

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA

Seventeenth meeting of the Conference of the Parties  
Johannesburg (South Africa), 24 September – 5 October 2016

## CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Include *Guibourtia tessmannii* in Appendix II of CITES in accordance with Article II (2)(a) of the Convention and with Resolution Conf. 9.24 (Rev.Cop16), Annex 2 a, paragraph B.

*Guibourtia pellegriniana* in Appendix II of CITES in accordance with Article II (2)(a) of the Convention and with Resolution Conf. 9.24 (Rev.Cop16), Annex 2 a, paragraph B.

Include *Guibourtia demeusei* in Appendix II of CITES for reasons of resemblance, in accordance with Article II (2)(b) of the Convention and with Resolution Conf. 9.24 (Rev.Cop16), Annex 2 b, paragraph A.

Annotation <sup>(2)</sup>

#4 All parts and derivatives, except :

- a) seeds (including seedpods of *Orchidaceae*), spores and pollen (including pollinia). The exemption does not apply to seeds from *Cactaceae* spp. exported from Mexico, and to seeds from *Beccariophoenix madagascariensis* and *Neodypsis decaryi* exported from Madagascar ;
- b) seedling or tissue cultures obtained *in vitro* in solid or liquid media transported in sterile containers;
- c) cut flowers of artificially propagated plants;
- d) fruits, and parts and derivatives thereof, of naturalised or artificially propagated plants of the genus *Vanilla* (*Orchidaceae*) and of the family *Cactaceae*;
- e) stems, flowers, and parts and derivatives thereof, of naturalised or artificially propagated plants of the genera *Opuntia* subgenus *Opuntia* and *Selenicereus* (*Cactaceae*); and
- f) finished products of *Euphorbia antisyphilitica* packaged and ready for retail trade.

B. Proponent

European Union and Gabon<sup>3</sup>.

<sup>1</sup> Translation kindly provided by the author(s) of the document.

<sup>(2)</sup> See section 6.5. for supporting statement on choice of annotation.

<sup>3</sup> The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

C. Supporting statement

1. Taxonomy

1.1 Class: Dicotyledoneae (formerly Magnoliopsida)

1.2 Order: Fabales

1.3 Family : Fabaceae

1.4 Genus, species or subspecies, including author and year:

*Guibourtia tessmannii* (Harms) J Léonard (1949)

*Guibourtia pellegriniana* J Léonard (1949)

*Guibourtia demeusei* (Harms) J Léonard (1949)

1.5 Scientific synonyms:

*Copaifera tessmannii* Harms (1910) = *Guibourtia tessmannii*

*Copaifera coleosperma* Benth (1865) = *Guibourtia pellegriniana*

*Copaifera demeusei* Harms (1897) = *Copaifera larentii* De Wild (1907) = *Guibourtia demeusei*

1.6 Common names:

Common names:		Guibourtia tessmannii	Guibourtia pellegriniana	Guibourti demeusei
Common name		Bubinga		
Commercial name		Bubinga (Bois de rose d'Afrique, African rosewood, Akume (United States of America))		
National characteristics in the range Common names Commercial names Local names	Gabon	Kevazingo (Bubinga) Oveng (Fang, Also Equatorial Guinea)		Ebana (Bubinga)
	Cameroon	Bubinga (rose) Essingang (Ewondo)		Bubinga (rouge) Oveng ossé Mbaya (Bagyeli pygmies)
	Congo	Probable presence in the Sangha and Cuvette Ouest	Possible presence in the Kouilou / Niari	Bubinga Bubinga d'eau, Lianu (Kiombe), Paka
	Central African Republic	Probable presence in the Sangha, Haute Sangha and Lobaye	-	Bubinga
National characteristics in the range Common names Commercial names Local names	RD Congo	No recorded presence ( <i>outside range</i> )	no recorded presence ( <i>outside range</i> )	Bubinga Waka, Waka na maï (Equator), Kongo (Batetela), Lusole (Tshiluba), Kasase-Sase (Kasai)
Chinese	古夷苏木 (红木, Hongmu)			
	特氏古夷苏木	佩莱古夷苏木	德米古夷苏木	

2. Overview

The name Bubinga relates to three distinct species belonging to the same genus African *Guibourtia*: *G. tessmannii*, *G. pellegriniana* and *G. demeusei*. The designation Kevazingo used in Gabon refers only to the first two species.

Of these three species, *Guibourtia tessmannii* and *Guibourtia pellegriniana* are characterised by remarkable morphological similarities which make it significantly more difficult to differentiate the trees of the two species and their respective woods. Their populations are dispersed in relatively low

densities (generally less than 0.05 feet/ha) in narrow ranges across three Central African countries (Gabon, Cameroon (south, central and east), Equatorial Guinea) <sup>(4)</sup>.

The common name Bubinga also denotes the species *Guibourtia demeusei*, which is more dependent on flooded forests <sup>(5)</sup>. Its range is more considerable and extends up to the cuvette of the Congo Basin where it may form small stands. Although the tree and wood of this species have features which enable them to be identified more easily <sup>(6)</sup>, its wood, while of poorer quality than that of the other two species, is still confused with the wood of both *G. tessmannii* and *G. pellegriniana* on international tropical woods markets, where it is also commonly referred to as Bubinga.

Prized for their aesthetic qualities, the woods of Bubinga / Kevazingo have been traded on international markets for tropical woods since the first half of the 20th century. Log exports, which reached annual volumes close to 90,000 m<sup>3</sup> in Gabon (2000), and around 15,000 m<sup>3</sup> in Cameroon (1998), have substantially reduced the populations of the species concerned in their respective ranges.

In the course of the past four years, the wood of the species Bubinga / Kevazingo has risen considerably in value on the international markets due to the growth of demand in China. The prices of these precious woods, already among the highest, have undergone a further exponential increase in the order of 300 to 500 percent depending on quality and specifications. Today, the wood of Bubinga / Kevazingo is, by a considerable margin, the most expensive wood from the tropical rainforests of Central Africa.

This surge in the value of Bubinga / Kevazingo wood has led to the emergence of illegal networks in all the range states which harvest and export the species concerned. By disregarding the sustainability requirements laid down in the Forest Codes in force in these countries, the illegal industries weaken the populations of these species even further, risking the rapid disappearance of populations at local level.

This document proposes that *Guibourtia tessmannii* and *Guibourtia pellegriniana* comply with the criteria of Appendix II of CITES in accordance with Article II (2)(a) of the Convention and with Resolution Conf. 9.24 (Rev. CoP16), Annex 2 a, Paragraph B: *It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.*

By blocking shipments to the international market of quantities of wood which has been illegally harvested and marketed, the inclusion of the species *Guibourtia tessmannii* and *Guibourtia pellegriniana* (as well as *Guibourtia demeusei* for reasons of resemblance) in Appendix II of CITES will allow international trade in the wood of these species to be regulated and ensure that the recent rise in international demand for the wood of Bubinga / Kevazingo is not detrimental to their conservation throughout their range - not only in Gabon, but also in the neighbouring states where they occur.

### 3. Species characteristics

Due to the similarity of their morphology, local names do not distinguish between trees of the species *Guibourtia tessmannii* and *Guibourtia pellegriniana*. They are referred to indiscriminately as Kevazingo in Gabon, pink Bubinga or Essingang (ewondo) in Cameroon and Oveng (fang) in Equatorial Guinea. These two species are indeed morphologically close, but differ in the structure of their bark and the anatomy of the wood (Bamford, 2005). These differences are so subtle that distinguishing between the two species is quite difficult for workers in the field.

#### 3.1 Distribution

The ranges of *G. tessmannii* and *G. pellegriniana*, trees of the dense evergreen rainforests of Central Africa, are confined to the westernmost region of these forests. These species occur in the forests of Gabon, in the southern, central and eastern regions of Cameroon and throughout Equatorial Guinea <sup>(3)</sup>.

*G. tessmannii* can be found on firm ground from the south of Nigeria to the south of Mayombe, across Cameroon, Equatorial Guinea and Gabon (CTFT, 1977). The species is highly likely to be

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<sup>(4)</sup> See maps in Annexes 1.1, 1.2, 1.3 and 1.4

<sup>(5)</sup> See map in Annex 1.5.

<sup>(6)</sup> See section 9 and Annexes 2a, 2b, 3 and 8.

present in southern Nigeria <sup>(7)</sup>, but no source has confirmed it in the southern part of Mayombe in the Congo and the Democratic Republic of the Congo.

The range of *G. pellegriniana* is more limited than that of *G. tessmannii*. According to Souane (1985), cited by Tosso (2015a), *G. pellegriniana* is restricted to the littoral forests of Cameroon and Gabon and hence also to the forests of Equatorial Guinea. Moreover, Meunier *et al.* (2015) confirm that the range of this species is restricted to littoral forests. Nevertheless, recent molecular studies indicate that *G. pellegriniana* not only colonises coastal forests, but also penetrates further into the interior of the continent and can live in sympatry with *G. tesmanii* - i.e. its range overlaps with that of *G. tesmanii*, although it probably occurs in a lower density than the latter (Doucet, personal communication).

### 3.2 Habitat

*Guibourtia tessmannii* and *Guibourtia pellegriniana* are species occurring in forests on firm ground (CTFT, 1977) and are found on well drained soils (Leemans *et al.*, 2012). One of the main characteristics of the two species is their diffuse dispersal across their range. According to De Saint Aubin (1983), while Kevazingo occurs throughout Gabon, it is scattered as individual trees in the primeval forest. However, it is more abundant in mixed Okoume and Ozouga forests. Its relative abundance in this type of forest was first ascertained at the time of the colonial forestry mission (Bertin, 1929). The species of the genus *Guibourtia*, occurring in dense tropical rainforests on firm ground <sup>(8)</sup>, are generally highly dispersed and have low densities (Tosso, 2015a).

### 3.3 Biological characteristics

*Guibourtia tessmannii* and *Guibourtia pellegriniana* are intermediate light-demanding, non-gregarious species, (Meunier *et al.*, 2015). In Gabon, annual growth in diameter of *G. tessmannii* is in the order of 0.35 cm/year in their natural habitat (Picard and Gourlet-Fleury, 2012). For the Cameroon administration, the diametric growth to be considered for management of pink Bubinga (*G. tessmannii*) is 0.45 cm / year.

The seeds of these hermaphrodite species are dispersed through the opening of the seedpod (autochory) and probably by animals attracted by the aril surrounding the seed (Meunier *et al.*, 2015). Identified dispersers include the African pouched rat (*Crycetomys emini*), Thomas's rope squirrel (*Funciurus anerythrus*), black Guinea fowl (*Agelastes niger*), mandrill (*Mandrillus sphenx*), great blue turaco (*Corythaeola cristata*), black-casqued hornbill (*Ceratogymna atrata*) and the red-billed dwarf hornbill (*Tockus camurus*). According to Tosso *et al.* (2015b), changing the relative densities of these species for the benefit of the African pouched rat would lead to a virtual absence of natural regeneration of *G. tessmannii*. These authors thus demonstrate that illegal logging, together with consumption of seeds by rats, represent a double pressure on the species which could ultimately compromise its resilience in its biotope.

The fruiting period of *G. tessmannii* and *G. pellegriniana* extends from December to March (Meunier *et al.*, 2015). According to Tosso *et al.* (2015a), "Fruiting occurs from the short rainy season to the long dry season in Gabon, from December to July (Aubréville, 1968). In Cameroon, *G. tessmannii* fruits during the rainy season (August) (Lebrun, 1970)".

### 3.4 Morphological characteristics<sup>(9)</sup>

*Overview, trunk and bark :*

*Guibourtia tessmannii* and *Guibourtia pellegriniana* are very large trees reaching 60 m in height and 2 m in diameter, with sinuous buttresses (Meunier *et al.*, 2015). The base has irregular edges sometimes extending in long grooves. The crown is largely hemispherical with upright, spreading branches, giving the cover a dense, dark appearance (Tailfer, 1989). In Gabon and South

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<sup>(7)</sup> Due to the proven presence of *Guibourtia tessmannii* in riparian FMUs on the border between western Cameroon and southern Nigeria. See map in Annex 1.4.

<sup>(8)</sup> The relevant *Guibourtia* are *Guibourtia tessmannii*, *Guibourtia pellegriniana* and *Guibourtia ehie*. This third-named species, also called Bubinga in Cameroon, is not included in this proposal since its populations are less threatened by international trade. Its brown wood is easily identifiable – in no way to be confused with that of the other Bubinga species – and has a lower value on the markets.

<sup>(9)</sup> See illustrations and photographs in Annex 5.

Cameroon Kevazingo and Bubinga specimens have been seen with a base diameter considerably more than 200 cm <sup>(10)</sup>.

The bole of *G. tessmannii* is straight and cylindrical and free of branches up to 20 meters. It can reach diameters of 200 cm and often has long slender buttresses up to 3 m high. The crown of the tree is dense and rounded (Leemans *et al.*, 2012). The trunk of *G. tessmannii* reaches greater diameters than that of *G. pellegriniana* (Doucet, personal communication).

*G. tessmannii* shows a bark with a greenish-grey to reddish-brown surface, scaly, with small round scales leaving orange to red depressions. Its inner bark is brittle, reddish to brown in colour, and secretes a reddish gelatinous exudate (Leemans *et al.*, 2012).

A section of *G. tessmannii* is pinkish-brown and cream in the interior, and may exude a type of reddish gum. A section of *G. pellegriniana* exudes a pale yellow gum (Meunier *et al.*, 2015). Tailfer (1989) describes the section as reddish-brown, of medium thickness with a fibrous interior, exuding a gelatinous gum the colour of redcurrants (*G. tessmannii*) or pale yellow (*G. pellegriniana*).

*Leaves, leaflets, flowers and seeds:*

The leaves of *Guibourtia tessmannii* and *Guibourtia pellegriniana* are made up of a single pair of alternate leaflets (Meunier *et al.*, 2015). Tailfer (1989) describes the leaves as pinnate, a single pair of acuminate slightly curved leaflets with no marked translucent pits.

