations with sycamore fig and sycamine mulberry.

Populus alba white poplar, green poplar

Populus euphratica willow, Euphrates aspen

To many people, white poplar is an invasive and terrible tree. In Palestine, it is tough and green among barren places. Constantly fluttering leaves are bright shiny green on top and felty downy white on the bottom side. These poplars grow from root sprouts

and can spread all over a site. The willows described in Babylon were probably this tree species. These poplars are often misidentified in translations as willow or aspen.

Prunus armeniaca apple, golden apple, apricot

There is much confusion about historic terms for apricots and apples from various Biblical scholars. The native, wild growing apricot is now understood to be the Bible translation of apple. In the Garden of Eden, Adam and Eve ate of the apricot.

Prunus amygdalus almond

Prunus dulcis almond

Everyone knows about tasty almond seeds, but few would recognize its fruit and beautiful flowers. Almonds produce great blooms, nuts of commerce, oil, and food flavorings. Almond was a symbol of wise leaders and made into walking staffs for tribal chiefs. Almond was native to Persia and transported around the mid-East in Biblical times. The tree grows to 25 feet in height. Almond is very cold sensitive.

Pterocarpus santalinus red sandalwood, red saunders, almug

Sandalwood, and its beautiful red colored heartwood which polishes to a high sheen, is used for small wood pieces and musical instruments.

Quercus aegilops Dyer's oak, oar oak

Quercus coccifera scarlet oak, Kermes oak

(name from insects on it used to generate red dye),

Quercus ilex holly oak, Holm oak

Quercus lustanica cypress oak (sometime mistranslated as a cypress tree)

Quercus macrolepis

These are all native, scrubby, short oaks usually less than 22 feet tall. The wood is hard and used for fuelwood and charcoal. Both trees and galls on the trees can generate tannins for tanning leather.

Salix acmophylla willow

Salix alba willow

Salix fragilis crack willow, Kashmir willow

Salix safsaf poplar, willow

Willow has been translated in many ways within translation and associated texts as willow or poplar. Green willow wands were used for weaving into wicker wall boards and furniture. Contrary to old myths and its own scientific name, *Salix babylonica* – weeping willow, was not part of the Bible. Many uses of the word “willow” actually referred to a “poplar”.

Styrax benzoin onycha

Styrax officinalis stacte, storax

Small trees used to generate resin products.

Tamarix aphylla

Tamarix tetrandra

tamarisk, tamaris, eshel, salt bush, grove

Tamarisk trees are short and tough, usually occupying harsh sites along coastlines and desert edges. The wood was used for small lumber products, charcoal, and bowls. These trees were common shade trees.

Conclusions

There are many tree links to cultural heritage stemming from the Bible. Some tree identification has been confused by errors and language translation problems. Georgia's towns, fields and forests are filled with close relatives of a number of Biblical trees. Hold a sweetgum leaf and you touch a genetic piece of Christian, Jewish, and Islamic ecological history.

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