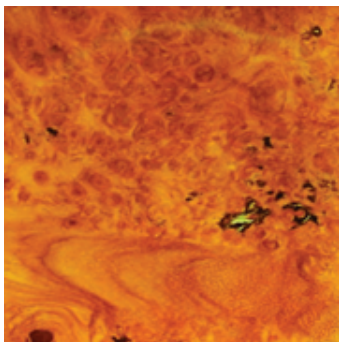


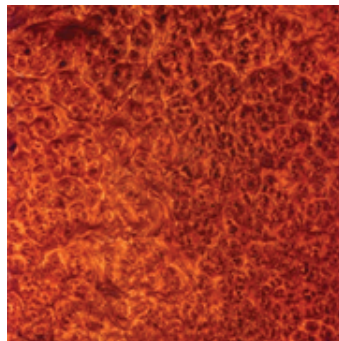


Common Hardwoods & Properties

Some of the more common domestic and exotic wood types with their properties, usages, availabilities and approximate costs are summarized in this section. The woods are organized alphabetically, and within their respective families. For example, there are eighteen known species of Maple. The ones included here are shown under “M”, and grouped together in alphabetical order. Cocobolo and Tulipwood are members of the *Rosewood Family*; hence, they are listed with the other *Rosewoods*. Note that the cost can vary significantly based on quantity, quality, dimension, and the state of drying. Price ranges provided here are based on averages that were obtained from several sources, and refer to 4/4 and 8/4 lumber if not stated otherwise.



Afzelia Burl (*Afzelia xylocarpa*). The heartwood is reddish brown after exposure; the sapwood is pale straw to whitish and well defined. Its texture is moderate to coarse, the grain is straight to interlocked, and it works to a smooth finish. It is somewhat difficult to work with due to its interlocked grain and open pores. Typical Uses: Exterior joinery (window frames, doors), flooring, heavy construction including harbor and dock work, furniture, and because of good acid resistance, used for vats and tanks. Region: West, Central, and East Africa. The prices are high to moderate for burls (\$55/lb), somewhat less for lumber. The very rare and distinct *Afzelia Xylay* species can be upwards of \$250 for thin individual boards, such as 1/8” x 10” x 24”.

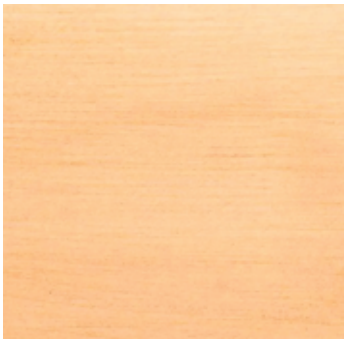


Amboyna Burl (*Pterocarpus indicus*). Amboyna Burls come from the *Curly Narra* (or *Red Narra*) tree. The heartwood varies from light yellow, through golden brown to brick red in color and has a characteristic odor. It is among the most sought-after, and expensive burls. The grain in Amboyna is wavy, interlocked or crossed and these irregularities give rise to mottle, ripple and curly effects of figure. The more red the Amboyna wood, the heavier it is. Amboyna Burl can be nailed, screwed, glued and stained satisfactorily and takes an excellent polish. It is a very durable and highly decorative wood. Region: Indonesia (Ambon Island). Expect \$35.- per pound. A turning blank of 3” x 3” x 4” sells for around \$150.



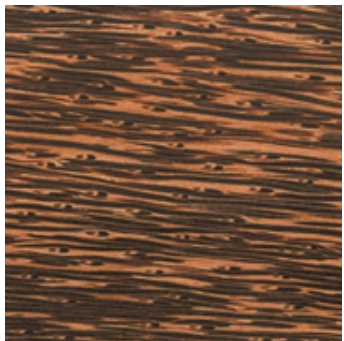
Aniegre (*Aningeria* genus). The heartwood is of a light yellowish-brown, and it tends to darken to a more golden brown over time. The trees can get quite large, and good-size lumber is usually available. The grain is mostly straight, has a medium uniform texture, and good natural luster. In general, it machines well, and has good workability with hand tools. The wood tends to contain various amount of silica, thus it does have a blunting effect on tools. Main usages are for veneer, furniture, cabinetry, and interior joinery. Availability is good, and pricing modest,

expect around \$15 per board foot.



Basswood (*Tilia americana*). The wood is a fairly soft wood, preferred for carving and is easy to work with. Basswood exhibits a fine, straight grain with an even texture and little contrast between early and late wood. Europeans sometimes call it American lime because it bears some carving similarities to European lime (*Tilia vulgaris*). Basswood is an off-white, almost cream colored, tending towards very light brown. It holds carving detail very well. The wood has no characteristic odor or taste. It seldom warps after seasoning, making it close to ideal for larger pieces,

as well as great for smaller carvings. Region: North America. Pricing is in the lower range, about \$2.50 – \$3.50 per board foot; can be more expensive for larger pieces of carving stock.




Black Palm (*Borassus flabellifer*). Black Palm is a hard, heavy wood with a dense, stringy, and straight grain. The black fibers are embedded in lighter grain. It is somewhat difficult to machine, needs sharp tools, and exhibits a distinctive end grain. The dark, hard fibers tend to splinter easily, and can pull out. Typical Uses: Knife handles, game calls, pens, pool cues, bowls, wine bottle stoppers and other ornamental turnings. Region: Myanmar. Due to a trunk structure with a light, soft center, only the outer section are used, and cut into smaller boards. Expect between \$30 and \$35 per

board foot. Smaller dimensioned boards and turning blanks can be considerably more expensive.

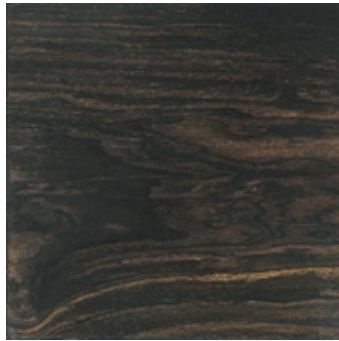


Blackwood, African (*Dalbergia melanoxylon*). African Blackwood heartwood is dark purple-brown with dark black streaks and the sapwood is creamy white. It usually grows to a high of 15 to 20 feet, but may occasionally reach 50 feet (15m). African Blackwood is very dark in appearance, but related to the Rosewood (*dalbergia*) family. It was originally referred to as “Ebony” in ancient Egypt. The grain is usually straight; the wood is slightly oily to the touch, extremely fine and even textured. It is known





as one of the hardest and also heaviest wood, but actually considered an exceptional fine turning wood. Typical Uses: Musical instruments (guitars, clarinets, oboes, etc.), inlay, carving, tool handles, and other turned objects. Region: South and Central Africa. Availability is limited to smaller pieces and boards due to its slow growth and rather small size of the trees. Pricing is expensive, and in the upper range, with 2-3 times that of other rosewoods. Expect \$250 - \$280 for a piece sized 4" x 4" x 12".