The fruits are small round pods, curved then flattening out; in the case of *G. tessmannii*, the surface is sharply wrinkled and striated, while that of *G. pellegriniana* is covered with tiny grains. The seeds are completely encased in a red aril (Meunier *et al.*, 2015). The pod is flat, suborbicular, 2-3 cm, with tough valves containing one or two arillate seeds (Tailfer, 1989). The pod of *Guibourtia tessmannii* has a short pedicel, heavily striated valves and a basal, slight mucro, whereas the pod of *Guibourtia pellegriniana* has a long pedicel, grained valves and a basal lateral mucro.

The flowers are small and have no petals. They contain 4 sepals and 10 stamens gathered in panicles. In *Guibourtia tessmannii*, the ovary is sessile and hirsute. In *Guibourtia pellegriniana*, the ovary is briefly stipitate and glabrous (Tailfer, 1989).

*Wood (visual description) <sup>(11)</sup>*

The woods of *Guibourtia tessmannii* and *Guibourtia pellegriniana* are difficult to distinguish by sight. The wood of both species is hard and heavy (class 4), of a pink or reddish brown colour, with very fine purplish red veining. Some veins can be darker, tending towards brown. The grain is sometimes wavy, but the texture is generally fine. These characteristics have earned it the name "African rosewood" since the beginning of the colonial era. <sup>(9)</sup>.

The heartwood and sapwood are different [...]. The whitish sapwood is rather thick in logs of small diameter. The wood has a moderately fine grain, sometimes straight sometimes interlocked (figured wood) <sup>(12)</sup>. The coloured, irregular and relatively close grain is more or less pronounced depending on provenance. It appears that *G. pellegriniana* supplies a more fine-grained wood with less pronounced streaks than *G. tessmannii* [...]. The distribution of producing species shows that the whole spectrum of streaks can be found (Bayol *et Borie*, 2004).

Table 1. Anatomic and technological characteristics of the woods of *Guibourtia pellegriniana* and *Guibourtia tessmannii* (Tosso *et al.*, 2015a)

	<i>Guibourtia pellegriniana</i>	<i>Guibourtia tessmannii</i>
Density of wood at 12% moisture (g·cm <sup>3</sup> )	0.94	0.80 – 0.95
Radial shrinkage (%)	8.2	5.2 – 8.1

<sup>(10)</sup> See photographs in Annex 7 and Annex 9.

<sup>(11)</sup> See illustrations and photograph in Annex 3.

<sup>(12)</sup> This characteristic of figured wood – coupled with the spectacular dimensions that sawn wood can reach – are key factors in the attraction of the wood of Bubinga / Kevazingo on international markets. Not only on Asian markets (see section 6 below), but also in the United States.

	<i>Guibourtia pellegriniana</i>	<i>Guibourtia tessmannii</i>
Tangential shrinkage (%)	9.9	6.3 – 10.5
Modulus of rupture (N·mm <sup>-2</sup> )	-	166 – 195
Modulus of elasticity (1000·N·mm <sup>-2</sup> )	16.3	15.1
Tensile compressive strength (N·mm <sup>-2</sup> )	80	66 – 73
Shear stress (N·mm <sup>-2</sup> )	-	9.5
Chalais Meudon hardness	-	7.9 – 9.0
Diameter of vessels (µm)	185	110
Number of vessels per mm <sup>2</sup>	4	3
Width of cells (µm)	5 – 10	3 – 4
Height of cells (µm)	1000	501

#### Wood (microscopic description) <sup>(13)</sup>

The Thünen Institute (Germany), has developed a tool for identifying woods based on their microscopic characteristics (<http://delta-intkey.com/wood/en/index.htm>). It provides an exhaustive description of the woods of the genus *Guibourtia*, but without distinguishing the specific characteristics of the species *G. pellegriniana*, *G. tessmannii* (and *G. demeusei*). In the framework of the current inclusion of these species in Appendix II of CITES, specimens will be analysed and characterised on micro and macroscopic level, using the CITESwoodID identification tool.

#### 3.5 Role of the species in its ecosystem

Like all forest species, *Guibourtia tessmannii* and *G. pellegriniana* play an important role in the forest ecology, notably in the spatial structure of plant communities by attracting predators that facilitate their dispersion and regeneration.

### 4. Status and trends

#### 4.1 Habitat trends

Today, the gradual decline in area of the dense rainforests of Central Africa has been sufficiently documented. Most recent estimates concerning the entire sub-regional forest indicate that total deforestation recorded between 1999 and 2012 had reached 4.6 % of the forest cover (dense rainforest) which remained in 2012 (de Wasseige, 2015).

The ranges of *Guibourtia pellegriniana* and *Guibourtia tessmannii*, however, concern the zones of dense rainforest where the rate of deforestation is lower than that of the forest area as a whole. This is notably the case for Gabon's forests, where deforestation is less than 0.1 % at national level; moreover, the rate of degradation is limited to 0.3% (Tchatchou *et al.*, 2015)

#### 4.2 Population size

The low density of the different Bubinga species occurring in forests on firm soil has been noted by forestry companies since the valorisation of the African areas during colonial times. "These trees are generally highly dispersed and their stands scarce" (Méniand, 1931). More recent studies have confirmed this low population density (Tosso *et al.*, 2015a).

In Gabon, a number of estimates of the existing stock have been extrapolated from local inventories. Based on the concept of sustainable yield for logging, these estimates relate more to the volumes of wood products than to the populations of the species concerned. In 1975, the Centre Technique des Forêts Tropicales announced a probable stock of Kevazingo (*Guibourtia tessmannii* and *Guibourtia pellegriniana*) of between 3 and 7 million m<sup>3</sup> for the whole of Gabon. In 1995, the Gabon directorate-general in charge of inventories (DIARF) significantly raised this estimate to a 7 to 13 million m<sup>3</sup> bracket. However, these estimates should be treated with caution. After analysing the inventory data mentioned above, Christy noted in 2003 that "timber stocks in Gabon are not reliably known" (Christy *et al.*, 2003, pages 75 to 77). In the two other range states

<sup>(13)</sup> See photographs in Annex 2a and the full description in Annex 2b.

(Cameroon and Equatorial Guinea), the size of the populations has not been the subject of national estimates.

However, sound population estimates do exist at local level. In fact, for 15 years, legislation in the range states has required specific inventories to be maintained for all harvested forest species as part of the sustainable management of forestry concessions for timber production.

In Gabon, the management inventories carried out in sustainably managed forest concessions (Concessions Forestières sous Aménagement Durables, CFAD) have confirmed the presence of low density, sparse populations of *Guibourtia tessmannii* and *Guibourtia pellegriniana*. Information on management data could be obtained for 7 CFADs, covering a total area of 1.6 million hectares. This data reveals a commercial volume of Kevazingo of between 0.00009 m<sup>3</sup>/ha and 0.0045 m<sup>3</sup>/ha (see Annex 6a).

Since this data does not concern all classes of diameter (and taking into account that the classes considered vary among the 7 CFADs), it is not possible to deduce from the data provided what the density of the established populations is in stems per hectare. Based on the average commercial volumes, population densities would appear to be extremely low. It is likely that these densities are more significant in other CFADs where forest management is certified by the Forest Stewardship Council (FSC) and where Kevazingo is harvested sustainably. The inventory figures of the certified CFADs, totalling an area of more than 1.75 million hectares (see Annex 6a) are able to provide more detailed information on the populations of *Guibourtia tessmannii* and *Guibourtia pellegriniana*.

In Cameroon, *Guibourtia tessmannii* has been identified in around 20 concessions managed for the sustainable production of timber across a total area of nearly 1.6 million hectares. The management inventories there all revealed extremely low densities of between 0.0018 stems (>20 cm) / ha and 0.06 stems (>20 cm) / ha (see Annex 6b). In 13 of the 20 concessions considered, this very low representation led to the decision to ban logging of *Guibourtia tessmannii* as part of the management plan.

#### 4.3 Population structure

In Gabon, the results of the inventory and the management plans of the CFADs are not public documents. This is unfortunate, since the results of the management inventory enable a curve of the population structure to be drawn up based on actual inventories according to diameter classes. The population structures given below are the result of management inventories of only two CFADs and cannot therefore be used to extrapolate for the whole of the range in Gabon.

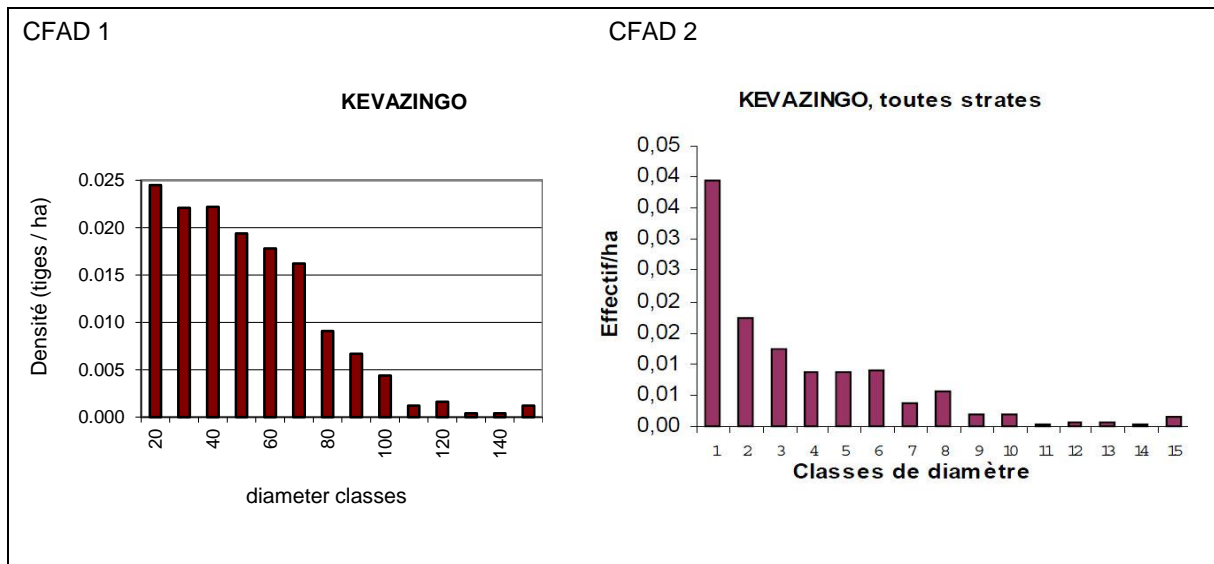
In Cameroon, the CFAD management plans are public. However, due to the very low densities recorded in all the CFADs where *Guibourtia tessmannii* has been identified by the management inventories (see Annex 6b), they are not a suitable basis for drawing up the population structure for the species, either for the areas inventorised or *a fortiori* at national level.

In spite of this reservation, the population structures of *Guibourtia tessmannii* have been described in distribution curves by diameter class in most of the management plans of CFADs where inventories of the species have been taken in Cameroon. These distribution curves are consistently unfavourable<sup>(14)</sup>. Since 1998, the project API Dimako, in support of the sustainable management of Cameroon's forests, had warned that the decision to exploit species with such unfavourable curves could lead to extinction at local level (FORAFRI 1998, page 112).

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<sup>(14)</sup> With the notable exception of forest management unit 09-024. In this FSC certified concession *Guibourtia tessmannii* is harvested, but the minimum diameter was raised from 80 cm (minimum diameter cutting limit) to 110 cm (minimum diameter management) as part of the sustainable management of the species.

Figure 1. Population structures (distribution curves) in two CFADs in Gabon



#### 4.4 Population trends

It is difficult to precisely determine the population trends of *Guibourtia tessmannii* and *Guibourtia pellegriniana*. On the one hand, the size of their populations is not accurately known (see above), while on the other, the influence of harvesting on the regenerative capacities of these populations has not been adequately evaluated. This is partly due to the continuing gaps in knowledge on the dynamics of stands, the phenology and dispersal methods of these species.

However, it is to be assumed that their regeneration potential is limited, irrespective of their exploitation as lumber, primarily because of their low densities and the changes to the populations of their seed disperser species. Regeneration of these species is very clearly deficient in several regions of their range where it has been possible to study their populations and the dynamics of their stands in greater detail (*Precious Woods*, 2014, *Tosso et al.*, 2015a).

#### 4.5 Geographic trends

The lowest densities are probably to be found in the forest regions situated at the edge of the range. In the case of *Guibourtia tessmannii* and *Guibourtia pellegriniana*, these peripheral regions of the range are the south of Nigeria, the east of Cameroon, north Mayombe (Congo) and the east of Sangha (Congo and Central African Republic).

### 5. Threats

In the course of the conversion to sustainable management of the major forest concessions earmarked for lumber production from the beginning of the 2000s, the inventory data collected in Cameroon and Gabon clearly demonstrated that logging levels have to be managed with care. *Guibourtia tessmannii* and *Guibourtia pellegriniana*, more particularly, are characterised by relatively low population densities. These low densities may prove all the more detrimental to their conservation across the whole of their range because their regeneration is affected at local level by the changes to the relative populations of predators and natural dispersers of their seeds (relative increase in the populations of African pouched rat (*Crycetomys emini*) (*Tosso et al.*, 2015a).

The low densities recorded in all the areas where inventories of these two species have been carried out are likely to have suffered negative impacts from the commercial use of Kevazingo and Bubinga since the start of the colonial era <sup>(15)</sup>, notably through the higher levels of harvesting recorded between 1990 and 2010 (see section 6 below).

By increasing the pressure on populations and encouraging the development of illegal logging networks in the main range states, the increase in the value of the woods of *Guibourtia tessmannii* and

<sup>(15)</sup> Many experts have hypothesised on historic overexploitation of species with a high commercial value. In this context, see in particular some of the conclusions of the project *Forêts et Terroirs au Cameroun (BFT 2004)*.



*Guibourtia pellegriniana* on international markets clearly constitutes a threat to the conservation of both species.

