



THE WOOD DATABASE



WOOD ALLERGIES AND TOXICITY



by Eric Meier

“Not to omit any one of them, the yew is similar to these other trees in general appearance . . . It is an ascertained fact that travellers’ vessels, made in Gaul of this wood, for the purpose of holding wine, have caused the death of those who used them.”

–Pliny the Elder, from *Naturalis Historia*, ca. 77 AD

Looking at the above quotation, (taken from a writing nearly two thousand years old), ought to bring—at the very least—a small bit of respect and attention to the matter of safety as it pertains to wood toxicity. If this subject has been known and reported as “*ascertained fact*” since ancient history, how much more ought we to take heed in

modern times, considering that we have so many more well-developed means of communication and testing?



A turned yew bowl by Steve Earis

WOOD TOXICITY AND ALLERGEN CHART











Below you'll find a chart of various wood species, along with their reported effects and properties. The information on this chart has been compiled from many sources, with references given at the [bottom](#). When viewing the chart, please keep the follow in mind:




































Just because any given wood is not listed on the chart, *does not* mean that it is completely safe to use. It simply means that adverse reactions have not been reported as of yet. (The wood may be very obscure or unknown.) One helpful thing to do if you have confirmed that you're allergic to a specific species of wood, is to check for related species (listed at the end of each wood profile page). Many times, a wood in a particular genus will share similar allergic compounds with other related woods, resulting in cross-reactions.) For example, [Cocobolo](#) is in the [Dalbergia](#) genus, and is also closely related to other woods such as [Kingwood](#), [Tulipwood](#), [Honduran Rosewood](#), etc. Also, you may notice two wood types that




























sound like they're related, such as [Black Cherry](#) ([Prunus genus](#)) and [Brazilian Cherry](#) ([Hymenaea genus](#)), but they are actually quite unrelated.

All inhaled wood dust is hazardous to your long-term health. This chart simply lists specific woods that can aggravate symptoms through allergic reactions, or woods that are outright toxic in and of themselves. However, *all* woods produce fine dust when worked, which in turn can damage your lungs and cause a number of other adverse [health reactions](#). (This particular health issue—and the unhealthy buildup of such dusts in small woodworking or hobbyist shops—has been dealt with at length on [Bill Pentz' website](#).)

A common question: is this wood safe to use as a plate/bowl/cutting board/etc.? Despite the very long list of woods below, very few woods are actually toxic in and of themselves. But what a great number of woods do have the potential to do is cause allergic reactions in sensitive individuals. This risk for finished wood projects is greatly lessened (but not eliminated) with the application of a food-safe finish. In the end, using almost any wood is a calculated risk, and the question boils down to this: how much of a potential risk am I comfortable with? 1 in 10? 1 in 1,000? 1 in 1,000,000?


























WOOD SPECIES	REACTION	AREA(S) AFFECTED	POTENCY
Abura	irritant, nausea, giddiness, and vomiting		★★☆☆
African Blackwood	irritant, sensitizer	  	★★★★
Afrormosia	irritant, nervous system effects, asthma, splinters go septic	  	★★★★
Afzelia	irritant, sneezing	  	★★☆☆



























Agba (<i>Gossweilerodendron balsamiferum</i>)	irritant		????
Aglaia (Aglaia genus)	irritant	 	★★☆☆
Ailanthus	irritant		★☆☆☆
Albizia	irritant, nausea, pink eye, giddiness, nose bleeds	  	★★★☆☆
Alder (Alnus genus)	irritant	  	★☆☆☆
Alligator Juniper	irritant	 	★★★☆☆
Amboyna	irritant, asthma	 	????
Andiroba	irritant, sneezing	  	★★☆☆
Angelim vermelho	unspecific allergic reactions		★★☆☆
Araracanga	irritant, asthma	 	★★★☆☆
Ash (Fraxinus genus)	irritant	 	★★☆☆
Ash, alpine (<i>Eucalyptus delegatensis</i>)	irritant	 	????
Ash, mountain	irritant	  	★★☆☆
Australian Blackwood	irritant, sensitizer, asthma	  	★★☆☆
Australian Cashew Nut (<i>Semecarpus australiensis</i>)	irritant, skin lesions, nosebleeds	  	★★★★
Avodire	irritant, nose bleeds, internal bleeding, asthma	 	★★★☆☆
Balsa	irritant		★★☆☆




