Blackwood, Burmese (*Dalbergia cultrata*). There are four species of blackwood. Burmese Blackwood is a member of the rosewood family, it comes from South East Asia, and is dense and hard. The color of the heartwood can be variable, ranging from reddish brown to darker purple-brown with nearly black streaks. It carves, turns and polishes well, and also tends to darken with age. Typical Usages: Decorative turnings, carvings and inlay. Region: South East Asia. Availability can be limited, and pricing is in the mid to upper range. Mostly available in smaller quantities and sizes, expect \$10 - \$12 for blanks in 1.5" x 1.5" x 12".



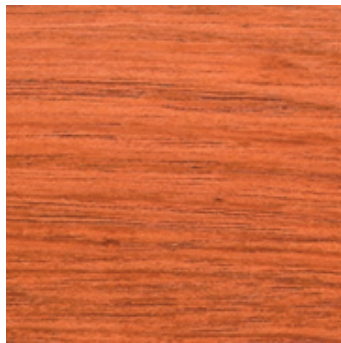
Bloodwood, Satine (*Brosimum rubescens*). This beautiful, dense and heavy wood is as red as blood and as smooth as silk. The wood tends to darken with time, and upon exposure to direct sunlight. Bloodwood is also known as *Satine Rouge*, *Conduru* or *Satinjout*. The wood is very resistant to bugs and decay, and its resistant properties contribute to possible allergic response to the dust. A dust mask should always be used while working with this wood. Typical Uses: Accent wood for box making as well as for billiard cue butts, drum sticks, xylophones and organ pipes. Region: Brazil, French Guiana and Suriname. Availability is usually good, and pricing is moderate, expect \$12 - \$15 per board foot.



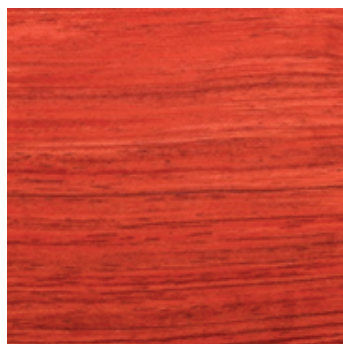
Bocote (*Cordia alliodora*). Bocote is a beautiful and decorative wood that is easy to work with. Its colors vary from light to golden brown with variegated irregular markings. The wood has an attractive ray fleck figure if quartersawn. Bocote is quite dense, exhibits a medium and uniform texture, and straight or shallowly interlocked grain. It polishes to a smooth finish, and stains and glues well. Typical Uses: Boat decking, fine cabinetry, fine furniture, decorative and figured veneer, moldings, inlay work, joinery, and turnery. Region: Mexico & Central America. Pricing is in the mid to upper range, and variations are due to the extend of figuredness (more figures species will be more expensive). Expect around \$18 per board foot on the low end, and around \$40 per board foot for highly figured species.



Boxelder (*Acer negundo*). The Tree is native to portions of the southern tier and Susquehanna Valley, but has become more broadly established throughout many parts of the state. Boxelder grows commonly along the banks of streams and rivers. Boxelder has a soft wood that has no commercial value, but is important for wildlife and the stabilization of stream banks where it grows. The wood however is sought after for decorative wood workings due to its red-orange color patterns. Typical Uses: Decorative wood carvings, turnings, inlay or marquetry. Region: Susquehanna Valley, North America. The wood is rarely available as lumber, but can be obtained occasionally locally, from speciality saw mills, or private sellers. Pricing is usually moderate, around \$10 per board foot, but highly figured, and pink colored species can be more expensive.



Brazilian Cherry (*Hymenaea courbaril*). It is also known as “Jatoba”, with variations in color from a lighter orange-brown, to a darker reddish brown. Some trees can be as much as 14 feet wide. The wood also tends to become darker with age. The grain is wavy and interlocked, much like mahogany. Brazilian cherry glues, stains and finishes well, and also turns well on the lathe. Jatoba is exceptionally stiff, strong, and hard, among the very toughest and durable of all timbers worldwide. Typical Uses: Flooring, furniture, cabinetry, tool handles, ship building, railroad ties, turned objects, and some other, specialty items. Region: Central America, southern Mexico, northern South America, and the West Indies. Availability is good with pricing at the lower end. Expect between \$5 and \$8 per board foot.



Bubinga (*Guibourtia tessmannii*). Bubinga has a strong resemblance to rosewood. The heartwood is pink, vivid red, or red brown with purple streaks or veins. On exposure it becomes yellow or medium brown with a reddish tint. The sapwood is whitish and clearly demarcated. The texture of this wood is fine and even with a straight or interlocked grain, it can be highly figured. The wood machines well, and takes a high polish. Gluing can be difficult at times due to a high content of natural oils. Typical Uses: Fine furniture and cabinetwork, musical instruments, decorative veneers, fancy turnery, inlay work. Region: Eastern Africa. Regular Bubinga is moderately priced around \$16 per board foot. Figured grains, such as pommele, and waterfall are considerably more expensive (four to five times).



Canarywood (*Centrolobium microchaete*). Canarywood is yellow to orange with streaks of red, purple and black. The pale-yellow sapwood is sharply demarcated from heartwood. The wood has a medium texture, and is of lighter weight with more open pores. It is easy to work with both hand and machine tools, and takes a high natural polish. Typical Uses: Furniture, doors, flooring, interior millwork, decorative inlay and turning. Region: Brazil, Bolivia. Pricing is moderate with good availability. Expect between \$15 and \$20 per board foot.



Cedar, Spanish (*Cedrela odorata*). Spanish Cedar is a member of the Cedar family. The wood does vary in color, depending on the place of origin, soil conditions etc. In general, the heartwood has a pinkish to red color that will darken over time to a deeper red-brown. The wood is usually straight grained, soft with a low density, and has a fine and uniform texture. It is easy to work with both with hands and machine tools. It does not bend or warp with changing humidity; hence Spanish Cedar is most commonly used as wood lining in humidors. Other usages are as veneer, plywood, and for musical instruments. It is usually priced on the lower end with around \$6 per board foot.



Cherry (*Prunus serotina*). The heartwood is reddish brown to deep red, with brown flecks, and will naturally darken with age. Cherry is known as being one of the best all-around woods for workability. The wood dries fairly quickly with moderate shrinkage, but is dimensionally stable after kiln drying. It is stable, straight-grained, glues, and machines well. Cherry has a decent strength-to-weight ratio, though it's not as hard as some other denser domestic hardwoods. Typical Uses: Furniture, cabinets, construction and turned items. Region: North America. Regular Cherry comes around \$8 - \$10 per board foot, Curly Cherry with \$11 - \$15 per board foot.



