

Table 1.--Soil suitability for hardwoods in the Coastal Plain area

| Important commercial species ^{1/} | Terraces | | | | | | Bottoms from Coastal Plain materials | | | | |
|--|-----------------------|----------------------|----------------------------------|----------------------|----------------------------|-------------------------------|--------------------------------------|------|----------------|--------------|----------|
| | Cahaba, Kalmia, Amite | | Flint, Tilden, Prentiss, Izagora | | Stough, Wahee, Myatt, Leaf | Ochlock-onee, Iuka, Tombigbee | Mantachie, Urbo | Bibb | Chastain | | Johnston |
| | Noneroded | Eroded ^{2/} | Noneroded | Eroded ^{2/} | | | | | Coarse surface | Fine surface | |
| Ash, green or white | | | ● | | ● | ● | | | ● | ● | ● |
| Baldcypress | | | | | | | | | ● | ● | ● |
| Beech, American | | | | | | ● | | | ● | ● | |
| Birch, river | | | | | | | ● | | | | |
| Cherry, black | ● | ● | ● | ● | ● | | ● | | | | |
| Cottonwood, eastern | | | | | ● | ● | ● | ● | ● | ● | |
| Elms, slippery & Am. | ● | ● | ● | ● | ● | | | | ● | | |
| Hackberry & sugarberry | | | ● | ● | ● | ● | ● | ● | ● | ● | |
| Hickories (exc. water) | | | | | ● | | | | ● | ● | |
| Magnolia, southern | ● | | ● | | | | | ● | ● | | |
| Maple, red | ● | | ● | | | | | | | ● | |
| Oak, cherrybark | ● | ● | | ● | | | | | | | |
| Oak, laurel | | | | | ● | | ● | | | | |
| Oak, Nuttall | | | | | | | ● | | ● | | |
| Oak, overcup | | | | | | | ● | | ● | | |
| Oak, Shumard | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| Oak, southern red | | | | | ● | ● | ● | ● | ● | ● | |
| Oak, swamp chestnut | | | ● | ● | ● | ● | | | ● | ● | |
| Oak, water | | | | | | | | | | | |
| Oak, white | | | | | | | | ● | ● | ● | |
| Oak, willow | ● | | | | | | ● | ● | ● | ● | |
| Persimmon, common | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| Pines (exc. spruce) | | | | | | | ● | ● | ● | ● | |
| Pine, spruce | | | | | | ● | ● | ● | ● | ● | |
| Sweetgum | | | | | | | | | | | ● |
| Sycamore, American | | | | | | | | ● | ● | ● | |
| Tupelo, black | | | | | | | | | | | |
| Tupelo, water | | | | | | | | ● | ● | ● | |
| Walnut, black | ● | | ● | | ● | ● | ● | ● | ● | ● | |
| Yellow-poplar | | | | | | | | | ● | ● | ● |

^{1/} Common names are those found in Agriculture Handbook 41, U.S. Department of Agriculture, 1953.

^{2/} Soils with less than 6 inches of topsoil.

POST AND SPECIALTY SPECIES: Black locust and flowering dogwood on noneroded, moist, well-drained soils; mulberry on all soils.

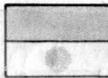
SPECIES LIMITED COMMERCIALY OR IN OCCURENCE: Basswood, pecan, post oak, and silver maple on well-drained soils; shingle oak and sweetbay on poorly drained soils; boxelder, winged elm, honeylocust, black willow, sassafras, American holly, buckeye, chinaberry, and common sweetleaf on all soils.

WEED SPECIES: Blackjack oak and smooth sumac on well-drained soils; planertree, roughleaf dogwood, poison-sumac, and buttonbush on poorly drained soils; eastern hophornbeam, American hornbeam, devils-walkingstick, hawthorn, and flatwoods plum on all soils.



Occurs frequently; favor for management.

Occurs occasionally; favor.



Occurs frequently; manage, but do not favor.

Occurs occasionally; manage, but do not favor.

Soil Suitability For Hardwoods In Coastal Plains

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The Coastal Plain soil area occupies the major portion of Mississippi east of the Delta and Loess areas. In general, the soils are sandy, acid, and lacking in natural fertility, but on the alluvial soils moisture and drainage relations appear sufficient to support good growth of some tree species.

Table 1 lists the principal Coastal Plain soils that support natural hardwoods. Upland soils are omitted, because most are too poor and dry to produce commercial hardwoods, except perhaps on lower slopes. The table is based on observations of natural stands; other growth relations may hold true in plantations. Solid black blocks indicate species that occur frequently and should be favored in managing natural stands. Grey blocks indicate common species that should be managed for harvest at the first profitable opportunity, but not favored as a component of future stands. Dots show species occurring only occasionally on a particular soil; here again, black means "favor" and grey means "manage, but do not favor."

Spruce pine and baldcypress are listed because they are found on the same soils as hardwoods. Other pines are included because they are better adapted to eroded and poorly drained pan soils than are hardwoods; pan soils become too dry in summer for good hardwood growth.

¹Stoneville Research Center, maintained by the Southern Forest Experiment Station, Forest Service, U. S. Department of Agriculture, in cooperation with the Delta Branch of the Mississippi Agricultural Experiment Station and the Southern Hardwood Forest Research Group.