## 6. Utilisation and trade

### 6.1 National utilisation

The trees of *Guibourtia tessmannii* and of *Guibourtia pellegriniana* have a socio-cultural importance throughout their ranges. They are considered sacred in common traditions (Nke Ndihi, 2014), and their barks have medicinal properties broadly shared by local pharmacopoeia (Tosso *et al.*, 2015a). Fermented extracts of the leaves and bark of Bubinga are also used as natural pesticides against brown root rot in the cocoa plantations of the central region of Cameroon (Sonwa, 2002).

The wood of Bubinga / Kevazingo has always been prized on domestic markets of its range states, where it is traditionally viewed as one of the most precious woods for carpentry and cabinetmaking (alongside, primarily, Wenge, Moabi, Doussie and Assamela). This is very clearly the case in the south of Cameroon (Betti, 2012). Today on informal timber markets in Cameroon, the price per m<sup>3</sup> of sawn Bubinga wood ranges from 84,000 FCFA (Yaoundé market) to 355,000 FCFA (Douala market) (MINEPA, T 2014 ; Kana *et al.*, 2015). Since 2012, however, it has become very difficult to obtain Bubinga wood for domestic use in Cameroon, given that the volumes harvested are preferably directed towards the far more lucrative international market.

### 6.2 Legal trade

For many decades the tropical forests of Central Africa were exploited without any management. The sole regulatory constraints imposed on loggers were that they should hold a valid permit and respect the minimum diameter cutting limits which were laid down with no reference to scientific data <sup>(16)</sup>. During this period, several hundred million m<sup>3</sup> of *Guibourtia tessmannii* and *Guibourtia pellegriniana* were exported to international markets, principally to Europe (Table 2).

Since 2009-2010, commercial pressure for the wood of Kevazingo and Bubinga has increased dramatically, a circumstance closely linked to the growing demand on the Chinese markets for rosewoods valued in cabinetmaking and furniture production by the Chinese sociocultural tradition Hongmu (红木). While experiencing a boom arising from the development of the middle classes in the Chinese economy, traditional South-East Asian sources of supply for the Hongmu furniture industry have been shrinking. This is because a number of local rosewood species, long subject to overexploitation, are threatened with extinction and have been included in Appendix II of CITES. The high-end furniture sector, moreover, has been the object of speculative investments over the past years, and the sector's responsible parties in China announced in 2014 that they expected prices of high-end furniture and primary supply materials to continue to rise in the coming years (Wang Man, 2014).

The woods of the different Bubinga species, the aesthetic qualities of which are close to those of the Asian rosewood species which are most highly prized in the Hongmu tradition <sup>(17)</sup>, have gradually become established as the first choice alternative for this burgeoning sector <sup>(18)</sup>. In the course of the past five years, the expansion of this "Hongmu demand" for the supply of the Chinese markets has led to unprecedented interest in Bubinga in the main producing countries of its range, particularly in Gabon and Cameroon.

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<sup>(16)</sup> See section 7 (legal instruments).

<sup>(17)</sup> See Annex 3.

<sup>(18)</sup> The woods of *G. tessmannii*, *G. pellegriniana* (and *G. demeusei*) are not listed as first class Hongmu woods (A1) in the official standard of valuable red woods updated by the Chinese authorities in 2008 (QB/T 2385-2008). However, their inclusion in this list as class 2 Hongmu wood has been enough to set off the current craze for these species on the Chinese market. For a detailed analysis of this standard and its implications for species it lists see JIANG 2011 and FOREST TRENDS 2014,

For an example of advertising associating Bubinga / Kevazingo wood with the Hongmu standard, see Annex 4.

Moreover, it is worth noting that due to their status as Class A2 woods (rather than A1), the Chinese statistics do not classify Bubinga/Kevazingo woods as "rosewoods" (specific HS code 44039930), but as "standard" tropical woods (code HS 440399). This non-specific registration clearly does not make it easier to keep track of the trade.

Table 2. Volumes of *G. tessmannii* and *G. pellegriniana* exported by Gabon and Cameroon (m<sup>3</sup>) (\*) (\*\*)

	Gabon	Cameroon		Gabon	Cameroon
1987	20,487 (1)		2002	77,176 (4)	
1990	22,519 (2)	4,537 (1)	2003	50,632 (4)	3,459 (4)
1991	22,809 (2)		2004	51,288 (4)	2,559 (4)
1992	37,233 (2)		2005	58,627 (4)	1,427 (4)
1993	43,023 (2)		2006	56,000 (5)	1,368 (4)
1994	41,653 (2)		2007	63,051 (4)	2,120 (4)
1995	70,037 (2)	11,200 (1)	2008	76,232 (4)	1,415 (4)
1996	42,490 (2)	14,100 (1)	2009	78,075 (4)	1,421 (4)
1997	55,719 (3)	13,443 (2)	2010		2,663 (4)
1998	79,514 (3)	14,734 (2)	2011	17,210 (6)	2,802 (4)
1999	75,526 (3)	3,847 (3)	2012	30,318 (6)	1,372 (5)
2000	87,395 (4)	1,160 (3)	2013	17,458 (6)	1,293 (5)
2001	86,431 (4)	2,589 (4)	2014		1,679 (6)

Sources Gabon: (1) UICN 1990, (2) DIARF 2000, (3) Christy 2003, (4) ATIBT, (5) MPRA 2009, (6) Mapaga 2015

Sources Cameroon: (1) RdB 1999, (2) Mimbimi Essono P., 2000 ; (3) BM 2010, (4) ATIBT, (5) T Mahonghol *et al.* 2015, (6) CAMCOM 2015

(\*) Italics: sawn wood. To obtain volumes in RWE (roundwood equivalent) comparable to the other data, the factory output - around 30 to 40% - has to be taken into account and the values therefore multiplied by 3.

(\*\*) In Cameroon, official statistics make no distinction between pink Bubinga (*G. tessmannii* / *G. pellegriniana*) and red Bubinga (*G. demeusei*) for all the years listed in the table.

In the course of the past four years, the official volume of sawn timber exports (expressed in *roundwood equivalent* (RWE) was between 50,000 and 100,000 m<sup>3</sup> in Gabon and between 5,000 and 10,000 m<sup>3</sup> in Cameroon.

Table 3. Evolution of Bubinga / Kevazingo prices on the international markets

	Price (m <sup>3</sup> )	Specifications	Source	Comparisons
2006	457 €	Bubinga logs export	ITTO Tropical Market Report	Doussie 457 € Afromrosia 391 €
2007	533 €	Bubinga logs export	ITTO Tropical Market Report	Padouk 305 € Moabi 297 €
2008	533 €	Bubinga logs export	ITTO Tropical Market Report	Padouk 259 € Moabi 259 €
2009	500 €	Bubinga logs export	ITTO Tropical Market Report	Padouk 310 € Moabi 270 €
Dec. 2011	790 €	Bubinga logs export	ITTO Tropical Market Report	Padouk 380 € sawn wood Padouk 850 €
Feb. 2015	1,840 – 2,125 €	logs Bubinga (dia+80)	ITTO Tropical Market Report (Guangzhou Yuzhu Wholesale Prices)	logs Wenge 700 €
	1,910 – 2,235 €	sawn wood Bubinga	ITTO Tropical Market Report (Shanghai Furen Wholesale Prices)	African rosewood 920 €
	1,230 – 4,800 €	logs Kevazingo (€ / tonne, all qualities)	ITTO Tropical Market Report (Zhagijagang Timber Market Wholesale Prices)	logs Padouk 540 € logs Wenge 710 € logs Afro 920 €

### 6.3 Parts and derivatives in trade

While official export statistics of *Guibourtia tessmannii* and *Guibourtia pellegriniana* producer countries only give information on sawn wood, logs are also traded on the international market (see latest data in the table above and Annex 10). It is possible that logs offered on the international market do in fact consist primarily of red Bubinga (*Guibourtia demeusei*) rather than Kevazingo (see section 9).

Container exports of raw, squared sawn wood, still containing the sapwood, are very common. There is currently no export in the form of veneers, peelings or slices.

## 6.4 Illegal trade

Constrained by the requirement to renew resources in their sustainably managed concessions, industrial logging companies operating in the official sector are only able to respond to a small section of the increased demand observed since 2010. In the remainder of the sector, the prospects of realising substantial financial benefits has quickly given rise to informal, illegal logging rings aimed at supplying illicit networks exporting to the People's Republic of China.

In Cameroon, the proliferation of illegal logging of and trade in Bubinga has been proven for several years (Betti, 2012 (pages 72-78) ; TRAFFIC 2015, (page 14)). The cases of illegality are furthermore documented by a number of recent official sources. See in particular (i) the reports by the independent observer to the forest supervisory body and regarding forestry offences (e.g. reports 61, 63, 65, 70, 71 published by AGRECO-CEW), (ii) the 2013 government status report 2013 on combatting corruption in Cameroon (CONAC 2013), and (iii) the register of forestry offences updated in September 2015 (identifying around 15 disputes relating to the harvesting of and trade in Bubinga (MINFOF 2015)).

In Gabon, cases of illegal harvesting of and trade in Kevazingo have also been proven since 2012. But it is principally since 2015 that the magnitude of the phenomenon has become apparent, following the uncovering of several illegal networks in which some of the forest administration was implicated. Press articles describing the latest developments can be accessed on the webpages of the Gabonese NGO conservation-justice (<http://www.conservation-justice.org/CJ/?lang=fr>).

While national statistics on exports of the species concerned appear to indicate a relative decline in logging compared to the figures at the end of the 1990s ((17,458 m<sup>3</sup> of sawn Kevazingo wood in Gabon in 2013, 1,679 m<sup>3</sup> of sawn wood of Bubinga in Cameroon in 2014), the actual volumes of illegally harvested wood are much higher. The fact is that a large part of these volumes are taken with a view to supplying unofficial and illegal export channels and are hence not formally declared or recorded in the export statistics.

## 6.5 Actual or potential trade impacts

Due to the low density of their populations and their difficulties in regenerating, all exploitation of *Guibourtia tessmannii* and *Guibourtia pellegriniana* which does not conform to the regulatory restrictions imposed by the Forest Codes in the range states (legality of permits, compliance with the minimum diameters, sustainable management in the case of industrial concessions <sup>(19)</sup>) is detrimental to the conservation of the species and risks contributing to their disappearance at local level.

It is clear that unless vigorous action is taken quickly to prevent illegal logging networks supplying international markets, the populations of *Guibourtia tessmannii* and *Guibourtia pellegriniana* will decline even further and the species will disappear from those regions in the range where their situation is currently the most precarious.

## 7. Legal instruments

### 7.1 National

Since the 2000s, the regulatory framework has evolved in the range states. It has gradually imposed sustainable management in the large industrial concessions, and to some extent this has led to a reduction in harvesting of *Guibourtia tessmannii* and *Guibourtia pellegriniana* in the managed areas <sup>(20)</sup>.

The exploitation of these species in the form of logs was prohibited in Cameroon (1999) <sup>(21)</sup> and in Gabon (2010). Nevertheless, harvesting these species is still authorised under rural forest permits

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<sup>(19)</sup> It has not been scientifically established that the legal requirements of forest management, as they are currently formulated and implemented in the forest concessions of the range states, effectively guarantee the conservation of populations of tree species of low density and problematic regeneration. See section 7.

<sup>(20)</sup> In Cameroon, the low density of *Guibourtia tessmannii* in 13 of the 20 concessions inventorised in the course of sustainable management led to the decision to prohibit exploitation of this species.

<sup>(21)</sup> This ban was relaxed in 2001 with the adoption of an export quota for the loggers. The official statistics, however, have given no information on exports of pink Bubinga logs since that date.

(Gabon) and in non-permanent forest estates (Cameroon) where sustainable management with a view to conserving resources is not mandatory.

The minimum diameter cutting limits normally apply to all logging companies, irrespective of their exploitation rights. The diameters in force for *Guibourtia tessmannii*, *Guibourtia pellegriniana* and *Guibourtia demeusei* in the main range states are set out in Table 4 below.

Table 4 Minimum diameters in range states		Gabon	Cameroon	Congo	CAR	DRC
<i>Guibourtia tessmannii</i>	Bubinga (pink)	90 cm	80 cm	80 cm	/	/
<i>Guibourtia pellegriniana</i>	Kevazingo (Gabon)	90 cm	80 cm	/	/	/
<i>Guibourtia demeusei</i>	Bubinga (red)	70 cm	80 cm	80 cm	60 cm	60 cm
	Ebana (Gabon)					

However, in the case of Kevazingo and Bubinga, complying with minimum diameters does not constitute a scientific guarantee at the present time. "Exploitation of forests in central and western Africa is subject to a series of legal measures intended to ensure sustainable management. On the technical level, one constraint imposed on loggers is a fixed minimum diameter [...]. These diameters have to be revised upwards by the loggers if they do not allow adequate regeneration after a first rotation. The main failing of these minimum diameters, however, is that they are not generally founded on a scientific basis. In actual fact, fruiting diameters should be taken into account in order to preserve the seed production. Unfortunately for the species of the genus *Guibourtia*, data on this is lacking" (Tosso *et al.*, 2015a)

At the beginning of the 2000s, the scientific community recommended that the forestry administrations of central African countries set restrictive harvesting conditions to support the management of species which are in demand on the international market but which suffer from low densities, weak population structures and poor rates of regeneration (criteria which apply to *Guibourtia tessmannii* and *Guibourtia pellegriniana*). The following are the main recommendations:

- Fix a minimum density threshold for trees per km<sup>2</sup>, below which harvesting of the species concerned is banned for the duration of the management; this threshold could be 5 stems/km<sup>2</sup> ;
- Stipulate that all exploited species must be managed, that is to say, they should be subject to a regeneration calculation after harvesting, with a view to a possible increase of the minimum diameter cutting limit (BFT 281 (2000)).

These recommendations have not been transposed into legal requirements in the range states of Bubinga / Kevazingo. They are nevertheless implemented in some FSC certified concessions <sup>(22)</sup>.

## 7.2 International

No international instrument has been developed and implemented.