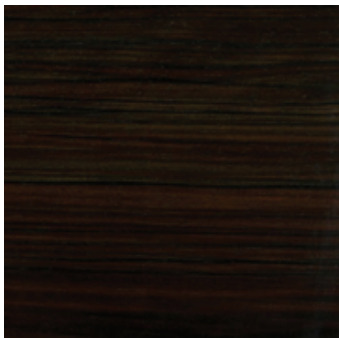
Dalmata (*Cynometra spruceana*). This hardwood is reddish-brown to dark brown in color, and exhibits darker streaks and veining. Its texture is medium to fine, it machines well, but requires sharp tools. Typical uses are for small or specialty items such as boxes, ornamental turnings, and knife handles. Region: South America. Availability is limited to smaller dimensioned boards, and turning blanks. Pricing is moderate with \$18 - \$22 per board foot.



Ebiara (*Berlinia auriculata*). The heartwood is colored from light yellow-brown to deep reddish brown with dark, almost black streaks. The sapwood is pale, and clearly demarcated from the heartwood, and it is also referred to as “Red Zebrawood”. In general, workability is good to fair, both with machine and hand tools; sharp tools are required, some tear-out may occur. Typical uses are for furniture, cabinetry, ornamental turnings, and musical instruments. Region: Africa. Availability is good, and pricing modest with \$12 - \$15 per board foot.

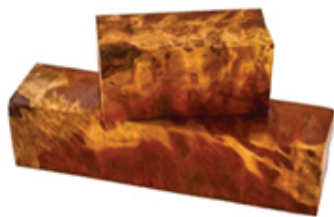


Ebony, Gaboon (*Diospyrus crassiflora*). Gabon (or Black) Ebony is one out of eleven Ebony species known. It is a very dense, very hard wood with straight to slightly interlocked grain and a fine texture. Not all Ebony is all black, although it is believed to be the blackest wood that grows. The tree is quite small, and it is difficult to obtain larger dimensioned pieces. It is necessary to pre-bore black ebony for nailing and screwing, it does take glue well. The wood has an high oil content, and gluing may be problematic at times. Ebony can be polished to an excellent finish. Typical Uses: Tools, cutlery and knife handles, door knobs, butt ends of billiard cues, piano and organ keys, violin and guitar finger boards, other musical instrument pieces, turning, fancy articles and inlay. Region: Africa. Gaboon is one of the most expensive woods, on average 2 – 3 times more that most Rosewoods.



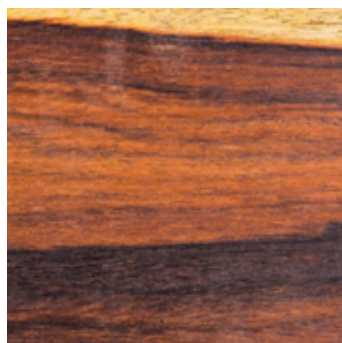
Ebony, Macassar (*Diospyros celebica*). This heavy, dark wood has a dramatic striped appearance, somewhat similar to zebrawood. The dark brown to black heartwood exhibits bands of yellow to golden brown. Very hard, dense, and heavy, it can be brittle at its heart. It can be somewhat difficult to work with due to its hardness, but the wood is excellent for turning. The grain is usually straight but tear-out may occur on pieces that have interlocked or irregular grain. Typical Uses: High-end cabinetry, inlay work, musical instruments, or decorative applications. Southeast Asia. Availability tends to be limited to smaller dimensioned boards and turning blanks. Pricing is high, similarly expensive as other members of the ebony family (Gaboon). Expect around \$140 per board foot.



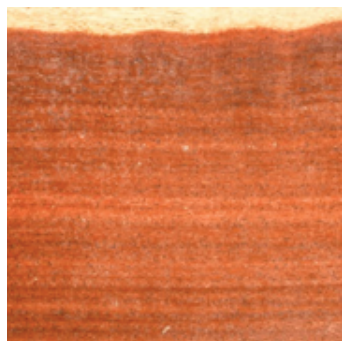


size and state of drying.

Eucalyptus Burl (*Eucalyptus obliqua*). This decorative wood is light to pale brown with some silvery shine. Its structure is coarse with open texture, straight grain with fiddleback or curly figure. It is also referred to as *Messmate Stringybark*, or *Brown-top Stringybark*. The wood machines well, and is also very workable using hand tools. Typical uses are for parquet flooring, veneers, fine furniture, and turned items. Region: Australia, Tasmania. Expect around \$12 - \$18 per kilogram, depending on

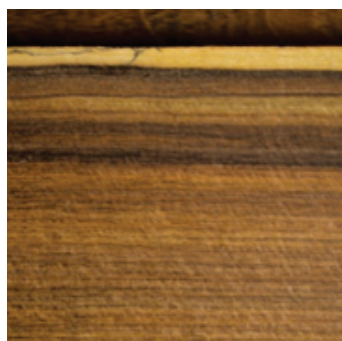


Granadillo (*Platymiscium ulei*). This wood is referred to with various other names, *Macacauba*, or *Macawood*, also with *Coyote*, or *Trebol*. It is very hard, nicely redish-brown in color, and with a swirling grain. It has good working properties, both with machine, and hand tools, and makes a good turning wood. Some tear-out may occur due to its hardness, sharp tools are recommended. Region: Typical uses are for furniture, musical instruments, decorative turnings, and specialty wood items. Central and South America. Availability is good and pricing moderate with \$14 - \$16 per board foot.




somewhat difficult to glue. Typical usages are for flooring, cabinetry, turned items (pool cues), and other specialty objects. Region: Guatemala. Pricing is moderate, somewhat depending on dimensions, with \$20 - \$24 per board foot.