Bamboo	irritant		★☆☆☆
Batai	irritant, sneezing	 	★★★★☆
Birch (Betula genus)	irritant, sensitizer, nausea	 	★★☆☆☆
Black Cherry	wheezing, giddiness		★☆☆☆☆
Black Locust	irritant, nausea	 	★★★★☆
Blackbean (<i>Castanospermum australe</i>)	irritant	  	????
Bloodwood	irritant, excessive thirst, salivation, nausea		★★☆☆☆
Bloodwood, Red (Australian)	irritant	 	★★☆☆☆
Blue Gum	irritant		★☆☆☆☆
Blue Mahoe	sneezing		★☆☆☆☆
Bocote	cross reactions possible once sensitivity to other woods have developed		★★☆☆☆
Bosse	irritant, sensitizer, asthma, nausea, headache	  	★★★★★
Box, Gray	irritant, rash	 	★☆☆☆☆
Boxwood, Knysna (<i>Gonioma kamassi</i>)	irritant, headache, asthma	 	????
Boxwood, European	irritant, sensitizer	  	★★☆☆☆





























Brazilwood	irritant, headache, nausea, swelling skin, blisters	👤	★★☆☆
Brigalow (<i>Acacia harpophylla</i>)	irritant	👤	????
Brownheart	irritant	👤	★★☆☆
Bubinga	irritant, lesions	👤	????
Buckthorn	irritant, sap can cause dermatitis	👤	★★☆☆
Bulletwood	irritant	👤	★★☆☆
Camphor	irritant, asthma, headaches, giddiness	👤👤👤	★★☆☆
Cashew (<i>Anacardium occidentale</i>)	irritant, blisters, sensitizer	👤	★★★☆☆
Catalpa	irritant	👤	★☆☆☆☆
Cedar, Alaskan Yellow	irritant	👤	★☆☆☆☆
Cedar, Aromatic Red	irritant	👤👤👤	★★★★☆
Cedar, Atlantic White	irritant	👤	★☆☆☆☆
Cedar, Australian Red	irritant, asthma, migraine, giddiness, bronchitis, stomach cramps, NPC (rare)	👤👤👤	★★★★☆
Cedar, Incense	irritant, rashes	👤	★★★★☆
Cedar of Lebanon	irritant, asthma, runny nose,	👤👤👤	★★★★☆























respiratory
disorders

Cedar, Northern White	irritant, asthma	 	★★★☆☆
Cedar, Port Orford	irritant, runny nose, asthma, kidney problems (diuresis)	 	★★★★☆
Cedar, Spanish	irritant		★★★☆☆
Cedar, Southern Red	irritant	 	★★★★☆
Cedar, Western Red	irritant, sensitizer, runny nose, asthma, nervous system effects, NPC (rare)	  	★★★★★
Cheesewood	irritant		★★★☆☆
Chechen	irritant, sensitizer	  	★★★★☆
Chestnut, Chinese (<i>Castanea mollissima</i>)	irritant		★★★☆☆
Chestnut, Sweet	irritant, sensitizer		★★★★☆
Chico Zapote	irritant (nasal)		★★★★☆
Chinaberry	irritant, headaches	 	★★★☆☆
Cocobolo	irritant, sensitizer, nausea, asthma, pink eye	  	★★★★★
Cocuswood	irritant		★★★☆☆
Coolibah	irritant		★☆☆☆☆
Copaia (<i>Jacaranda copaia</i>)	irritant		?????


