## 8. Species management

### 8.1 Management measures

Support programmes for the regeneration of *Guibourtia tessmannii* and *Guibourtia pellegriniana* have been in place for several years in a number of FSC certified forest concessions in Gabon and in Cameroon (Precious Woods, 2014 ; Tosso *et al.*, 2015a, 2015b).

<sup>(21)</sup> Notably in FMA 09-024 in Cameroon, where *Guibourtia tessmannii* is felled at a minimum diameter 30 cm higher than the administrative minimum (namely 110 cm instead of 80 cm).

## 8.2 Population monitoring

Not applicable

## 8.3 Control measures

### 8.3.1 International

To date, none of the three species considered in this proposal (*G. tessmannii*, *G. pellegriniana*, *G. demeusei*) has been the object of an evaluation for the IUCN Red List of endangered species.

### 8.3.2 Domestic

Concerned about the potentially disastrous impact of the expansion of fraudulent and uncontrolled trade on the regeneration prospects of the species concerned, from 2011 in Cameroon and 2014 in Gabon, forest management administrations adopted restrictive measures aimed at closer regulation of the harvesting and trade of Bubinga and Kevazingo.

However, these measures primarily took the form of an obligation to hold supplementary permits for harvesting and trading in the species concerned, as well as other regulations relating to the auctioning system for confiscated woods (MINFOF (2011), MINFOF (2012a), MINFOF (2012b), MFEPRN (2014)). They have had only a limited effect on the intensity of traffic in Bubinga and Kevazingo woods.

Faced with an increasingly worrying situation, the Gabonese government decided to act resolutely. On 24 November 2015, the Ministry for the Protection of the Environment and Natural Resources adopted a decree suspending all harvesting of Kevazingo throughout its national territory (MPERNFM (2015)).

This decree was issued for conservation reasons. A multidisciplinary national control strategy is currently being put in place by the government of Gabon with the aim of ensuring that the conditions needed for legal logging which is not detrimental to the regeneration of this resource are formally established before harvesting of and international trade in Kevazingo are again authorised.

At the Council of Ministers of 12 February 2016, His Excellency Omar Bongo, President of the Gabonese Republic underlined these provisions with the announcement of "the ban on exports of Kevazingo, Moabi and Douka so that these species exclusively undergo tertiary processing into finished products in Gabon". He also announced that "exports of the wood were to be subject to stricter controls". The wish of the Gabonese Republic to include species marketed under the name of Kevazingo (*guibourtia tessmannii* and *guibourtia pellegriniana*) in Appendix II of CITES in line with Article II paragraph 2a of the Convention is very firmly anchored in this rigorous national strategy. Including these species in Appendix II of CITES will make it possible to improve the prospects of conserving them in their range, while drastically strengthening controls of the export of their woods – all within the framework of an international convention which is applicable in all the importing countries.

In order to take into account the decision of the Gabonese authorities to only authorise exports of Kevazingo wood as tertiary processed products, the inclusion of the species *Guibourtia tessmannii* and *Guibourtia pellegriniana* in Appendix II of CITES must encompass all products and by-products arising from the processing of their woods. The annotation envisaged for the inclusion in Appendix II of CITES is therefore No. 4 (see section A).

## 8.4 Captive breeding and artificial propagation

## 8.5 Habitat conservation

The available facts primarily relate to the protected ranges of Cameroon and Gabon.

In Cameroon "*Guibourtia tessmannii* is found in four protected ranges in the littoral region: Ebo National Park, the Douala Edéa Forest Reserve, Mount Lonako Forest Reserve and Nkongsamba Forest Reserve. *Guibourtia tessmannii* also occurs in the national parks of Campo Ma'an (south region) and Lobeke (east region)" (TRAFFIC 2015). The inventory of the So'o lala Forest Reserve, covering an area of 39,728 ha at the boundaries of the central, southern and eastern provinces of Cameroon, records a very low pink Bubinga (*Guibourtia tessmannii*) density of less than 0.01 stems / ha (ANAFOR 2008).

In Gabon, the management inventory of the Minkebe Reserve carried out in 1998 by DIARF as part of ITTO financing (2,439,150 hectares at a recognition rate of 0.2%) found a density of 0.05 stems / ha (DIARF 2000).

## 8.6 Safeguards

Not applicable

## 9. Information on similar species

### 9.1 Overview

It is important to take into account the marked resemblance of the woods of *Guibourtia tessmannii* and *Guibourtia pellegriniana* (Kevazingo, pink Bubinga) on the one hand and the wood of *Guibourtia demeusei* (Ebana, red Bubinga) on the other <sup>(23)</sup>. While the population densities of the third species seem of less concern and its range is more extensive than those of *Guibourtia tessmannii* and *Guibourtia pellegriniana*, it is nevertheless under pressure from the growth in demand on the international market; primarily due to the popularity of Hongmu class woods in China.

Furthermore, the marked similarity between its wood and that of *Guibourtia tessmannii* and *Guibourtia pellegriniana*, their common names in Cameroon and on international markets, as well as the fact that their ranges overlap, are key factors leading to confusion on the international markets. This confusion could enable underground illegal networks to continue trading in *Guibourtia tessmannii* and *Guibourtia pellegriniana* despite their inclusion in Appendix II of CITES.

Consequently, it would be highly desirable to include the species *Guibourtia demeusei* in Appendix II of CITES at the same time as *Guibourtia tessmannii* and *Guibourtia pellegriniana*, applying Article II, paragraph 2 b) of the Convention (reasons of resemblance).

### 9.2 Range / state of populations

The populations of *Guibourtia demeusei* are present in flooded forests which line major watercourses. Their range is more extensive than those of *Guibourtia tessmannii* and *Guibourtia pellegriniana*, covering the north of the Republic of the Congo, the south of the Central African Republic and the provinces of Bandundu, the Equator and the Kasai in the Democratic Republic of the Congo.

The populations of *Guibourtia demeusei* are dispersed – in densities that can be high locally – in flooded forests which line major watercourses. Their range is more extensive than those of *Guibourtia tessmannii* and *Guibourtia pellegriniana*, covering the north of the Republic of the Congo, the south of the Central African Republic and provinces of Bandundu, the Equator and the Kasai in the Democratic Republic of the Congo <sup>(23)</sup>. Locally, the species is known as Paka in the Republic of the Congo and the Central African Republic, as Waka in the Democratic Republic of the Congo <sup>(24)</sup>.

*Guibourtia demeusei* is a typical species of periodically inundated forests, swampy forests and riverine forests. They are particularly abundant in the Congo Basin, where they form genuine stands. The species sporadically extends into Gabon and Cameroon, following the watercourse (BAYOL & BORIE, 2004).

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<sup>(23)</sup> See map in Annex 1.5.

<sup>(24)</sup> For more specific local names in the range of *Guibourtia demeusei*, see table in section 1.6.

The species also occurs in the same type of environment in the south of the Central African Republic and in the north of the Republic of the Congo. In the latter, Heeketsweiler discusses the inundated forest of *Guibourtia demeusei* (copalier) in pure or almost pure stands, of small extent, located solely on the higher parts, periodically inundated, bordering the rivers in the north of the Congo Basin – regions of Enyélé and Ipdendja (UICN, 1990).

In the Central African Republic the PARN inventory carried out in 1996 estimated potential stands of *Guibourtia demeusei* (min. management diameter 60 cm) were in the order of 300,000 m<sup>3</sup> (Yele *et al.*, 2011). In the north of the Republic of the Congo, the management plan of the Kabo FMU(267,048 ha) indicates an average gross volume of 0.01 m<sup>3</sup>/ha for *Guibourtia demeusei* (with marked local variations) and a favourable population structure (CIB 2006).

### 9.3 Distinctive characteristics of the species

The particular habitat of *Guibourtia demeusei*, in inundated forests bordering large watercourses, constitutes a special element which enables it to be distinguished from *Guibourtia tessmannii* and *Guibourtia pellegriniana* during management inventories. The bole does not exceed 100 cm in diameter, and this is another notable identification marker compared to other Bubinga species in the forests of Central Africa.

The visual characteristics belonging to *Guibourtia demeusei* are depicted in Annex 8. The botanical features allowing specimens of the species *Guibourtia tessmannii*, *Guibourtia pellegriniana* and *Guibourtia demeusei* to be distinguished are summarised in a table provided by Tosso (Tosso 2014, pages 87-88).

The wood of *Guibourtia demeusei* is a sharper violet red than that of *Guibourtia tessmannii* or *Guibourtia pellegriniana* (hence it is known in Cameroon as red Bubinga rather than pink Bubinga). Like that of *Guibourtia pellegriniana*, its grain is a little finer than that of *Guibourtia tessmannii* (Bayol & Borie, 2004) <sup>(25)</sup>.

### 9.4 Utilisation and trade/ confusions with *Guibourtia tessmannii* and *Guibourtia pellegriniana*

The confusion between Kevazingo / pink Bubinga (species *Guibourtia tessmannii* / *Guibourtia pellegriniana*) and red Bubinga (*Guibourtia demeusei*) is very widespread on the international market. This confusion, made possible by the marked similarity of the woods of these three species, highlights a lack of knowledge on the part of technical workers and sales agents.

In this context, it is highly symptomatic that the Chinese industrial standard QB/T 2385-2008, which is doubtless partly responsible for the huge popularity of Bubinga on the Chinese market for high-end Hongmu furniture (Jiang, 2011 / Forests Trends 2014), maintains an "official" confusion between these three species (see Table 5 below).

Table 5. Confusion between *G. tessmannii*, *G. pellegriniana* and *G. demeusei* in the standard QB/T 2385-2008

表 A. 2					
序号	木材名称	树种名称		商品名	科别
		中文名	拉丁名		
1	格木	非洲格木	<i>Erythrophleum suaveolens</i> <i>Erythrophleum ivorense</i>	Tali	苏木科 Caesalpinaceae
2	缅甸木	缅甸木	<i>Afzelia xylocarpa</i>	Lingue	
3		非洲缅甸木	<i>Afzelia africana</i> <i>Afzelia bella</i> <i>Afzelia bipindensis</i> <i>Afzelia pachyloba</i>	Doussie	
4	印度木	越南印度木	<i>Dialium cochinchinense</i>	Nyamut	
5		印度印度木	<i>Dialium indum</i>	Dialium	

<sup>(25)</sup> For the differences between the woods of *Guibourtia demeusei* and *Guibourtia tessmannii*, see also Annex 3 (visual differences) and Annexes 2a and 2b (structural differences).

序号	木材名称	树种名称		商品名	科 别
		中文名	拉丁名		
6		阔萼茴木	<i>Dialium platysepalum</i>	Mpepete	苏木科 Caesalpiniaceae
7	古夷苏木	阿若古夷苏木	<i>Guibourtia arnoldiana</i>	Benge	
8		爱里古夷苏木	<i>Guibourtia ehie</i>	Ovengkol	
9		德米古夷苏木	<i>Guibourtia demeusei</i>	Bubinga	
10		佩莱古夷苏木	<i>Guibourtia pellegriniana</i>	Ebana	
11		特氏古夷苏木	<i>Guibourtia tessmannii</i>	Waka	

This confusion recurs at a number of levels along the chain of harvesting and international trading. In Cameroon, sales of standing volume allowed by the administration between 2011 and 2012<sup>(26)</sup> authorised sales of an accumulated volume of several dozen thousands of m<sup>3</sup> of red Bubinga (*Guibourtia demeusei*), compared to barely 1000 m<sup>3</sup> of pink Bubinga (*Guibourtia tessmannii* / *Guibourtia pellegriniana*) (Betti 2012). It is not easy to ascertain to what extent this discrepancy genuinely reflects the differences between the exploitable populations of the two species.

Such differences are not, in any case, apparent in the results of the management inventories in the forest concessions located in the regions where the sales of standing volume were permitted.

In the Democratic Republic of the Congo, batches of *Guibourtia demeusei* logs are placed on the market as Kevazingo (Annexes 11a and 11b). In the United States companies specialising in the sale of tropical wood products market woods identified as *Guibourtia demeusei* under the common names Bubinga, Kevazingo and Essingang (Annex 12c).

#### 10. Consultations

The conservation status of the species marketed under the names Bubinga and Kevazingo has been the subject of two regional workshops in June 2012 (Douala) and July 2015 (Yaoundé). The suitability of including these species in Appendix II of CITES was discussed by the participants.

The government of the Gabonese Republic is aware that its concerns and its will to sustainably manage its forest resources are shared by the authorities in neighbouring countries into which the ranges of the *Guibourtia tessmannii*, *Guibourtia pellegriniana* and *Guibourtia demeusei* extend. The government of the Gabonese Republic submitted this proposal to them with a view to obtaining their comments and ideas. Furthermore, it invited them to officially join the presentation of this proposal to the CITES Secretariat for consideration at the 17<sup>th</sup> meeting of the Conference of the Parties.

Finally, in April 2015, Cameroon, Congo, Equatorial Guinea and the Republic of the Congo were consulted in writing as range states of the species. At the point of submission, no response had been received from them.

#### 11. Additional remarks

#### 12. References

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<sup>(26)</sup> The sales of standing volume constitute permission to harvest without any obligation to manage the forest. The administration assigns a maximum area of 2,500 ha for a duration of two years, in non-permanent forest estates.