Jobillo (*Astronium graveolens*). Jobillo (*Tigerwood*, *Goncalo Alves*) heartwood is russet brown, orange brown, or reddish brown to red with narrow to wide irregular stripes of medium to very dark brown. After exposure it becomes brown, red, or dark reddish brown with nearly black stripes. The dingy grayish or brownish-white sapwood is sharply demarcated. It is not difficult to work in spite of its high density; it finishes very smoothly, and takes a high polish. The wood weathers well and is highly resistant to moisture absorption. It is reported to be



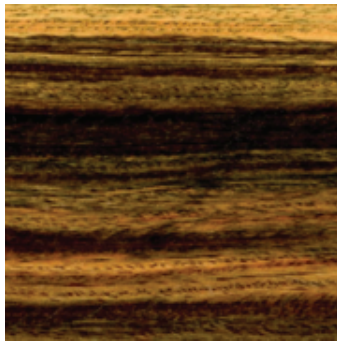
Katalox (*Swartzia cubensis*). This very hard, dense, heavy, Central/Latin American wood has a generally dark purple and brown heartwood that can show considerable color variation. Katalox (*Mexican Royle Ebony*) can be quite attractive and it takes a high natural polish and sometimes has interlocked grain that can create an attractive curl in the figure. Finishing agents will turn darker pieces almost black, after which it can be difficult to distinguish from Partridgewood due to the similar wenge-like, but very tight, grain pattern.



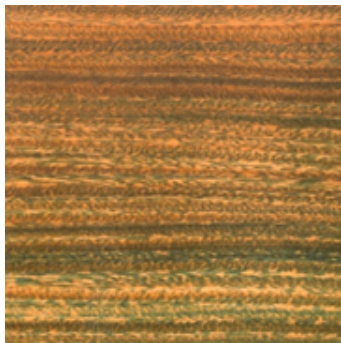
Katalox has exceptional strength properties, is ideal for an Ebony substitute in stringed instruments and is nearly as dense as Ebony. Region: Yucatan Peninsula – Mexico. Availability is average, and pricing is in the modest to upper range with \$24 - \$28 per board foot.



Lacewood, "Brazilian Lacewood" (*Roupala brasiliensis*). Lacewood is also known as *Leopardwood*, but there are several other species. Lacewood is pale pinkish brown to medium brown with flaky, speckled figure with dark flecks, varying from a small lacelike pattern to a larger "splashy" figure. The texture of Lacewood is fairly coarse. It is moderately hard, fairly easy to work with and takes a lustrous finish. Common uses are for veneer, musical instruments, ornamental turnings, and for high end cabinetry. Region: Chile, Brazil. Lacewood is fairly rare, and pricing is in the medium range with \$15 - \$20, largely depending on dimensions.



Lignum Vitae "Genuine" (*Guaiaecum officinale*). Lignum Vitae heartwood is dark greenish-brown to almost black, the pale yellow sapwood is clearly demarcated. The wood tends to darken with age, and upon exposure to direct sunlight. The wood has a high content of natural oils, and can be polished to a fine luster. The wood turns well, however, gluing may be problematic at times. Common usages are for bearings, mallet heads, tool handles, and other objects that require durability and hardness. Genuine Lignum Vitae is generally considered the heaviest, and the hardest wood in the world, and unsurpassed in its durability. It has been classified as endangered species, and is restricted in trading, thus prices are generally high. Care should be taken when buying since it often stems from questionable sources. Smaller dimensioned boards and turning blanks are available, and sometimes are sold based on weight, rather than dimensions in board foot, expect around \$10 for a piece measuring 4" x 4" x 2".



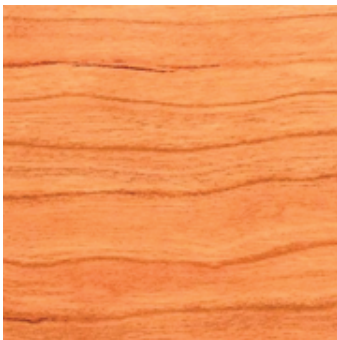
Lignum Vitae, Argentine (*Bulnesia sarmientoi*). This wood is a close relative to the famous tropical Lignum Vitae, and is similar in its appearance and working properties. The olive-green wood (*Verawood*) is typically highly figured, and tends to darken with age. The resinous wood has an oily feel and a strong spicy-sweet fragrance. It is considered difficult to work with, both due to its high density and high oil content. Often used for turning, Argentine Lignum Vitae wood provides an excellent polish. The Argentine name *Palo Santo* literally means, *Saint Wood*. Region: Argentina. Argentine Lignum Vitae lumber is priced in the upper range with \$40 - \$50 per board foot.



Maple, Birds eye (*Acer saccharum*). There are eighteen different species of Maple. It is so named because the figure resembles small bird's eyes. Bird's-eye figure is a phenomenon that occurs within several kinds of wood, most notably in hard maple. The figure is reportedly caused by unfavorable growing conditions for the tree. The sugar maple attempts to start numerous new buds to get more sunlight, but with poor growing conditions the new shoots are aborted, and afterward a number of tiny knots remain. It turns well on a lathe, allowing it to be shaped into decorative canes, bottle stoppers and pens. Typical Uses: Refined specialty products, such as in automobile trim, both in solid form and veneer, boxes and bowls for jewelry, thin veneer, humidors, furniture inlays, handles, guitars, and pool cues. Region: North America. Pricing is around \$25.- per board foot.



Maple (Curly, Western Maple) (*Acer saccharum*). The Curly Maple wood is cream-colored white with a reddish tinge. Fine brown lines give attractive growth ring figure on plain sawn surfaces. Other names for this phenomenon are *Tiger maple*, *Fiddleback maple*, or *Flamed maple*. Its texture is fine and even. It is a dimensionally stable wood with good strength. The wood glues well, and has average workability with both hand, and machine tools. Region: North America. Pricing for Curly Maple is varying considerably, depending on color, frequency of curls, and intensity. Expect \$10 - \$18 per board foot.



Maple, Hard (*Acer saccharum*). Hard Maple is one of the eighteen Maple species. Unlike most other hardwoods, the sapwood is most commonly used, rather than the heartwood, which tends to be of a darker brown. Its sapwood color ranges from nearly white to an off-white cream color, sometimes with a reddish or golden hue. The heartwood tends to be a darker reddish brown. The wood machines well, but Maple also has a tendency to burn when being machined with high-speed cutters such as in a router. It turns, glues, and finishes well, although blotches can occur when staining, and a pre-conditioner, gel stain, or toner may be necessary to get an even color. Typical Uses: Flooring (from basketball courts and dance floors to bowling alleys and residential), veneer, pulpwood, musical instruments, cutting boards, butcher blocks, workbenches, baseball bats, and other turned objects and specialty wood items. Region: USA, Canada. Pricing is moderate, expect around \$10 per board foot. Bird's eye, curly, and quilted maple are considerably more expensive.

