

Wood finishes used by traditional societies in Africa and Oceania, and by european period furnishings restorers

¹ Unité de Recherche Biomasse, Bois, Energie, Bioproduits (BioWooEB)

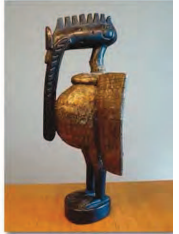
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Wood finishes used by traditional societies in Africa and Oceania were essentially composed of stains applied on wood products for decorative purposes, very often in connection with a precise ritual.

A main part of these stains and pigments comes from ancient uses for tissues dyeing, and are sometimes used for food additives.

Origin of Wood finishes used by traditional societies in Africa and Oceania

- Vegetable pigments and minerals were the main components of wood finishes, generally diluted in the water or possibly in vegetable or animal oils.
- The most common are obtained from berries, fruits, tree barks, mushrooms, or even insects like cochineal used for red and purple colours (mainly from South America and Mediterranean region, but also Australia and neighbouring areas).

The most emblematic and frequently used stains in Africa and Oceania

- **Indigo** extracted from grinded leaves, then fermented and mixed to fillers (clay, potash, slaked lime...); indigo tree (*Indigofera tinctoria*) widely grown throughout all tropical regions
 - **Roots of African sorghum** which are left to ferment to obtain red shades stains
 - **Curcuma root** which gives bright yellow, green or ochre stains when used with iron or copper salts
- Black stain**, commonly used for different decorative items like masks, is extracted from iron oxide or simply obtained from wood (or other plants) charcoal.

Before applying finishes

Sanding and polishing of wood surfaces, traditionally with the help of:

- Scrapers (metal, bone, scale)
- Rough trees leaves and/or containing silica (example: Gnien in Côte d'Ivoire, = *Parinari* spp.)
- Wet sands or earths with various particle sizes
- Shark or skate skin (Polynesia, Fidji...)

The first sandpapers in Asia and Oceania: parchments or banana tree leaves with shells, seeds fragments or sand glued with natural gum.

Main African vegetable-based stains

Species	Organ	Region-Country	Color	Product
<i>Baphia nitida</i>	Ground dried roots	West Africa	Red	Furniture
<i>Baphia nitida</i>	Wood decoction	South Benin – South-West Nigeria	Red	Yorouba masks
<i>Bixa orellana</i> (rocouyer)	Seeds integument (rocou)	South America – Africa – Oceania (New Guinea)	Orange-red	All products
<i>Caesalpinia coriaria</i>	Wood	India – Madagascar	Red	All products
<i>Cochlospermum tinctorium</i>	Rhizome	Sudano-Sahelian area	Brown-yellowish	All products, decorative items
<i>Ficus glumosa</i>	Bark	Central to Austral Africa	Red	All products
<i>Flemingia grahamiana</i>	Fruits	West to East Africa	Yellow	Bamboo
<i>Haematoxylum campechianum</i>	Wood	Various tropical countries	Red	All products
<i>Indigofera arrecta / coerulea / longiracemosa/tinctoria</i>	Leaved branches	Africa then Asia-Oceania	Indigo	All products
<i>Lannea velutina</i>	Bark juice	West to Central Africa	Varnishes	All products
<i>Morinda lucida</i>	Wood	West to Central Africa	Yellow to red	All products
<i>Mucuna flagellipes / poggei</i>	Leaves-seeds	West to Central Africa	Black; blue-black	All products
<i>Mucuna sloanei</i>	Seeds oils	West to Central Africa	Varnish, black paint	-
<i>Philenoptera cyanescens (gara)</i>	Stem and branches	West Africa	Indigo	Sculptures
<i>Phyllanthus emblica</i>	Leaves	South-East Asia, Madagascar	Brown	Bamboo
<i>Pterocarpus angolensis</i>	Heartwood	Austral Africa	Red	All products
<i>Rothmannia whitfieldii</i>	Fruits juice and fresh seeds	Sudano-Sahelian area	Blue-black	All products
<i>Sorghum bicolor</i>	Stem, leaf sheath	Africa	Red-purple	Masks
<i>Striga gesnerioides</i>	Flower	Tropical Africa - Asia	Pink (paint)	All products
<i>Terminalia scutifera</i>	Bark	West Africa	Yellow	Decorative items

From Jansen and Cardon, Prota 3, Dyes and tannins, 2005.

Wood craftsmen and period furnishings restorers mainly use four finishes types

Waxes

The two most common wax bases are:

1. Beeswax generally from Africa
2. Carnauba wax extracted from a Brazilian palm tree



Positive stains give opposite effect to the ones of classical stains

Stains

Natural stains mainly come from vegetable products: walnut stain, catechu, orcanette (*Alcanna tinctoria*), curcuma, rocou, logwood (*Haematoxylum campechianum*), chicory ...

Oils

More and more appreciated because:

- Easy to apply,
- They are not film-forming products;
- Give a soft and silky touch to wood products

Varnishes

Different from the 3 other categories of wood finishes because of their film-forming characteristics.

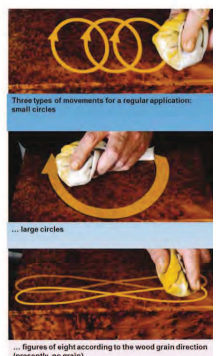
To obtain an ancient appearance

- Ceruse
- Cracked appearance
- Lacquering.

These wood finishes require sophisticated technical knowledge.

Traditional stamp varnishing (= French polish)

Doubtless one of the more sophisticated varnish technic, barely used today because of its very high cost, and almost only used by period furnishings restorers.



Three types of movements for a regular application: small circles

... large circles

... figures of eight according to the wood grain direction (presently, no grain)