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### 13. Annexes

Annex 1.1. Range of *Guibourtia tessmannii*

Annex 1.2. Range of *Guibourtia pellegriniana*

Annex 1.3. Gabon: Forest concessions where *Guibourtia tessmannii* / *Guibourtia pellegriniana* is harvested

Annex 1.4. Cameroon: Forest concessions where management inventories indicate presence of *Guibourtia tessmannii*

Annex 1.5. Range of *Guibourtia demeusei*

Annex 2a. Microscopic identification of the woods of *Guibourtia tessmannii* (pink Bubinga / Kevazingo) and *Guibourtia demeusei* (red Bubinga / Ebana)

Annex 2b. Identification by microscopic description of the woods of *Guibourtia tessmannii*, *Guibourtia pellegriniana* and *Guibourtia demeusei*

Annex 3. Visual comparison of the woods of *Guibourtia tessmannii*, *Guibourtia demeusei* and *Dalbergia Cochinensis*

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Annex 5. *Guibourtia tessmannii* / *Guibourtia pellegriniana* (pink Bubinga, Kevazingo)

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Annex 6b. Densities of *Guibourtia tessmannii* (pink Bubinga) in 20 forest concessions under sustainable management in Cameroon

Annex 7. Suspected loads of Kevazingo in Gabon and Bubinga in Cameroon

Annex 8. *Guibourtia demeusei* (red Bubinga, Ebana)

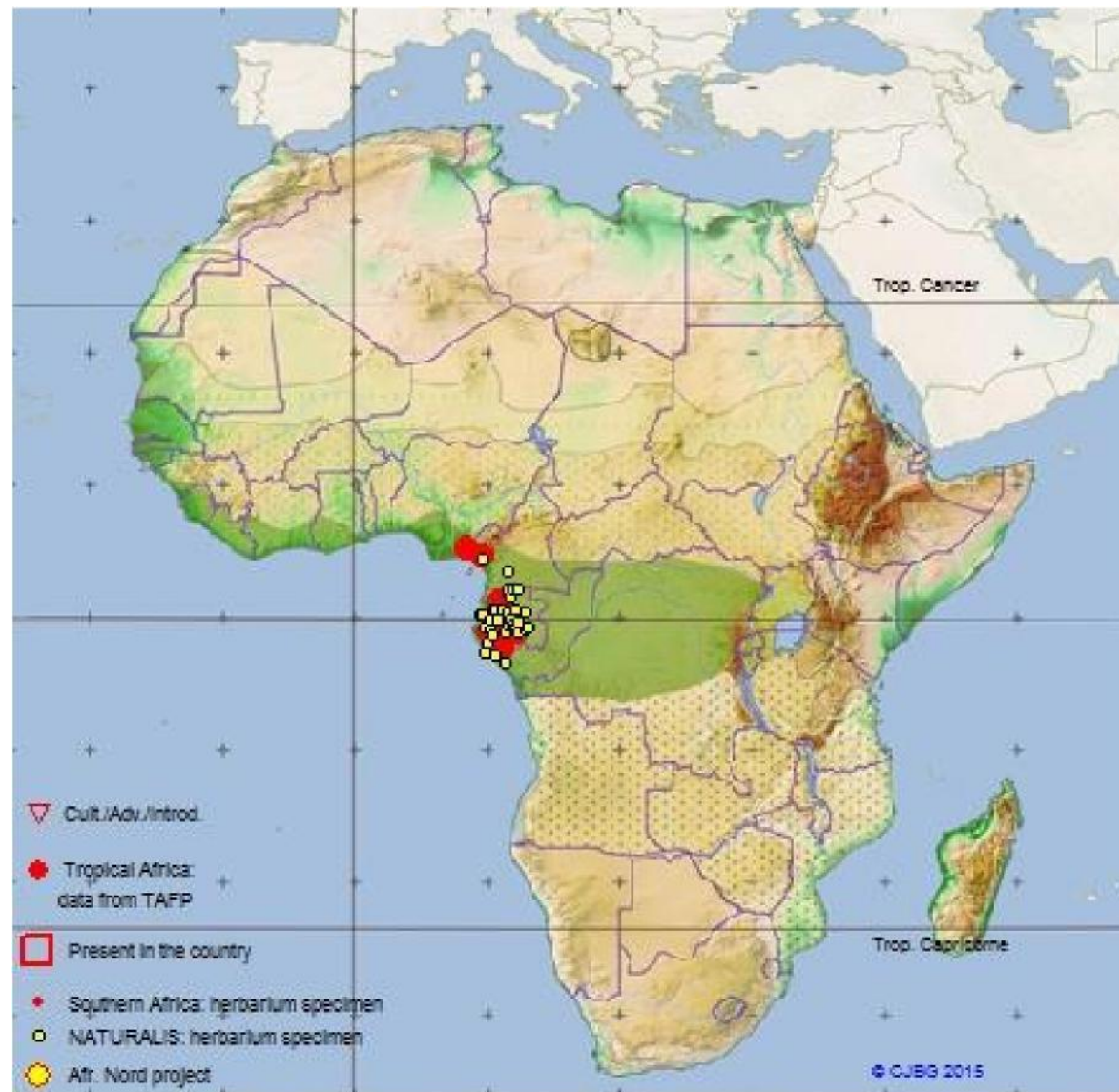
Annex 9. Interest in Kevazingo since the early years of colonialism (1914)

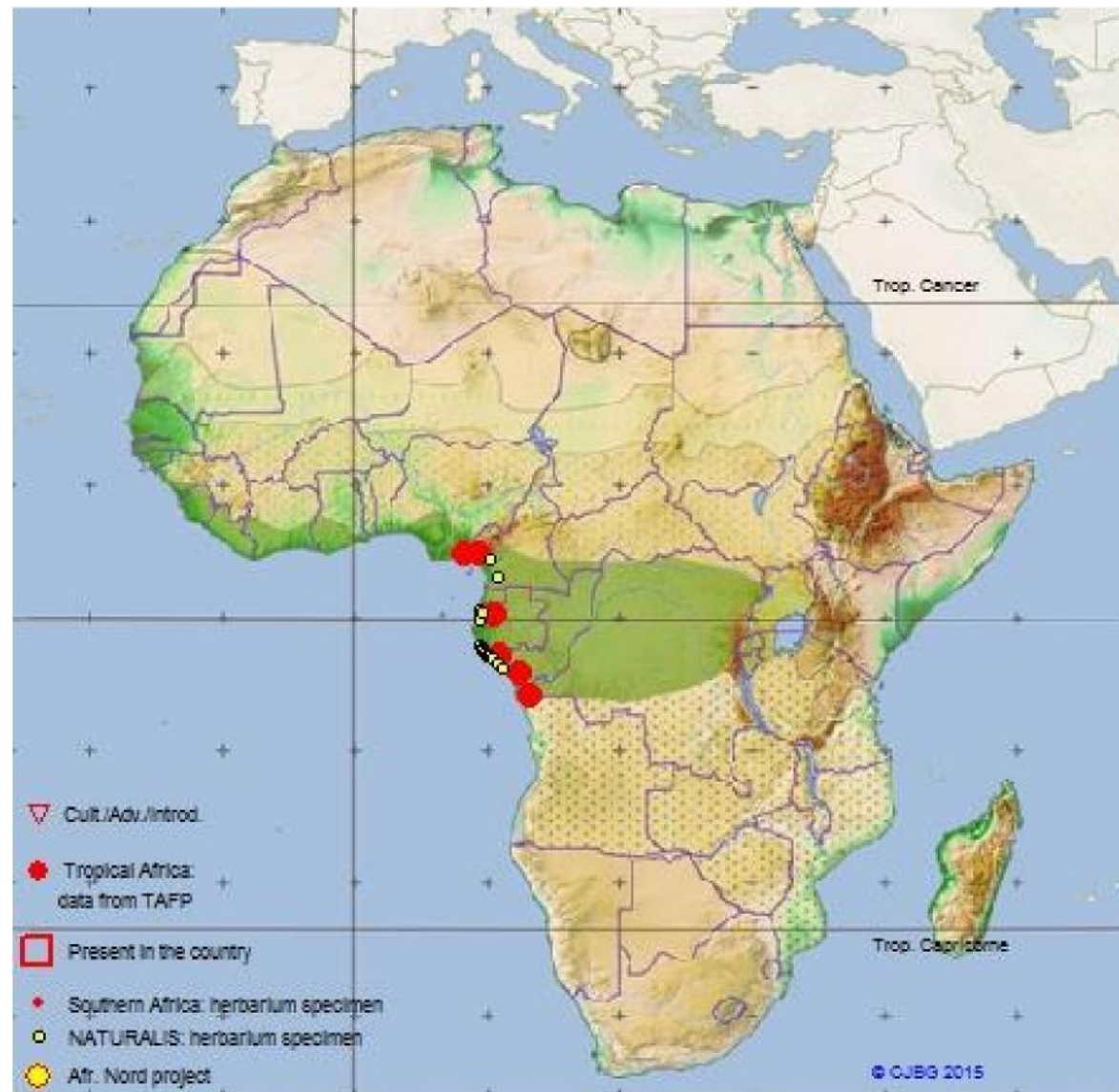
Annex 10. Kevazingo logs (stated origin Gabon) on sale on the international market

Annex 11a. Confusion between *Guibourtia tessmannii* and *Guibourtia demeusei* on the international market (*Guibourtia demeusei* from the Democratic Republic of the Congo, sold as Kevazingo)

Annex 11b. Confusion between *Guibourtia pellegriniana* and *Guibourtia demeusei* on the international market (*Guibourtia demeusei* from the Democratic Republic of the Congo, sold as Kevazingo)

Annex 11c. Confusion between *Guibourtia tessmannii* and *Guibourtia demeusei* on the international market (*Guibourtia demeusei* sold as Kevazingo / Essingang in the United States)





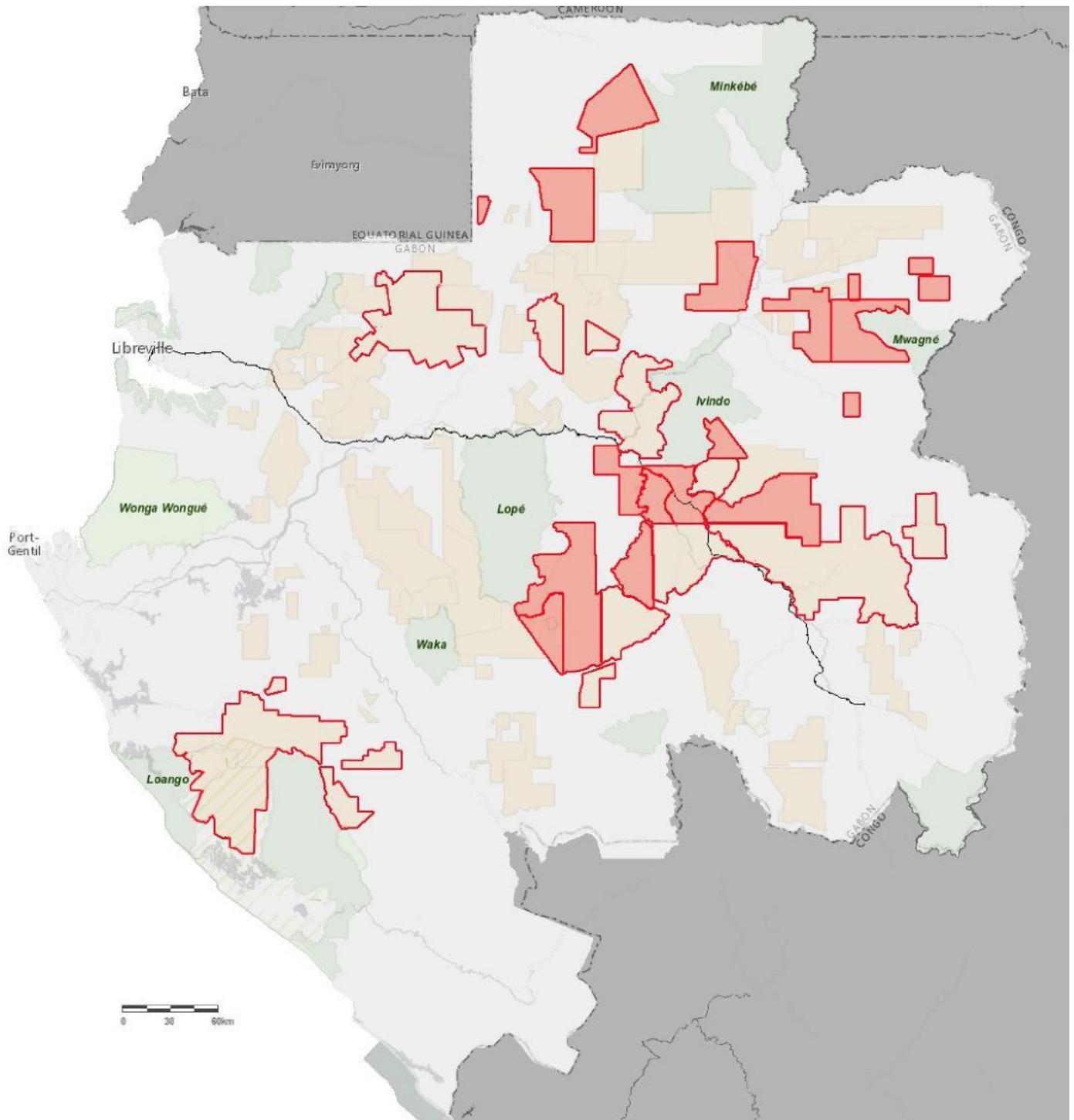


Annex 1.3. Gabon: Forest concessions where *Guibourtia tessmannii* / *Guibourtia pellegriniana* is harvested