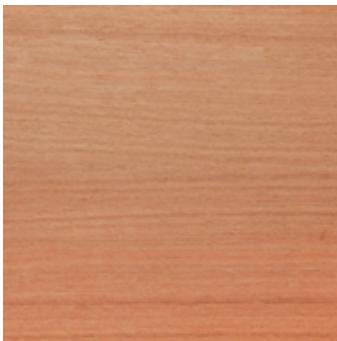


Mahogany, African (*Khaya ivorensis*). There are seven known species in the Mahogany family. The Honduran species is often referred to as *Genuine Mahogany*. The heartwood is of a pink-brown that darkens to a reddish-brown when cut. The texture is medium coarse, with mostly straight grain, it can be interlocked in some cases. The wood machines well, and is very workable with hand tools. It finishes well and has a lustrous quality. Typical uses are for furniture, cabinetry, musical instruments, paneling, flooring, boat building, and interior joinery. Region:

Africa. Availability is good and pricing moderate with \$10 - \$20 per board foot. Quilted African Mahogany is significantly more expensive. Expect upwards of \$40 per board foot.



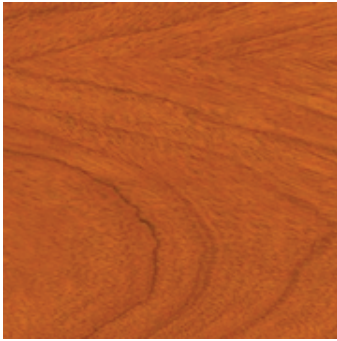
Mahogany, Honduran (*Swietenia macrophylla*). There are seven known species of Mahogany. The Honduran is also known as *Tropical Mahogany*, *South American Mahogany*, *Caoba* and *Chiculte*. It is planted throughout the whole of the tropics as a sustainable forest crop, and is widely available. It has a short grain which grows in a swirling pattern. The shortness of the grain makes it perfect for carving, turning, and other wood-working. It cuts beautifully without chipping, with properties similar to Walnut. It sands well, glues well and finishes to a luxurious red-gold sheen. There are only a few woods that are as beautiful or as pleasant to work with. Common uses are for furniture, cabinetry, carvings, turnings, and musical instruments. Region: North of the Yucatan, Venezuela and Brazil, Columbia, Peru, and Bolivia. Availability is generally good, and pricing is in the mid-range with \$10 - \$15 per board foot for standard lumber. Highly figured, musical instrument grade Fiddleback Mahogany can be four times that, expect around \$45 per board foot.



Makore (*Mimusops heckelii*). Makore heartwood is pink to pinkish-brown, the sapwood is lighter. Makore has a high silica content that can cause blunting of cutting edges. The wood exhibits excellent finishing properties and glues well; it has excellent stability. It can be finished to a lustrous shine. Typical Uses: Furniture, cabinetry, musical instruments and turning. It is often used in veneer form. Region: West Africa. The wood is generally in good availability, and goes for around \$10 per board foot. Musical instrument grade, Curly Makore is considerable more expensive

with upwards of \$20 per board foot.





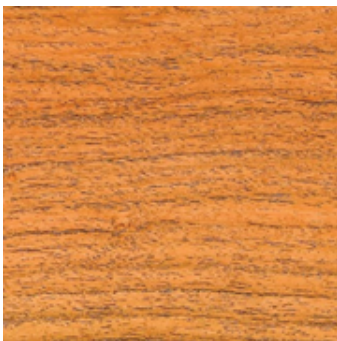
Mara (*Loxopterigyum grisebachii*). Mara, or Argentine *Snakewood*, is a member of the rubber tree family, it is a very beautiful, golden-brown wood with dark streaks. It machines well, and appears to be very stable. The grain is variable, ranging from straight, to swirled, to burlled. The wood is quite rare, but used locally for fine furniture building. Other uses are for decorative, turned objects (billiard supplies), and other specialty items. Region: Southern Brazil, Argentina. The wood is difficult to find in usable quantities. Small pieces measuring 2" x 2" x 18" sell for \$8 - \$10.



Marblewood (*Marmaroxylon racemosum*). Its overall appearance is somewhat similar to *Zebrawood*, although with some finer textures. The heartwood is yellow golden with streaks in a darker brown. It is sometimes referred to as *Serpentwood*, it is quite hard with interlocked grain, and somewhat difficult to work with. Sharp tools are recommended to prevent chipping, it does finish well, and can be polished to a lustrous shine. Common uses are as flooring, cabinetry, and turned items. Availability is good to fair, and prices, depending on amounts and dimensions ranges from \$20 - \$25 per board foot.



Mesquite, Black (*Prosopis Nigra*). Black Mesquite is one of three known species, its heartwood is mid-brown to dark chocolate in color. Black Mesquite lumber comes in wide, long boards, light chocolate to almost purple. The wood resembles *Mahogany*, is excellent to work with, it glues and finishes well. Common uses are for flooring, cabinetry, furniture, and decorative turned objects. Region: Argentina, South America. The wood is widely available, and priced in the medium range with \$16 - \$18 per board foot.



Mesquite, Honey (*Prosopis nigra*). Honey Mesquite is of golden yellow color, with a straight grain, and is highly dimensional stable once dried. The wood is excellent to work with, both with machine and hand tools. It is a very good wood for turning, and it finishes well. The wood tends to darken with time. Typical usages are for fine furniture, cabinetry, turned objects, wood paneling and as veneer. Region: South America. It is widely available and pricing is in the mid-range with about \$15 per board foot.





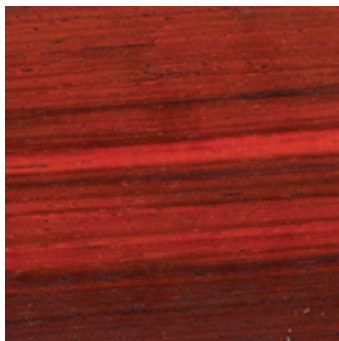
Olivewood (*Olea capensis*). The heartwood is often pale to medium brown with irregular streaks that vary from brown to dark-brown and dark grey. The sapwood is generally pale yellow. The wood has excellent strength, but can be difficult to work due to interlocked grain and oily surface of the wood. Olivewood needs care when drying to avoid checking or honeycombing, especially with thicker material. The wood is reported to have a low dimensional stability. It glues well, pre-boring is recommended when nailing. Olivewood polishes up well and gives a smooth even

finish. Typical Uses: Sculpture and carving work, decorative turnings, inlay, and high end custom furniture. Region: East Africa. Olive trees are mostly cultivated in groves, and larger amounts of the wood are not easily obtainable. Smaller dimensioned boards and turning blanks are available, pricing is in the upper range with upwards of \$25 per board foot.