Crow's Ash (<i>Flindersia australis</i>)	irritant		????
Cuban Mahogany	irritant		★☆☆☆
Cypress	sensitizer		★☆☆☆
Cypress, Australian	irritant, asthma, swelling of eyelids, boils, NPC (rare)	  	★★☆☆
Cypress, Gowen	irritant		★★☆☆
Cypress, Leyland	irritant		★★☆☆
Cypress, Mediterranean	irritant, rashes, headaches		★★★☆☆
Cypress, Mexican	irritant		★★☆☆
Cypress, Monterey	irritant		★★☆☆
Dahoma	irritant, sensitizer	  	★★★☆☆
Dead Finish (<i>Acacia tetragonophylla</i>)	irritant, splinters go septic		????
Douglas-fir	irritant, giddiness, runny nose, splinters go septic, nausea	  	★☆☆☆
Ebony (<i>Diospyros</i> genus)	irritant, sensitizer, pink eye	  	★★★☆☆
Ebony, Brown	irritant		★★☆☆
Ebony, Macassar	irritant, sensitizer		★★★☆☆
Ekki	irritant		★★☆☆
Elm (<i>Ulmus</i> genus)	irritant, sensitizer,	 	★☆☆☆



























	NPC (rare)		
Espave	irritant, asthma	 	★★☆☆
European Beech	irritant, sensitizer, NPC (rare)	  	★★☆☆
Eyoum (<i>Dialium dinklagei</i>)	irritant	 	????
Fir (<i>Abies</i> genus)	irritant		★★☆☆
Fir, Balsam	irritant		★★☆☆
Freijo	irritant, sensitizer, dryness/thirst		★★☆☆
Garapa	irritant		★★☆☆
Goncalo Alves	sensitizer	 	★★☆☆
Grasstree (<i>Xanthorrhoea</i> <i>spp.</i>)	irritant		????
Greenheart	sensitizer, wheezing, severe throat irritation, splinters go septic, cardiac and intestinal disorders	   	★★★★
Guanacaste	irritant	 	★★★★
Gum, Lemon-Scented	irritant		★★☆☆
Gum, Spotted	irritant, rashes		★★☆☆
Gum, Yellow	irritant	 	★★☆☆
Hackberry	irritant		★★☆☆
Hemlock, Eastern	irritant		★★☆☆
Hemlock, Mountain	irritant		★★☆☆

Hemlock, Western	irritant, runny nose, NPC (rare)	 	★☆☆☆
Hophornbeam	irritant		★☆☆☆
Hornbeam (Carpinus genus)	irritant		★★☆☆
Idigbo	irritant	 	????
Imbuia	irritant	 	★★☆☆
Indian Beech (<i>Pongamia pinnata</i>)	irritant	 	????
Indian Laurel	irritant		★★☆☆
Ipe	irritant, headache, asthma, vision effects	  	★★★☆☆
Iroko	irritant, sensitizer, asthma, boils, giddiness, HP	  	★★★☆☆
Ironwood, Desert	irritant, sneezing, coughing		★★★☆☆
Jarrah	irritant	 	????
Jatoba	irritant		????
Jelutong	irritant		★☆☆☆
Juniper, Phoenician (<i>Juniperus phoenicea</i>)	irritant, headache, nausea		????
Juniper, western	irritant	 	★★☆☆
Kahikatea (<i>Dacrycarpus dacrydioides</i>)	irritant	 	????
Karri	irritant		★☆☆☆






















Katalox	irritant	 	★★★★☆
Keruing	irritant		★★☆☆☆
Kingwood	irritant, sensitizer, pink eye	  	★★★★☆
Koto	irritant		★★☆☆☆
Laburnum ⚠	constitutional effects (nausea, vomiting, headaches); direct toxin	N/A	★★☆☆☆
Lacewood	irritant		????
Larch (Larix genus)	irritant, hives, lesions		★★☆☆☆
Leadwood (Combretum genus)	irritant		★★☆☆☆
Lebeck	irritant	 	★★★★☆
Lignum Vitae	irritant		????
Limba	irritant, hives, splinters go septic, asthma, bleeding of the nose and gums	 	????
Machiche	irritant		★★☆☆☆
Magnolia (Magnolia genus)	asthma, runny nose		★★☆☆☆
Mahogany, African	irritant, sensitizer, NPC (rare)	 	★★★★☆
Mahogany, Honduran	irritant, sensitizer, boils, nausea,	  	★★☆☆☆



