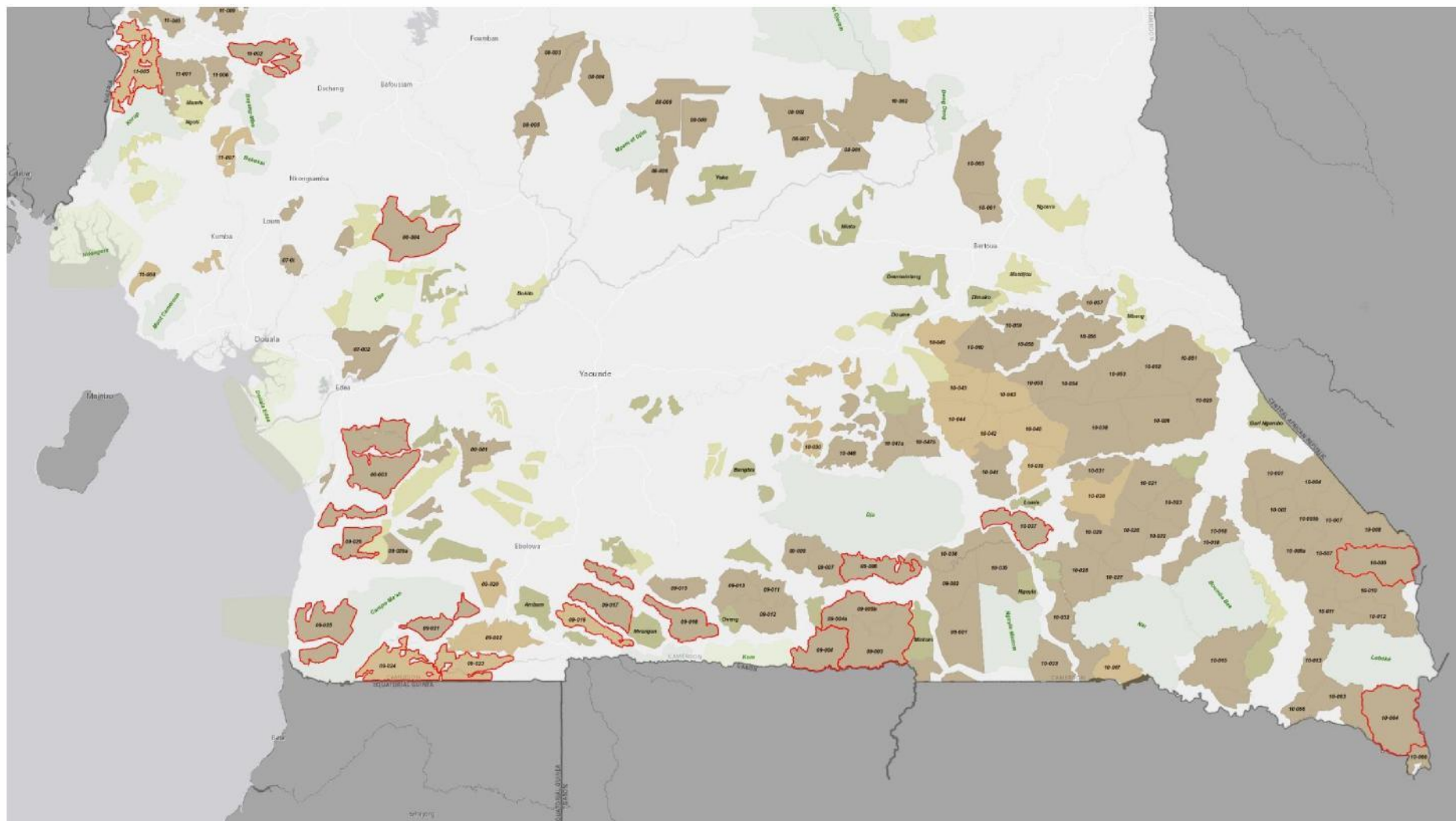
(Forest concessions outlined in red)

The forest concessions coloured pink are those for which the results of the management inventory are analysed in sections 4 and 5 and in Annex 6a.

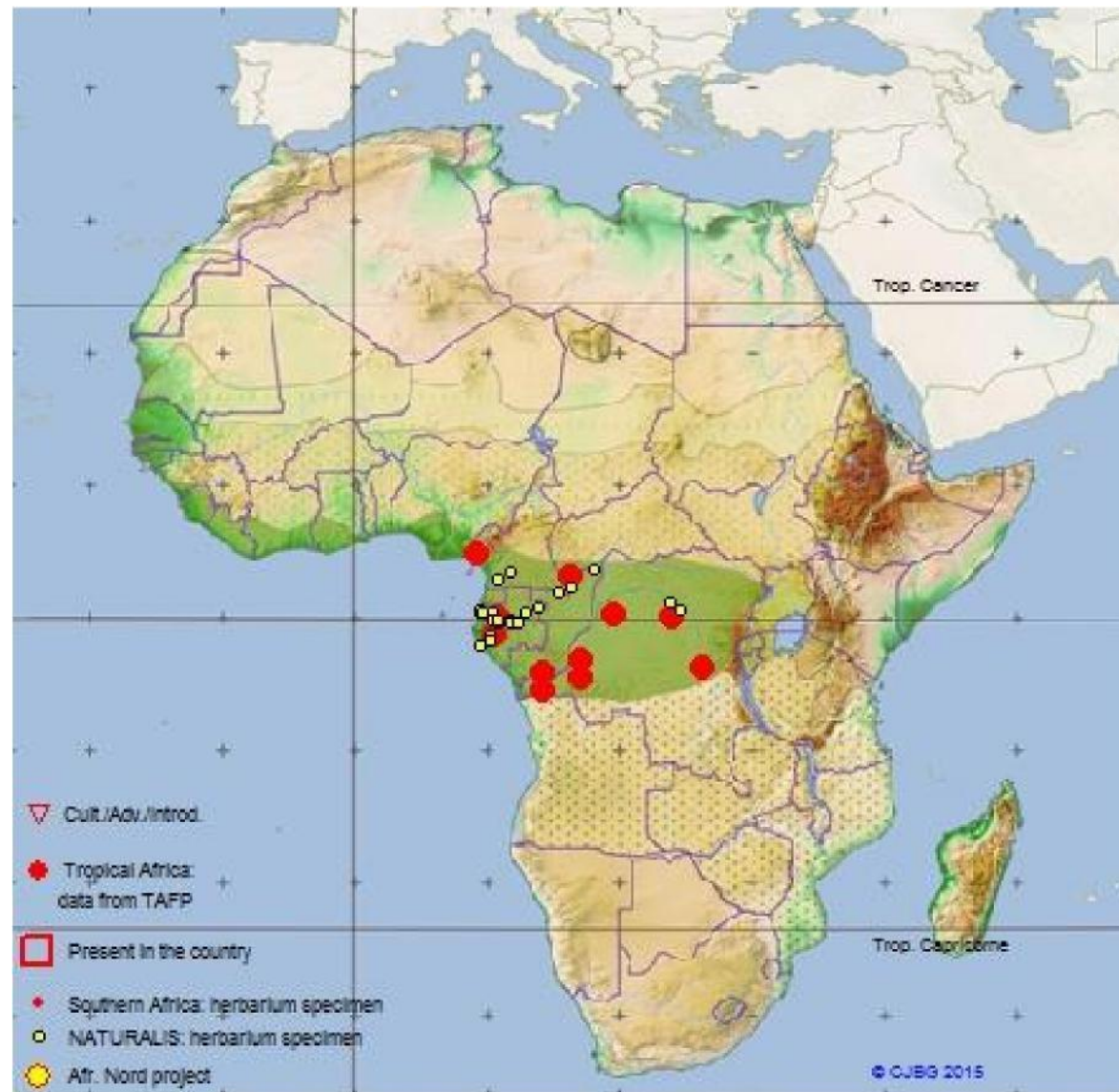
(Sources : Forest Atlas of Gabon <http://gab.forest-atlas.org/> - TRAFFIC 2015 – FSC various)



Annex 1.4. Cameroon: Forest concessions where the management inventories indicate the presence of *Guibourtia tessmannii* (source: Forest Atlas of Cameroon <http://cmr.forest-atlas.org>) (forest concessions outlined in red)



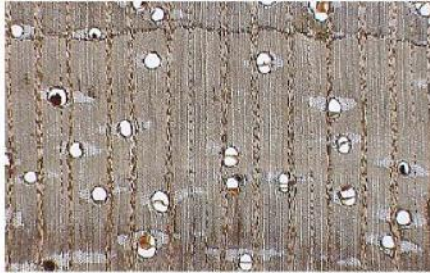
Annex 1.5. Range of *Guibourtia demeusi* (source : <http://www.ville-ge.ch>, Conservatory and Botanical Garden (CJB), Geneva)





Annex 2a. Microscopic identification of the woods of *Guibourtia tessmannii* (pink Bubinga / Kevazingo) and *Guibourtia demeusei* (red Bubinga / Ebana)  
 Note : the magnification factors of the sections are not the same for the different specimens.

*Guibourtia tessmannii*  
 (source : Thünen Institut)



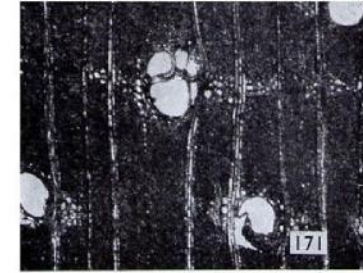
*Guibourtia demeusei*  
 (source : MRAC - échantillon Tw17698)



*Guibourtia demeusei*  
 (source : MRAC - échantillon Tw803)



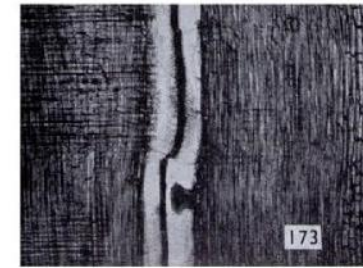
*Guibourtia demeusei*  
 (source : L. Lebacq, Bois congolais)



Section  
transversale



Section  
tangentielle



Section  
radiale

*Annex 2b. Identification by microscopic description of the woods of Guibourtia tessmannii, Guibourtia pellegriniana and Guibourtia demeusei*

(source : Thünen Institute, <http://delta-intkey.com/wood/fr/index.htm>).

**Guibourtia spp. (Bubinga) / Group of red timber (African rosewoods)**

**Nomenclature etc.** FABACEAE-CAESALPINIOIDEAE. *G. demeusei* (Harms) J. Léonard (syn.: *Copaifera demeusei* Harms, *C. laurentii* de Wild.); *G. pellegriniana* J. Léonard; *G. tessmannii* (Harms) J. Léonard (syn.: *Copaifera tessmannii* Harms). Trade name : kevazingo (DE, GA); essingang, noméle, okweni, owogn, simingan (CM); ovang (GA); oveng (GQ); waka (CG, CD); ebana, Afrikanisches Rosenholz, African rosewood (trade). Not protected under CITES regulations.

**Geographic distribution:** tropical Africa.

General growth ring boundaries distinct. Growth ring limits demarcated by marginal parenchyma and changes in vessel frequency; often wildly figured due to interlocked grain in combination with other grain deviations. Heartwood basically red to purple, with streaks (dark reddish brown to purple). Sapwood colour distinct from heartwood colour. Odour indistinct or absent. **Density 0.72–0.76–0.88** g/cm<sup>3</sup>.

**Vessels.** Wood diffuse-porous. Vessels in multiples, commonly short (2–3 vessels) radial rows. Average tangential vessel diameter: **60–140–220** µm. Average number of vessels /mm<sup>2</sup>: 1–3–5. Perforation plates simple. Intervessel pits alternate, average diameter (vertical) 7–9 µm, vestured. Vessel-ray pits with distinct borders, similar to intervessel pits. Helical thickenings absent. Tyloses absent. Other deposits in heartwood vessels present (light to dark reddish brown).

**Tracheides and fibres.** Fibres of medium wall thickness to very thick-walled. Average fibre length 1630–1780–1860 µm. Fibre pits mainly restricted to radial walls, simple to minutely bordered. Fibres non-septate. Fibre pits quite distinct.

**Axial parenchyma.** Axial parenchyma banded and not banded. Bands marginal (or seemingly marginal), fine. Axial parenchyma apotracheal and paratracheal. Apotracheal axial parenchyma diffuse or in chains (mostly thick-walled, often sclerosed, crystalliferous and located immediately adjacent to rays). Paratracheal axial parenchyma vasicentric, aliform and confluent. Axial parenchyma as strands. Average number of cells per axial parenchyma strand: (2–) 4–8.

**Rays:** 4–8 per tangential mms, multiseriate (1–)2–5(–6) cells wide. Height of large rays up to 500 µm, or commonly between 500 and 1000 µm. Rays composed of a single cell type (homocellular); homocellular ray cells procumbent.

**Secretory structures.** Intercellular canals present (rare) or absent, traumatic origin, axial orientation, axial type, in short tangential lines.

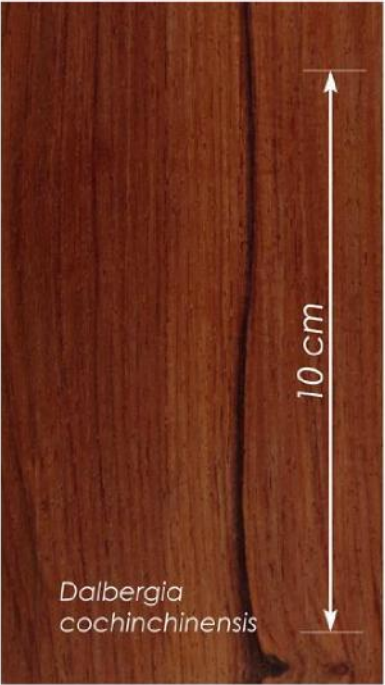
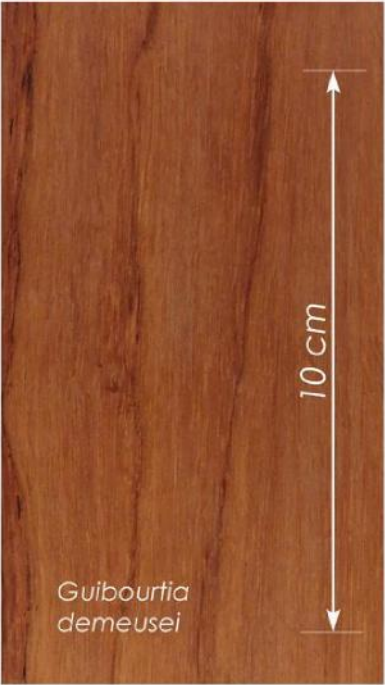
**Mineral inclusions.** Crystals present, prismatic, located in axial parenchyma cells. Crystal-containing axial parenchyma cells chambered. Number of crystals per cell or chamber: one. Cells/chambers often thick-walled. Silica not observed.

**Physical and chemical characteristics.** Heartwood not fluorescent. Water extract not fluorescent; colour of water extract red. Ethanol extract fluorescent (yellow). Colour of ethanol extract colourless to brown. Froth test positive. Splinter burns to partial ash. Colour of ash bright white.