Pink Flame (*Rinorea racemosa*). Pink Flame is a remarkably beautiful, rare timber from Peru, found in the upper Amazon basin. The tree comes in a male and a female version – with the female one being thought to be the more colorful. The heartwood of the female tree is capable of turning brilliant pink to dark red by some natural chemical processes. Although its looks are similar to boxelder, this wood is much heavier, a lot harder, and more colorful. Typical Usages: Decorative turnings and inlays, very rare. Region: Peru. Due to its very limited availability, pricing is high,

even for small dimensioned boards and turning blanks. Expect \$12 - \$18 or higher for a blank dimensioned 4" x 4" x 2".



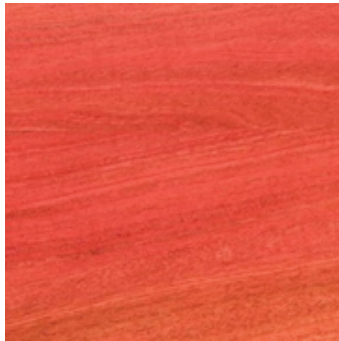
Padauk (*Pterocarpus soyauui*). African Padauk is a vivid-red, sometimes orange wood, and can be bright red with dark streaks. The grain is usually straight, but can be interlocked at times. It is also known as *Ngula*, *Mutui*, and *Bosulu*, and there are more than a dozen known species. The wood is easily workable, glues well, and takes a nice polish. It is somewhat comparable to *Walnut*, and tends to darken considerably with age, and upon exposure to direct sunlight. Common usages are for veneer, turned objects, musical instruments, and furniture. Region: Central and West

Africa. Expect \$8 - \$20 per board foot.



Pecan (*Carya illinoensis*). The Pecan tree is the state tree of Texas. Pecan heartwood is light to medium brown with some red-brownish hue. The sapwood is often not clearly demarcated, and is of a pale yellow to light brown color. The wood itself is quite strong, and the grain is mostly straight, with some occasional wavy appearance. Various species of *Pecan* and *Hickory* occur together, and they are often sold as *Hickory*. The wood tends to be somewhat difficult to work with, and tear-outs occur when planing. The wood is used for many applications, including

flooring, cabinetry and furniture. Due to its higher energy content in comparison to other local species, it is often used for fuel and smoke applications in wood stoves. The wood is readily available, and priced in the lower to mid-range, depending on dimensions and quality. Expect between \$5 and \$8 per board foot.



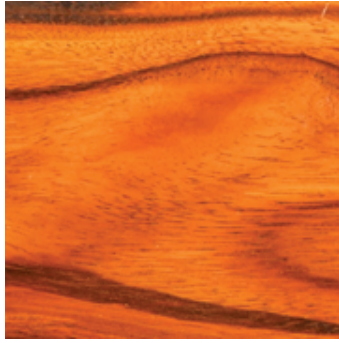
Pink Ivory (*Berchemia zeyheri*). Pink Ivory is a rare wood, in value comparable to Ebony. The grain is straight to irregular, while the texture is very fine. Pink Ivory sapwood is almost white, and the pink heartwood, after long exposure, tends to become orange-colored. The most valuable pieces are vibrant pink. Pink Ivory seasons very slowly and needs care to prevent checking. The wood is somewhat difficult to work with using hand tools, but is machines well, and takes a good finish. Region: South Africa, Mozambique, Zimbabwe. Due to

its limited availability, pricing is around \$50 for a 2" x 2" x 18" blank.



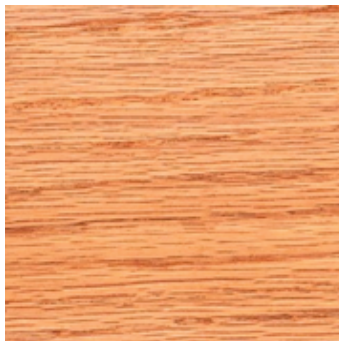
Purpleheart (*Peltogyne paniculata*). Purpleheart is also known as *Violetwood*. This violet colored wood is a very dense hardwood that requires sharp tools and patience, but the results can be stunning. The grain is usually straight, but can be wavy or irregular. The oily wood holds an oil base finish very well. To fully protect the bright color apply a color stabilizer. It's easy to mix and easy to apply and it will maintain the purple color.

Typical Uses: Construction, abutments, fine furniture and floors, decorative inlay and turnings. Region: Central and South America. Availability is usually good, and pricing is in the medium range. Expect \$7 - \$15 per board foot, depending on size.



Quina (*Myroxylon peruiferum*). Quina or *Argentine Sandalwood* is a pinkish-red wood with an oily feel and incredible perfumed scent that lasts. Quina is beautifully figured. Finely textured, this wood provides an excellent polish. The wood is somewhat difficult to work with due to its density, and noticeable blunting effect on cutting edges. Quina is extremely durable and is widely used in Argentina for a variety of purposes. Typical Uses: Window and door frames, counter tops, cutting boards and flooring. Region: Argentina. Quina lumber is priced in the mid

range with around \$18 per board foot.



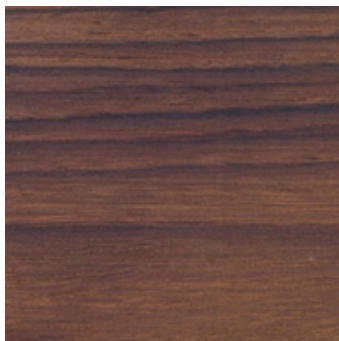
Red Oak (*Quercus rubra*). Red Oak is one of eleven species in the Red Oak group. The wood is straight-grained, with a coarse texture that varies according to rate of growth. The color ranges from light cream, pinkish-red to dark tan or golden brown. It machines well with hand and power tools. It has moderately high shrinkage values resulting in somewhat mediocre dimensional stability. Typical Uses: Furniture, cabinetmaking and turning; takes a stain well. Grain runs with the longest dimension. Region: North America. Pricing is on the lower end

due to good availability, variations are expected for thicker boards, and varying states of dryness. Expect approximately \$3 - \$8 per board foot.




Rosewood, Bolivian (*Machaerium scleroxylon*). Bolivian Rosewood (*Morado, Pau Ferro*) is part of the extensive rosewood family. This wood is deep, dark chocolate brown to purple black in color with occasional strips of even darker grain patterns. This species is hard and heavy with a fine texture with variable tones and when worked, exhibits a smell reminiscent of walnut. It machines well with sharp hand and power tools, is an excellent turning wood, and rated very durable. Typical Uses: Fine cabinetry, fine furniture, decorative veneer, moldings, inlay work, joinery, and turnery. Region: South America. Pricing is in the moder-

ate range, somewhat lower than for other, more scarce rosewoods (*Albertina genus*). Expect between \$20 and \$25 per board foot.