	giddiness, asthma, HP		
Mahogany, Santos	irritant	👤👤	★★☆☆
Makore	irritant, nausea, headache, giddiness, nervous system and blood effects	👤👁👤	★★★★☆
Mango	irritant	👤	★★☆☆
Mansonia	irritant, sensitizer, nausea, sneezing, headaches, nosebleeds, splinters go septic, asthma, giddiness, cardiac disorders	👤👁👤❤	★★★★☆
Maple (Acer genus)	irritant, sensitizer, asthma; HP in spalted maple	👤👤	★★★★☆
Maple, Queensland	irritant	👤👤	★★☆☆
Meranti (Shorea genus)	irritant	👤👁👤	????
Merbau	irritant	👤👤	????
Mesquite (Prosopis genus)	irritant	👤	★★☆☆
Messmate	irritant, asthma	👤👤	★★☆☆
Milky Mangrove (<i>Excoecaria agallocha</i>) ⚠	sap is poisonous, causes irritation to eyes and/or temporary blindness, headache, burning	👤👁👤	★★★★
























	of throat, blistering of skin		
Mimosa	irritant		★★★★
Moabi	irritant (mucous membranes)	 	★★☆☆
Molopangady (<i>Breonia madagascariensis</i>)	irritant, sores		????
Monkeypod	irritant		★★☆☆
Mora	irritant		★★☆☆
Movingui	irritant		★★☆☆
Muhuhu (<i>Brachylaena hutchinsii</i>)	irritant		????
Mulga	irritant, headache, nausea, lesions, wood contains a virulent poisonous principle used for spear heads by aboriginals	  	★★★★
Muninga	irritant, asthma, bronchitis	 	★★☆☆
Myrtle	irritant, sensitizer	 	★★☆☆
Myrtle, Tasmanian	irritant	 	★★☆☆
Narra	irritant, asthma	 	★★☆☆
Norway Spruce	irritant, asthma	 	????
Nyatoh	irritant	 	????
Oak (<i>Quercus</i> genus)	irritant, sensitizer, asthma, NPC (rare)	  	★★☆☆





















Obeche	irritant, sensitizer, runny nose, sneezing, hives, asthma	  	★★★★☆
Okoume	irritant, cough, asthma, pink eye	  	★★★☆☆
Oleander (<i>Nerium oleander</i>) ⚠️	irritant, nearly every part of the plant is toxic, cardiac effects	 	★★★★★
Olive	irritant, sensitizer	  	★★★★☆
Opepe	irritant, sensitizer, nervous system effects, headaches, fever	  	★★★★☆
Osage Orange	irritant, sap can cause dermatitis		????
Osage Orange, Argentine	irritant, sap can cause dermatitis		????
Padauk (<i>Pterocarpus</i> genus)	irritant, sensitizer, nausea, asthma	  	★★★★☆
Palm (<i>Arecaceae family</i>)	irritant, constitutional effects		★★☆☆☆
Parinari (<i>Parinari spp.</i>)	irritant		????
Partridgewood	irritant, hives, coughing	 	★★★☆☆
Pau Ferro	irritant, sensitizer	 	★★★★★
Pau Marfim (<i>Balfourodendron</i>	irritant		????































riedelianum)

Pau Rosa	irritant		★★☆☆
Pau rosa, Brazilian	irritant, constitutional symptoms		★★☆☆
Pau Santo	irritant		★★☆☆
Peroba Rosa	irritant, sensitizer, nausea, asthma	  	★★★☆☆
Persimmon	irritant		★☆☆☆
Pheasantwood	cavities in the wood can contain powder that is an irritant, skin discoloration	 	★☆☆☆
Pine (Pinus genus)	irritant, runny nose, asthma	 	★★☆☆
Pine, Huon	irritant	 	★★☆☆
Pistachio	irritant		★☆☆☆
Poison Walnut (Cryptocarya pleurosperma) ⚠	bark irritating to skin, dust may cause asthma, nausea, giddiness, sap is toxic and corrosive	 	★★★☆☆
Poplar	irritant, blisters, asthma, bronchitis	  	????
Primavera	irritant, sensitizer		★★☆☆
Pulai, Indian	irritant		★★☆☆