Annex 3. Visual comparison of the woods of *Guibourtia tessmannii*, *Guibourtia demeusei* and *Dalbergia Cochinchinensis*

(source : <http://www.hobbithouseinc.com>)



Annex 4. Example of Hongmu sales promotion for the woods of Kevazingo / Bubinga (relevant references highlighted in red)

www.sghongmu.com/chanpinzhiishi/20150319/1.html  
(accessed on January, 25, 2015)



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非洲花梨简介

学名: 特氏古黄木 *Guibourtia tessmanii* J. Leonard

商品名: 卜宾佳(Bubinga); Essingang (喀麦隆); Kevazingo (加蓬); Waka (扎伊尔); Akume (美国); Ovang (赤道几内亚)。

俗称: 非洲花梨。

非洲花梨木生长西非和东非的热带雨林, 和中、西部非洲的热带地区。  
中文学名: 非洲紫檀 (African Padauk), 气干密度达不到0.76g/cm<sup>3</sup>, 大概是0.72g/cm<sup>3</sup>。尽管这种木材达不到红木标准, 此木在非洲产的亚花梨中是材质最好, 纹理最美的。区别。

首先介绍刺楸紫檀, 刺楸紫檀属于红木国际里面的紫檀属, 花梨木类。刺楸紫檀为散孔材, 半环孔材倾向明显。生长轮明显。心材桔红、砖红或紫红色, 常常深色条纹, 划痕可见至明显; 香气无或很微弱; 结构细; 纹理交错。气干密度0.85g/cm<sup>3</sup>。

木屑放在嘴里嚼一嚼吐出来, 口水变成褐色, 口腔有点光滑感。光泽强、量重。握钉力强。刨面光滑。木材性质稳定, 不易变形、开裂, 耐腐, 不生虫, 颜色不褪。心材板放在阳台上2年, 表面没有老化现象, 抹去灰尘, 还是那么新鲜。

刺楸紫檀主产于热带非洲, 又因其色泽、花纹与黄花梨相似, 所以市场上称其为“非洲黄花梨”、“非洲花梨木”、“非洲花梨”、“非花”, 这些都是不规范的名称, 是商家出于各种各样的目的而流行沿用起来的。这些不规范名称不能用来特指刺楸紫檀, 它们是广义范畴概念, 而刺楸紫檀就是特指一个树种, 是红木国际里面33树种之一。

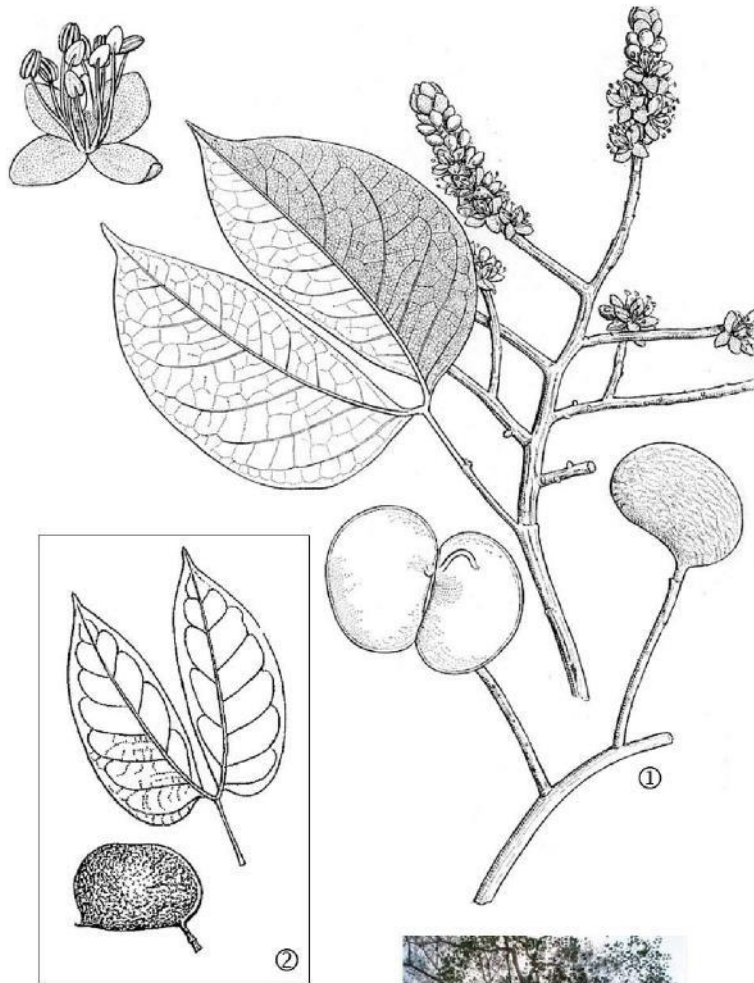
“非洲花梨木”从字面上来说, 应该是指非洲产的花梨木, 即是红木国际里面的刺楸紫檀。但是商家喜欢钻文字空子, 他们把不属于花梨木类的非洲木材, 如安氏紫檀、非洲紫檀等亚花梨、草花梨, 也称为“非洲花梨木”或“非洲花梨”, 这些非洲亚花梨、草花梨在木材性质上亚于花梨木, 达不到国际红木的标准, 所以没有列入红木范畴。它们打着“非洲花梨木”的招牌进入木材市场, 鱼目混珠。家具厂商用这些木材制作家具, 也就有了“非洲花梨木”家具 (本文所指的“非洲花梨木”家具是指以亚花梨、草花梨为木料的家具), 大批量的“非洲花梨木”家具充斥市场对真正的花梨木家具造成了不良的影响, 导致很多人误解了花梨木家具的品质。在外行人看来, “非洲花梨木”家具与真正的花梨木家具没有区别, 或者“非洲花梨木”家具就是花梨木家具, 无形之中就把花梨木家具定位在低端的层面上, 只有深入了解红木家具的人, 才知道真正的花梨木家具比“非洲花梨木”家具优越得多。简单来说, “非洲花梨木”与刺楸紫檀的区别在于刺楸紫檀是真正的花梨木, 属于红木, 但“非洲花梨木”不一定是红木里面的花梨木, 大部分“非洲花梨木”是亚花梨、草花梨, 它们不属于红木。这是“非洲花梨木”与刺楸紫檀的本质区别。所以商家所说的“非洲花梨木”有可能是红木刺楸紫檀, 也有可能是非洲的亚花梨、草花梨等红木木材, 因此大家要警惕了。

上一篇: 没有了

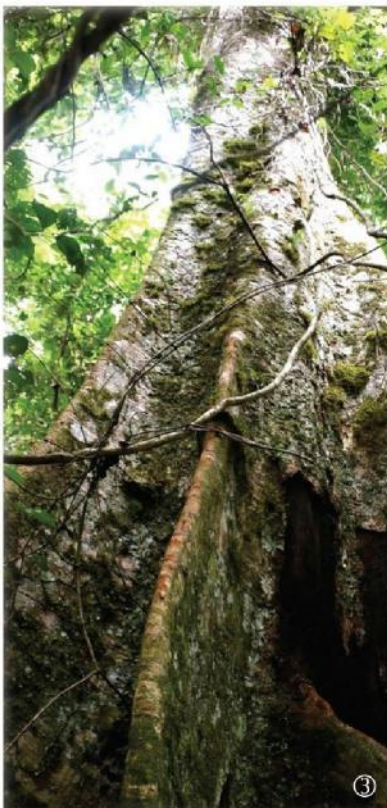
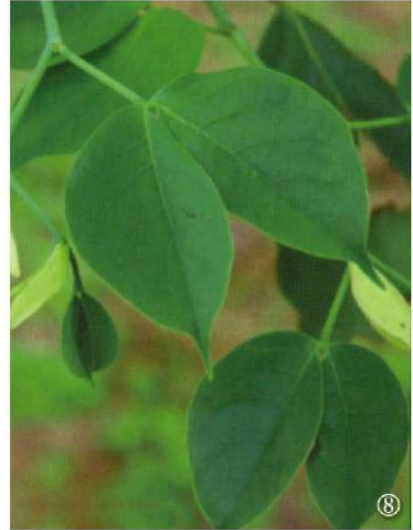
下一篇: 红木家具的保养



Annex 5. *Guibourtia tessmannii* / *Guibourta pellegriniana* (pink Bubinga, Kevazingo)



*Guibourtia pellegriniana*



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7. JL Doucet
8. Meunier 2015
9. JL Doucet

Annex 6a. Densities of *Guibourtia tessmannii* / *Guibourtia pellegriniana* in forest concessions under sustainable management in Gabon

Forest permit	Area	Diameters considered (cm)	Gross volume (m <sup>3</sup> )	Average trade volume (m <sup>3</sup> /ha)	Source
CIPLAC	197,669 ha	70-125	226	0.00068537	TRAFFIC 2015 (Sylvafrica 2014)
SUNLY Sud	209,152 ha	70-125	1,585	0.00454711	TRAFFIC 2015 (Sylvafrica 2014)
CORAWOOD UFA 1	150,242 ha	70-125	482	0.00192475	TRAFFIC 2015 (Sylvafrica 2014)
CORAWOOD UFA 2	235,595 ha	70-125	223	0.00056892	TRAFFIC 2015 (Sylvafrica 2014)
BORDAMUR Rimbunan Hijau	264,595 ha	63-125	508	0.00115136	TRAFFIC 2015 (Sylvafrica 2014)
LEROY UFA 1	240,591 ha	40-85	36	0.00008951	TRAFFIC 2015 (Sylvafrica 2014)
TBNI	283,908 ha	62-125	1483	0.00313471	TRAFFIC 2015 (Sylvafrica 2014)
	1,581,752 ha				

Densities of *Guibourtia tessmannii* / *Guibourtia pellegriniana* and production volumes in FSC certified CFADs in Gabon

Forest permit	Area	Densities (stems / ha)	Volumes exploited 2014 (m <sup>3</sup> )	Volumes exploited 2015 (m <sup>3</sup> )	Source
CBG	568,543 ha				FSC
Rougier Haut Abanga	288,626 ha				FSC
Rougier Ogooué Ivindo	282,030 ha				FSC
Precious Woods	616,700 ha				FSC / Mapaga 2015
	1,755,899 ha				

For the location of the forest concessions, see map in Annex 1.3.

Annexe 6b. Densities of *Guibourtia tessmannii* (pink Bubinga) in 20 forest concessions under sustainable management in Cameroon

Forest permit	Area	Density (according to management inventory)	Management decision	Source
UFA 09-013	51,204 ha	0.006 stems (>20 cm) / ha	Managed species (min diameter = 80 cm)	Management plan 2007
UFA 09-021	36,439 ha	0.01 stems / ha	Species banned from exploitation	Management plan 2004
UFA 09-023	55,545 ha	0.005 stems (>20 cm) / ha	Species banned from exploitation	Management plan 2004
UFA 09-024	75,625 ha	0.06 stems / ha	Managed species (min diameter raised to 110 cm)	Management plan 2006 FSC certification report BV-FM/COC-051201
UFA 09-025	86,788 ha	0.01 stems / ha	Species banned from exploitation	Management plan 2004
UFA 09-026 UFA 09-027	47,785 ha	0.006 stems (>20 cm) / ha	Managed species (min diameter = 80 cm)	Management plan 2007
UFA 11-002	72,705 ha	0.006 stems / ha	Species banned from exploitation	Management plan 2008
UFA 11-005	81,549 ha	0.008 stems / ha	Species banned from exploitation	Management plan 2008
UFA 00-004	125,490 ha	0.01 stems (>20 cm) / ha	Species banned from exploitation	Management plan 2006
UFA 00-003	125,568 ha	0.02 stems (>20 cm) / ha	Species banned from exploitation	Management plan 2004
UFA 09-015	40,368 ha	0.018 stems (>20 cm) / ha	Managed species (Min diameter = 80 cm)	Management plan 2010
UFA 09-016	66,646 ha	0.004 stems (>20 cm) / ha	Species banned from exploitation (1,107 m <sup>3</sup> harvested under provisional convention)	Management plan 2005
UFA 09-017 UFA 09-018	99,459 ha	0.012 stems (>20 cm) / ha	Species banned from exploitation	Management plan 2004
UFA 09-019	38,247 ha	0.002 stems (>20 cm) / ha	?	Rapport OIBT 2012
UFA 09-003 UFA 09-004a UFA 09-005a UFA 09-005b	183,350 ha	0.04 stems / ha	Managed species (min diameter = 80 cm)	ONADEF inventory 1998 Management plan 2007
UFA 09-004b	76,975 ha	0.0018 stems (>20 cm) / ha	? (4,513 m <sup>3</sup> harvested under provision convention)	Management plan 2004
UFA 09-006	74,432 ha	0.0025 stems (>20 cm) / ha	Species banned from exploitation	Management plan 2005
UFA 10-009	91,809 ha	0.0021 stems (>20 cm) / ha	Species banned from exploitation	Management plan 2004
UFA 10-037	52,186 ha	0.0018 stems / ha	Species banned from exploitation	Management plan 2002
UFA 10-064	115,900 ha	0.00 stems (>20 cm) / ha	Species banned from exploitation	Management plan 2006
	1,598,070 ha			