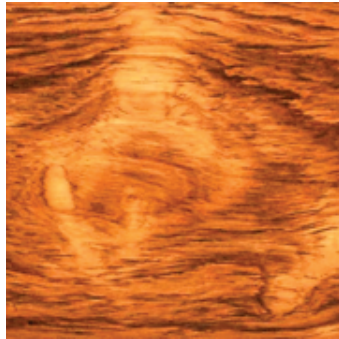


Rosewood, East Indian (*Dalbergia latifolia*). East Indian Rosewood is an excellent exotic turning wood that is easy to work with. The heartwood varies from light brown to a dark, purplish color with nearly black streaks. It is very stable, has a beautiful striped figure, and machines well. The resin makes it a bit harder to glue, and it is necessary to pre-drill before nailing. Typical uses are for decorative inlay and ornamental turnings, marquetry, and components for musical instruments.





Region: India, Sri Lanka, Indonesia. Availability is usually good, with pricing in the upper range; expect \$40 – \$50 per board foot.



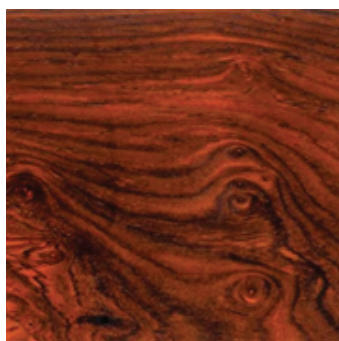
Rosewood, Honduran (*Dalbergia stevensonii*). The lighter colored sapwood is sharply demarcated from the darker heartwood. Honduran Rosewood heartwood is described as pinkish brown or purplish with darker and lighter bands. The combination of colors and streaks gives the wood a very attractive appearance. The grain is typically straight, and the texture is medium to fine. The wood has low to medium luster. When freshly cut, the bark and sapwood have a characteristic odor similar to that of stored apples. It machines well, but can be difficult to glue due to its high oil content. Typical uses are for musical instruments, veneer, high-end

furniture, and specialty items. Region: Guatemala, Honduras, Panama, Columbia. The wood is generally available, sometimes difficult to obtain in larger quantities. Pricing is in the mid to upper range as typical for true rosewoods (*dalbergia*); expect between \$30 and \$40 per board foot.



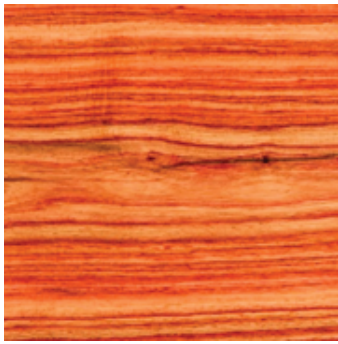
Rosewood, Yucatan (*Dalbergia yucatensis*). Yucatan Rosewood is a member of the true rosewood family. The wood is hard, of light-reddish brown color with darker-reddish brown grain. The sharply demarcated sapwood is pale to light yellow. It looks like a cross between *Honduras Rosewood* and *Cocobolo*, but does not have the allergenic properties of either of them. The wood is lighter than some of the other rosewoods, and its oil content is lower. Typical Uses: Decorative carvings, furniture, musical instruments, sporting implements, xylophones, umbrella handles. Region: Central and South America. Availability is good,

but mostly in form of smaller dimensioned lumber and turning stock. It is priced lower than most of the other true rosewoods. Expect \$18 to \$20 per board foot for boards of 3” - 10” in width, wider boards are considerably more expensive.



Cocobolo (*Dalbergia retusa*). Cocobolo is a member of the Rosewood family. It grows in the drier uplands on the Pacific side of Mexico down to Panama. Cocobolo wood shines up to a nice luster, machines easily, and has a spice-like scent when being cut. It is an excellent hardwood for making knife handles because it is waterproof. It has a high oil content that can occasionally make gluing problematic. Cocobolo varies in color from red to yellow-orange and striped with black to lighter black, often with hints of purple which makes for an amazing contrast. This hardwood darkens with age. Typical Uses: Knife handles, game calls, pens, pool

cues, peppermills, bowls, wine bottle stoppers and other ornamental turnings. Region: Mexico, Central America. Supply is somewhat limited, hence expect around \$75 - \$85 per board foot.



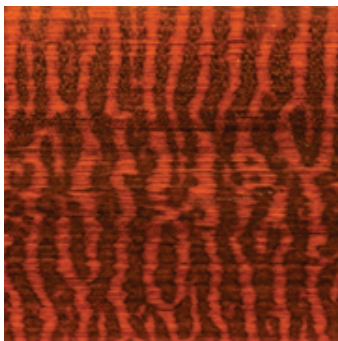
Tulipwood (*Dalbergia variabilis*). Tulipwood is a beautiful hardwood, and a member of the true rosewoods (*dalbergia family*). Tulipwood is hard and heavy, has irregular streaks of yellow, rose and red or violet on a cream to straw colored background. The wood has characteristic smell, a fine texture, high luster, and takes a high polish. It machines well but is somewhat difficult to work with. Typical Uses: Fine turnings, small boxes, inlay and marquetry, fancy accessories. Region: Tropical South America, especially Northeast Brazil. The wood has limited availability, and the tree is small enough to be considered a shrub.

Consequently, only small dimensioned boards and turning blanks are available. Expect around \$85 for boards of 2" – 5" in width, wider boards are considerably more expensive.



Sapele (*Entandrophragma cylindricum*). The heartwood is golden to dark reddish brown. Along with *Utile (Sipo)*, Sapele is widely used in Europe as a substitute for *Genuine Mahogany*, particularly in the furniture, flooring, door and window industry. Sapele has a very attractive Mahogany color, it is durable, and has great working properties. In general, it machines and finishes well, and has a distinct cedar-like scent while being worked. It has a fine, uniform texture, and good natural luster. It is usually priced below *Genuine Mahogany*, and supply is ample. Region: Africa. Pricing is moderate, expect \$10 - \$15 per board foot for

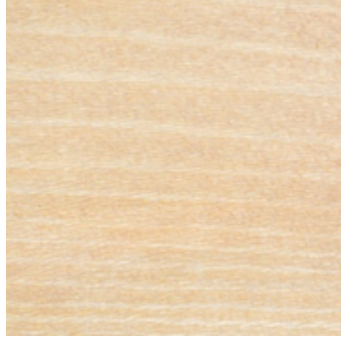
regular Sapele, \$65 - \$75 for Quilted Sapele.