Purpleheart	irritant, sensitizer, nausea	 	★★☆☆
Quebracho	irritant, nausea, NPC (rare)		★★☆☆
Quina	irritant	 	★★☆☆
Ramin	irritant, splinters go septic, asthma	  	★★☆☆
Redwood	irritant, sensitizer, asthma, HP, NPC (rare)	  	★★☆☆
Rengas	sap is strongly irritating, blisters, ulcers, fever, constitutional effects		★★★★
Rhodesian Teak	irritant		★★☆☆
Rose Butternut (<i>Blepharocarya involucrigera</i>)	irritant, pink eye	 	????
Rosewood (Dalbergia genus)	irritant, sensitizer, asthma	  	★★★★
Rosewood, Brazilian	irritant, sensitizer	  	★★★★
Rosewood, East Indian	irritant, sensitizer		★★★★
Rosewood, Siamese	irritant, rash, hives, sensitizer		★★★★
Rubberwood	irritant, sensitizer (latex allergy)		★★☆☆
Saffron-Heart (<i>Halfordia scleroxyloa</i>)	irritant, splinters go septic, lung	 	????

	congestion		
Santa Maria (<i>Calophyllum brasiliense</i>)	irritant, fainting, insomnia, kidney damage	 	????
Sassafras	sensitizer, nausea, respiratory, direct toxin , NPC (rare)	 	★★☆☆
Sapele	irritant, sneezing	 	????
Satinwood, East Indian	irritant, headache, diarrhea, sensitizer	  	★★★☆☆
Satinwood, West Indian	irritant, diarrhea, rash, blisters, sensitizer		★★★☆☆
Shittim (<i>Acacia seyal</i>)	irritant, coughing	 	????
Silky Oak, Northern	irritant		★★☆☆
Silky Oak, Southern	irritant, sap may cause blistering of skin, eyelid inflammation	 	★★★☆☆
Simarouba (<i>Simarouba amara</i>)	irritant		????
Siris, black	irritant		★★☆☆
Sissoo	irritant		★★☆☆
Slash Pine	irritant, asthma	 	????
Snakewood	irritant	 	★★☆☆
Sneezewood	irritant, oils within the wood cause violent sneezing		★★★★

Spruce (<i>Picea</i> genus)	irritant, sensitizer	 	★☆☆☆
Sucupira	irritant		★★☆☆
Sugi	unspecified allergic reactions		★★☆☆
Sumac (<i>Rhus</i> spp.)	irritant, bark may cause blisters		★☆☆☆
Sweetgum	irritant		★☆☆☆
Tali (<i>Erythrophleum suaveolens</i>)	irritant, headache, giddiness, nausea, disorders of bowels and stomach		????
Tambootie	irritant, diarrhea, blindness, direct toxin	 	★★★★
Tatabu	irritant		★★☆☆
Tatajuba	irritant		★☆☆☆
Teak	irritant, sensitizer, rash, nausea, asthma, vision effects, pink eye, HP	  	★★★★☆
Thuya	irritant	 	★★★☆☆
Tiama (<i>Entandrophragma angolense</i>)	irritant		????
Turpentine	irritant, swelling	 	????
Tzalam	cold-like symptoms		★☆☆☆
Utile	irritant		????