For the location of the forest concessions see map in Annex 1.4

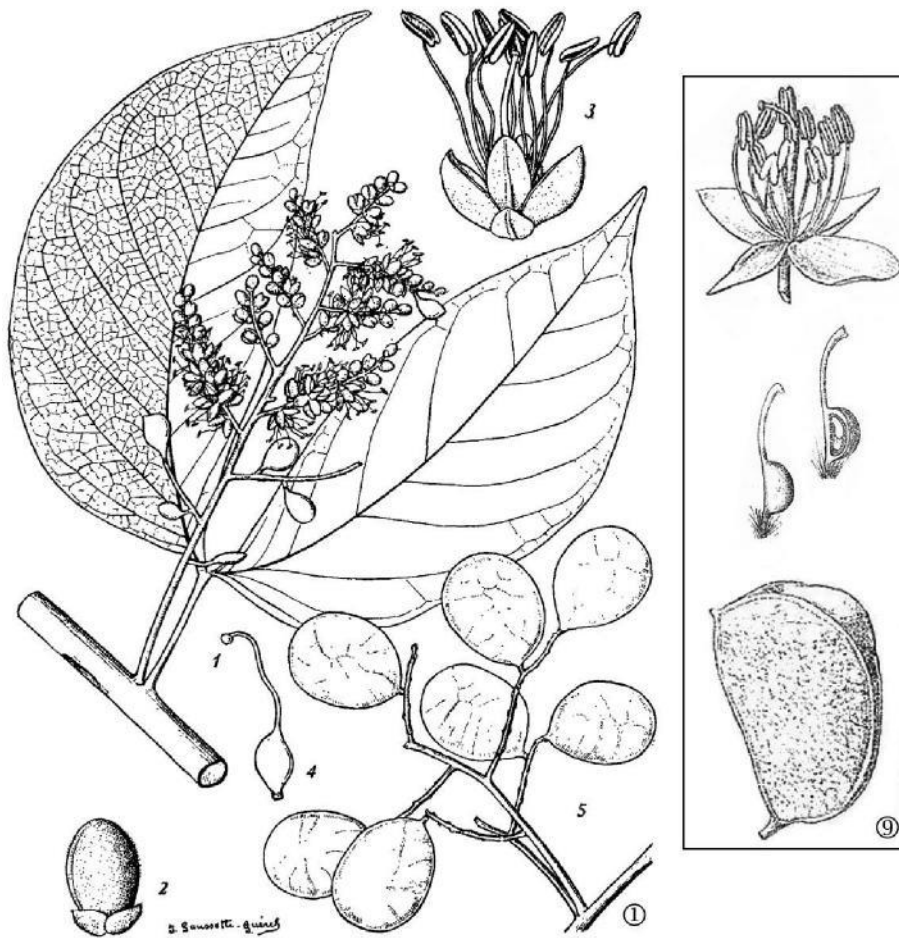


Annex 7. Suspected loads of Kevazingo in Gabon (above) and Bubinga in Cameroon (below)

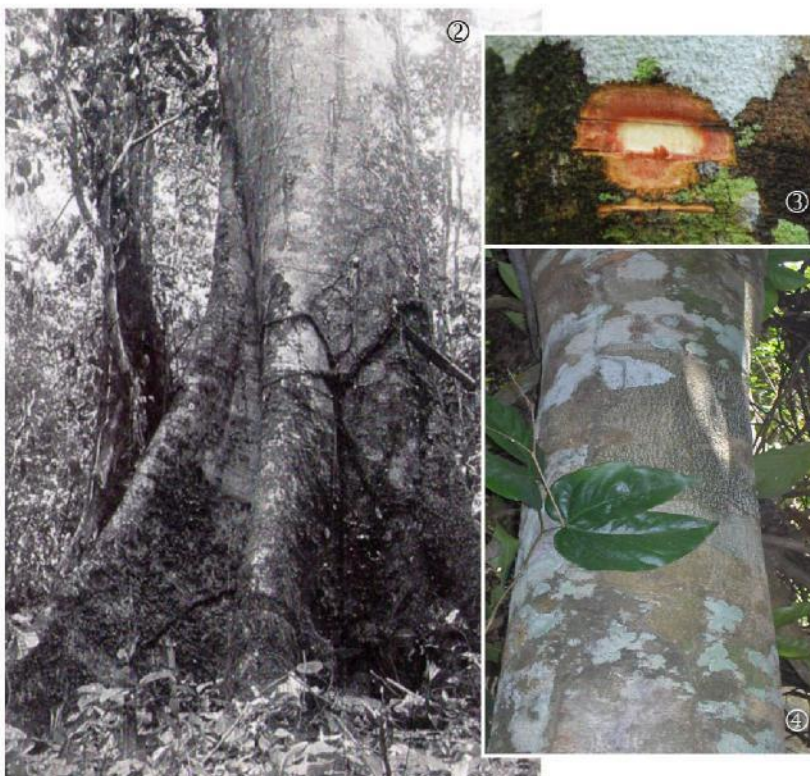




Annex 8. *Guibourtia demeusei* (red Bubinga, Ebana)



Pl. 25. — *Guibourtia Demeusei* (Harms) Léonard : 1, rameau florifère × 2/3; 2, bouton × 4; 3, fleur × 3; 4, pistil × 4; 5, infrutescence × 2/3. (Repris de : *Flore du Gabon* 15; 123, 1963.)



References

1. Aubréville (phyto-afri)
2. Tailfer 1989
3. Meunier 2015
4. Boika 2006
5. Meunier 2015
6. N. Bourland
7. Meunier 2015
8. Meunier 2015
9. Engler & Drude (PROTA)

GABON

PLANCHE I

MISSION BERTIN

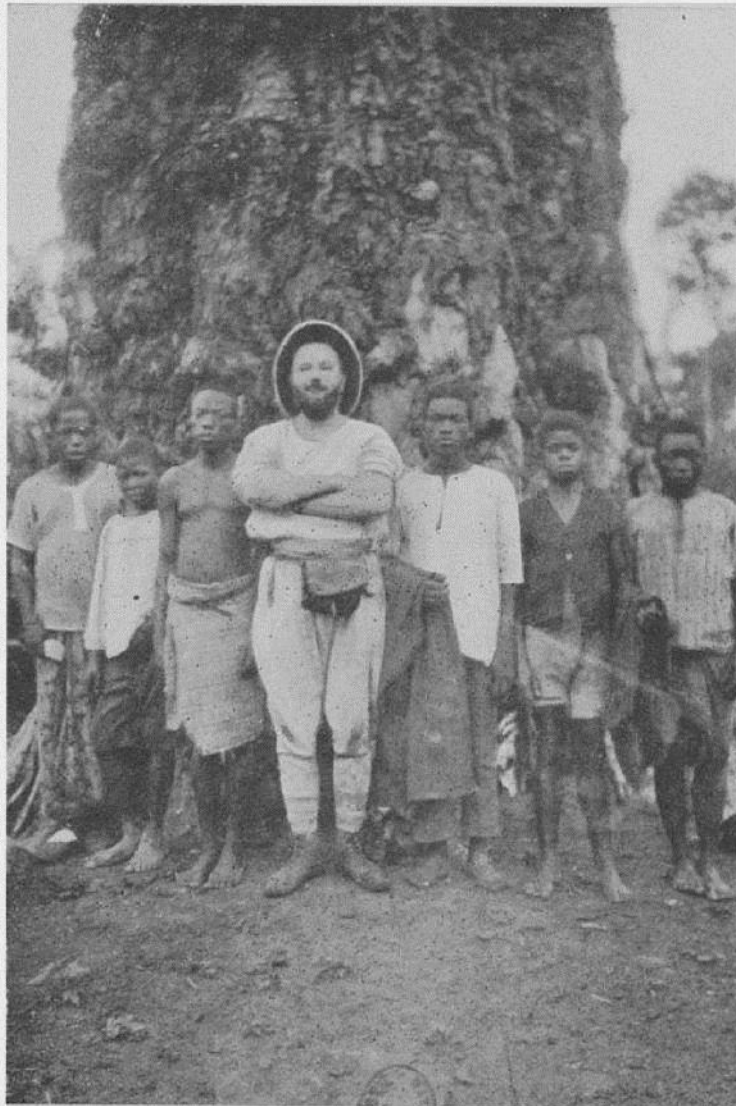




Fig. 1. — M. A. BERTIN en tenue de brousse et quelques indigènes devant un *Kevazingo* de dix mètres de tour.  
(Arbre donnant un bois analogue au bois de rose)

Annex 10 Kevazingo logs (stated origin: Gabon) on sale on the international market

[http://www.alibaba.com/product-detail/Kevazingo\\_106136588.html](http://www.alibaba.com/product-detail/Kevazingo_106136588.html)  
(accessed on February 21, 2016)

 Products ▾ What are you looking for...

Home > Products > Agriculture > Timber Raw Materials > Logs (12341)



ZOOM

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**Kevazingo**

FOB Price: [Get Latest Price](#)

[Contact Supplier](#) [Leave Messages](#)

**Product Details** **Company Profile**

**Quick Details**

Type: **Other** Place of Origin: **Gabon**

**Specifications**

We supply Kevazingo logs



Annex 11a Confusion between *Guibourtia tessmannii* and *Guibourtia demeusei* on the international market (*Guibourtia demeusei* from the Democratic Republic of the Congo, sold as Kevazingo)

http://www.alibaba.com/product-detail/BUBINGA-KEVAZINGO-SCIENTIFIC-NAME-GUIBOUTIA-TESSMANNII\_50004498416.html?spm=a2700.7724857.29.44.mfk5j3 (accessed on February 21, 2016)



Products ▾ What are you looking for...

About 2 results: Logs (2)

Home > Products > Agriculture > Timber Raw Materials > Logs (12341)



BUBINGA KEVAZINGO SCIENTIFIC NAME GUIBOUTIA TESSMANNII

FOB Price: [Get Latest Price](#)  
 Min. Order Quantity: 100 Cubic Meter/Cubic Meters  
 Supply Ability: 2000 Cubic Meter/Cubic Meters per Month  
 Port: MATADI DEMOCRATIC REPUBLIC OF CONGO  
 Payment Terms: L/C

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Product Details

Company Profile

Quick Details

Type:	RED	Shape:	Round	Color:	Red
Grade:	BC	Length (cm):	5m +	Diameter (m):	50+
Place of Origin:	Congo, The Democratic Republic Of The	Brand Name:	BUBINGA LOGS	WAKA:	GUIBOUTIA TESSMANNII

Packaging & Delivery

Packaging Details: CONTAINERS  
 Delivery Detail: 30 DAYS

Specifications

We have 100m3 ready to ship and more than 2000m3 in the bush will arrive in few weeks.

60/CAB/PROGOU/JKK/BDD/2014

Permis de coupe artisanal émis en 2014  
 par le cabinet du gouverneur du Bandundu  
 JKK - Jean Kamisendu KUTUKA

Annexe 11b. Confusion between *Guibourtia pellegriniana* and *Guibourtia demeusei* on the international market (*Guibourtia demeusei* from the Democratic Republic of the Congo, sold as Kevazingo)

http://www.alibaba.com/product-detail/Kevazingo-Bubinga-Logs\_104746747.html  
(accessed on February 21, 2016)



Products ▾ What are you looking for...

About 2 results: Logs (2)

Home > Products > Agriculture > Timber Raw Materials > Logs (12341)



### Kevazingo/ Bubinga Logs

FOB Price: [Get Latest Price](#)  
Min. Order Quantity: 50 Cubic Meter/Cubic Meters  
Supply Ability: 200 Cubic Meter/Cubic Meters per Month  
Payment Terms: L/C

[Contact Supplier](#) [Leave Messages](#)

[See larger image](#)

[Add to My Cart](#) [Add to My Favorites](#) [Share](#)

**Product Details**

**Company Profile**

#### Quick Details

Type: Other

Place of Origin: Congo, The Democratic Republic Of The

#### Packaging & Delivery

Packaging Details: 20' and 40' containers

Delivery Detail: 30-45 days

#### Specifications

Kevazingo/ Bubinga (Guibourtia Pellegrina/ Demeusei)

Quality: B+ / B / BC

Diameter: 60CM+ (under sapwood) per Brereton scale

##### Kevazingo/ Bubinga logs:

- \* Low FOB price
- \* Quality: B+ / B / BC
- \* Minimum diameter: 60 centimeters
- \* Minimum length: 4.4 meters
- \* Inspection: BIVAC/ SGS/ OCC

##### Kevazingo/ Bubinga sawn wood:

- \* Low FOB price
- \* Cut per your specifications
- \* Quality: FAS
- \* Minimum thickness: 14 millimeters
- \* Inspection: BIVAC/ SGS/ OCC
- \*\* We have also Padouk, Iroko, Sipo, Sapelli available in Sawn wood and Sawn Logs

##### Payment terms:

- \* 100% irrevocable L/C
- \* US\$ or South African Rand (ZA)

Annexe 11c. Confusion between *Guibourtia tessmannii* and *Guibourtia demeusei* on the international market (*Guibourtia demeusei* sold as Kevazingo / Essingang in the United States)

www.hearnehardwoods.com/hardwoods/exotic\_hardwoods/exotic\_wood/bubinga\_lumber/bubinga\_wood.html

**HEARNE HARDWOODS INC.**  
 200 Whiteside Drive, Oxford, PA 19363, USA  
 Toll Free: (888) 814 ~ 0007  
 EST. 1981

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**Wood Search**  
 Domestic Species  
 Exotic Species  
 Search By Picture  
 Bubinga Pricing  
 Select Wood Type

**Bubinga**  
 Plain | Heavy Figure | Heavy Figure

Origin of Wood Type:	West Coast Africa
Botanical Name:	Guibourtia demeusei
Specific Gravity:	.88
Avg. Weight Per BF (♻️):	5 lb/ bf
Color Range:	Red- Brown
Rarity / Availability: (♻️):	Readily Available
Typical Avg. Width:	3" to 15", flitches can be found up to 67" inches wide
Typical Avg. Length:	8' to 16' feet, can be found up to 20' feet
Avg. Waste Factor (♻️):	30%
Wood Uses:	Fine Furniture, Cabinetry, Wood Turning, Gunstocks, Wood Carving, Veneer and many other uses!
Lumber Grades (♻️):	FA S, Quarter-Sawn, Quarter-Sawn (Figured), Flitch, Figured (Heavy), Figured (Medium), Veneer
Other Trade Names:	African Rosewood, Kevasingo, Cssingang
Description:	Bubinga is one of the most beautiful African hardwood lumbers. Due to the fine tight grain and its reddish brown color bubinga is often referred to as "African Rosewood". The trees can grow quite large and five foot diameter logs are not uncommon making one piece table top slabs possible. *Used for fine furniture and musical instruments *Orange brown at first oxidizing to a beautiful reddish brown *Hard durable wood