Snakewood (*Piratinera guianensis*). This is one of the world's most rare species, only growing in a small region in the north part of South America. It is named snakewood due to the remarkable resemblance to a real snake's skin. Snakewood is extremely heavy, hard and strong. Heartwood is reddish brown with speckles of black appearing as hieroglyphics or snakeskin markings. Snakewood has a straight grain and fine, even texture. Snakewood is brittle and splits easily. Very smooth when finished; has a natural polish. Typical Uses: Decorative turnings, umbrella handles, walking sticks, caskets, fancy items, cabinets. Region:

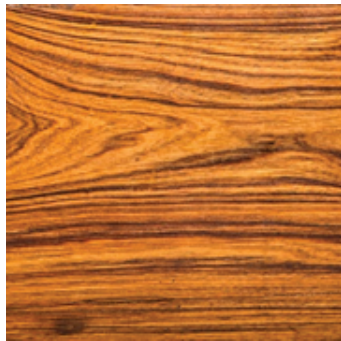
South America. The trees are fairly small, and as one of the rarest woods, availability is limited to small dimensioned boards, half-logs, or turning blanks. In terms of pricing, this wood may be the most expensive of any exotic woods available. Expect around \$170 for a piece with dimensions of 2" x 2" x 14", which amounts to a board foot price of more than \$430.





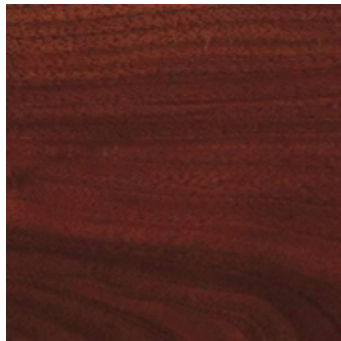
Sycamore (*Plantanus occidentalis*). There are two species known, the *American Sycamore*, and the *European Sycamore* (*Acer pseudoplatanus*). The *American Sycamore* is quite similar to maple, and the white-to light tan sapwood is used predominantly. The heartwood is of a darker, reddish-brown color. Its texture is fine to even with some interlocked grain. It is easy to work with, both with machines and hand tools, it does glue and finish well. Common usages are for flooring, cabinetry, plywood applications, veneer, and specialty wood objects (tool handles).

Region: Eastern United States. Availability is usually good, and pricing is in the lower to mid-range, depending on quality and dimensions. Expect \$5 to \$10 per board foot.



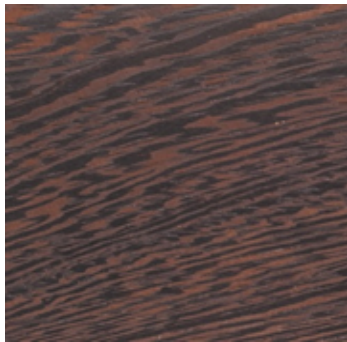
Tambooti (*Spirostachys africana*). *Tambooti*, *African Cocobolo*, or *African Sandalwood*, is a dense, heavy hard wood; lustrous and with a powerful, persistent, and pleasant scent sweeter than that of sandalwood. This pleasant odor will last long after the wood is cut. A piece of furniture made of it can scent a large room for a long time. Because of its limited quantities, and the defectiveness of the tree, it is a rare wood and therefore sought for small fancy articles and high grade furniture. Typical Uses: Carvings, luxury furniture, turnery and curios. Region: South African Lowveld and Swaziland. Pricing is in the mid to

upper range, comparable to some of the rosewoods, expect \$45 to \$50 per board foot.



Walnut, “Black Walnut” (*Juglans nigra*). There are a total of seven known species of Walnut (*Bastogne*, *Claro*, *English*, *Peruvian*, *Tropical*, *White*). The heartwood can range from a lighter pale brown to a dark chocolate brown with darker brown streaks. Color can have a grey, purple, or reddish cast. Sapwood is nearly white. It has a medium texture, the grain is usually straight, but it can be irregular. Black walnut can occasionally also be found with figured grain patterns such as: curly, crotch, and burl. In general, easy to work provided the grain is straight and regular. It glues, stains, and finishes well, and has excellent

dimensional stability. Typical Uses: Furniture, cabinets, gun stocks, interior paneling, veneer, turned items, and other small wooden objects such as pens, bottle stoppers, knife handles and pepper mills. Region: Canada, USA. The woods of these various species are very popular, and prices range between \$8.50 and \$14 per board foot.



Wenge (*Millettia laurentii*). Wenge is characterized by a deep brown color with tight black stripes throughout, it can be nearly black in appearance. This is the dark and heavy wood that falls between *Walnut* and *Ebony* for quality, color and price. Wenge is coarse, hard and heavy with a straight grain. Works fairly well with machine tools but has a high blunting effect on cutting edges. It tends to splinter, and sand unevenly due to the difference in density between the brown and the black areas. It turns well, but is somewhat difficult to glue if resinous. Typical uses are for flooring, cabinetry, and furniture.

Region: West Africa. Expect between \$12 and \$16 per board foot.



Yellowheart (*Euxylophora paraensis*). Yellowheart is also known as *Pau Amarello*, *Limao rana*, *Pau Setim*, and *Pequia Setim*. This beautiful hard wood has been used for everything from hat racks to flooring, drawer slides to fine furniture. It darkens only slightly with age. The wood machines well, and the yellow stays yellow, and does not fade. The wood exhibits a mild, characteristic, tea-like smell while worked. Gluing properties are excellent, it finishes to a beautiful sheen, and the finished product promises to become heirloom quality. Region: Brazil. Pricing is in the mid-range with

\$8 - \$14 per board foot.



Zebrawood (*Microberlinia brazzavillensis*). Zebrawood heartwood is a light golden-yellow with narrow veining or streaks of dark brown to almost black, giving the quartered surfaces a zebra-stripe appearance. The grain is interlocked or wavy and produces alternating hard and soft grained material. The wood machines well, but can be difficult to plane or surface due to the prevalence of interlocking grain. Common usages are for furniture, interior joinery, and decorative turnings. The wood is hard, heavy and stable. Region: West Africa. Pricing is in the mid range

for regular lumber with around \$15 per board foot.





Ziricote (*Cordia dedecandra*). Ziricote heartwood is tobacco colored to reddish brown, with irregular dark brown or blackish streaks and variegations, with more or less of an oily or waxy appearance; rather sharply demarcated from the grayish or yellowish sapwood. Luster variable; texture fine to medium, grain variable. It resembles *Brazilian Rosewood* because of its unique grain lines and tendency for spider webbing, supply is rather limited. Ziricote is a very dense and heavy wood which allows for a bright, glass-like tone, and is highly durable. Typical Uses: Fine furniture, musical instruments, cabinet work, turnery, flooring, rotary and sliced veneer. Region: Mexico and Central America. Due to its limited availability, pricing is in the upper range, exceeding that of true rosewood species. Expect between \$85 and \$95 per board foot for widths ranging between 2" - 8".