Verawood	sneezing		★★☆☆
Walnut, African	irritant, systemic effects, NPC (rare)	  	★★★★
Walnut, Black	irritant, sensitizer, NPC (rare)	  	★★☆☆
Walnut, English	irritant, NPC (rare)	  	★★☆☆
Wamara	irritant	 	★★★★
Wenge	irritant, sensitizer, splinters go septic, nervous system effects, abdominal cramps	  	★★★★
Western Hemlock	irritant, NPC (rare)		????
Western Juniper (<i>Juniperus occidentalis</i>)	irritant	 	★★★★
White Peroba (<i>Paratecoma peroba</i>)	irritant, sensitizer, asthma	  	????
Willow (<i>Salix</i> spp.)	sensitizer, nausea, NPC (rare)		★★☆☆
Yew (<i>Taxus</i> spp.) ⚠	irritant, nausea, headache, cardiac effects, direct toxin	   	★★★★
Yellowheart	irritant		★★☆☆
Zebrawood	sensitizer	 	★★☆☆
Ziricote	cross reactions possible once sensitivity to other		★★☆☆

woods have
developed

Zitan

irritant, vomiting



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WHAT IS A SENSITIZER?

You've probably already heard the term *desensitized*—usually in reference to violent movies or images—meaning that we start off as naturally being sensitive to something, and upon more and frequent exposure, we become less and less sensitive to its effects.

Well, with some woods that have been classified as being a *sensitizer*, the opposite is true: the more we are exposed to a wood's sawdust or other fine particles, the more sensitive we get to its exposure, and the more severe and adverse the reactions become.

If you ever have an allergic reaction to any wood that has been identified as a sensitizer, use extreme caution in handling or using that species (and related species) in future instances. Some have reactions so severe that they simply have had to stop and discontinue using certain wood species altogether. ([Cocobolo](#) is notorious in this regard.)

WHAT IS HP?

Hypersensitivity pneumonitis (also called extrinsic allergic alveolitis, EAA) is an inflammation of the alveoli within the lung caused by hypersensitivity to inhaled organic dusts. [HP on PubMedHealth](#).

WHAT IS NPC?

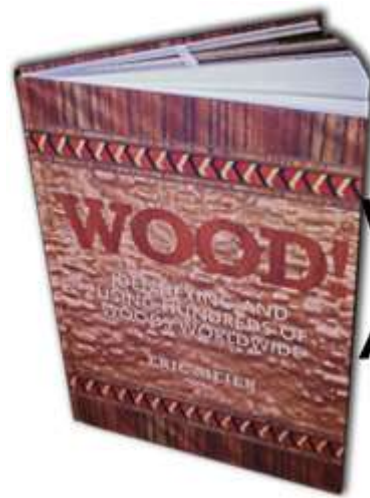
Nasopharyngeal carcinoma, or sometimes called nasopharyngeal cancer. Basically, it is a cancer of the upper area of the pharynx or "throat," where the nasal passages and auditory tubes join the remainder of the upper respiratory tract. [NPC on MayoClinic.com](#).

ARE YOU AN ASPIRING WOOD NERD?



The poster, [Worldwide Woods, Ranked by Hardness](#), should be required reading for anyone enrolled in the school of wood nerdery. I have amassed over 500 wood species on a single poster, arranged into eight major geographic regions, with each wood sorted and ranked according to its Janka hardness. Each wood has been meticulously documented and photographed, listed with its Janka hardness value (in lbf) and geographic and global hardness rankings. Consider this: the venerable Red Oak (*Quercus rubra*) sits at only #33 in North America and #278 worldwide for hardness! Aspiring wood nerds be advised: your syllabus may be calling for [Worldwide Woods](#) as part of your next

assignment!



**THIS
WEBSITE
IS ALSO
A BOOK**

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(This is a monthly update, and your email will be kept private.)

ABOUT

STAY UP TO DATE WITH THE WOOD DATABASE (This is a monthly update, and your email will be kept private.)

ABOUT THE PROJECT

- [How the project got started](#)
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FIND WOOD

- [Wood Filter tool](#)
- [Browse Woods \(by common name\)](#)
- [Browse Woods \(by scientific name\)](#)

WOOD ID

WOOD INFO & STATS

WOODWORKING

SUPPORTING THE SITE

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