

THE PROPERTIES AND USES OF INDONESIAN COMMERCIAL WOOD

Source:

Kartasujana, I.& Martawijaya, A. 1973. Commercial woods of Indonesia, their properties and uses
Pengumuman no.3 thn 1973. Lembaga Penelitian Hasil Hutan, Bogor.

Distribution key:

The geographical distribution of the species is indicated by the following key:

1. Sumatera
2. Java
3. Borneo
4. Sulawesi
5. Moluccas
6. Lesser Sunda Islands
7. West Irian/Papua

Uses key:

The key to indicate the possible uses of the wood is as follows:

1. Construction
2. Plywood
3. Furniture
4. Flooring
5. Panelling
6. Sleepers
7. Door and window frames
8. Packing material
9. Sporting goods and musical instruments
10. Power and telephone poles
11. Shipbuilding
12. Carvings and handicrafts
13. Fancy veneer
14. Matches
15. Pulp
16. Drafting instruments
17. Pencils
18. Charcoal
19. Medicine
20. Moulding

Table 1. Properties and Uses of Indonesian Wood Species

No.	Wood Species	Specific Gravity			Class		Distribution	Uses
		Min	Max	Mean	Durability	Strength		
1.	Agathis	0.36	0.64	0.49	IV	III	1,2,3,4,5,7	1,2,3,7,8,9,14,15,17
2.	Bayur	0.30	0.78	0.52	IV	II – III	1,2,3,4,5,6	1,2,3,7,11,12
3.	Bakau	0.82	1.03	0.94	III	I – II	1,2,3,4,5,6,7	1,15
4.	Balau	0.65	1.22	0.98	I	I – II	1,3,4	1,4,6,10,11
5.	Bangkirai	0.60	1.16	0.91	I-(I-III)	I – II	3	1,2,3,4,6,11
6.	Bedaru	0.84	1.36	1.04	I	I	1,3	1,3,6,9,11,12
7.	Belangeran	0.73	0.98	0.86	II-(I-III)	(I)-II	1,3	1,3,4,6,7,11
8.	Benuang	0.16	0.48	0.33	V	IV – V	1,3,4,5	2,8,14,15
9.	Bintangur	0.37	1.07	0.78	III	II – III	1,2,3,4,5,6	1,2,3,4,5,6,11
10.	Bongin	0.93	1.20	1.02	III	I	1,3	1,3,4,13
11.	Bungur	0.62	1.01	0.80	II – III	I – II	1,2,3,4,5,6	1,3,4,5,6,7,11
12.	Cendana	0.77	0.94	0.84	II	II – I	2,6	12,19
13.	Cengal	0.51	0.89	0.70	II – III	II – III	1,2	1,2,3,4,5,6,7,11
14.	Dahu	0.37	0.75	0.58	IV	III – IV	1,2,3,4,5,7	3,4,5,13
15.	Durian	0.42	0.91	0.64	IV – V	II – III	1,2,3,4,5	1,2,8
16.	Ebony	0.90	1.14	1.05	I	I	4,5	3,12,13
17.	Giam	0.83	1.15	0.99	I	I	1,3	1,4,6,10,11
18.	Gerunggang	0.36	0.71	0.47	IV	III – IV	1,3,4,5	1,2,8
19.	Gisok	0.73	0.97	0.83	II – III	II – I	1,3	1,2,3,4,5,7,11
20.	Jabon	0.29	0.56	0.42	V	III – IV	1,2,3,4,5,6	2,8,14,15
21.	Jati	0.59	0.82	0.70	I – (III)	II	2,4,6	1,3,4,5,6,10,11,12,13
22.	Jelutung	0.22	0.56	0.40	V	III – V	1,3	2,8,12,16,17,20
23.	Jeungjing	0.24	0.49	0.33	IV/V	IV – V	1,5	1,2,8,14,15
24.	Kapur	0.63	0.94	0.81	II – III	II – I	1,3	1,2,3,4,5,6,7,11
25.	Kemiri	0.23	0.44	0.31	V	IV – (V)	1,2,4,5	2,8,14,15
26.	Kempas	0.68	1.29	0.95	III – IV	I – II	1,3	1,2,4,6
27.	Kenari	0.48	0.68	0.55	IV	III	1,2,3,4,5,6	1,2,4,5,7
28.	Keruing	0.51	1.01	0.79	III	(I)-II	1,2,3	1,2,4,5,6,11
29.	Kuku	-	-	0.87	II	I	1,3,4,5,7	3,4,5,11,13
30.	Kulim	0.73	1.08	0.94	I – (III)	I	1,3	1,2,4,6,10,11
31.	Lara	0.98	1.23	1.15	I	I	4,5	1,4,6,10,11
32.	Lasi	0.77	0.88	0.81	II	II	4,5	1,3,4,5,12,13
33.	Mahoni	0.56	0.76	0.64	III	II – III	2	1,2,3,4,5,7,11,12
34.	Matoa	0.50	0.99	0.77	III – IV	II(I – III)	1,2,4,5,6,7	1,3,4,7,11
35.	Melur	0.38	0.77	0.52	IV	II – IV	1,2,3,4,5,6,7	1,2,3,4,5,7,9,16,17
36.	Mentibu	0.41	0.57	0.53	IV/V	III	1,3	1,2,7,8
37.	Meranti merah	0.29	1.01	0.55	III – IV	II – IV	1,3,4,5	1,2,3,4,5,8,15
38.	Meranti putih	0.29	0.96	0.54	III – IV	II – IV	1,3,4,5	1,2,3,4,5,8,15
39.	Merawan	0.42	1.03	0.70	II – III	II – III	1,3	1,2,3,4,5,7,9,11
40.	Merbau	0.52	1.04	0.80	I – II	I – (II)	1,2,3,4,5,6,7	1,4,5,6,10,11
41.	Mersawa	0.49	0.85	0.46	IV	II – III	1,3	1,2,4,5,11
42.	Nyatoh	0.39	1.07	0.67	II – III	II – (I – II)	1,2,3,4,5,7	1,2,4,5,7,9,11
43.	Perupuk	0.40	0.69	0.56	IV/V	II – III	1,3,4	1,2,3,8,12,14,15
44.	Petanang	0.62	0.91	0.75	III	II	1	1,4,5,6,11
45.	Pilang	0.71	0.89	0.79	III	II	2,6	1,2,3,4,5
46.	Pulai	0.19	0.90	0.46	III – V	IV – V	1,2,3,4,5,6,7	2,8,12,14,15,16,20
47.	Ramin	0.46	0.84	0.63	IV	II – III	1,3	1,2,3,4,5,7,20
48.	Rengas	0.59	0.84	0.69	II	II	1,2,3	3,4,5,6,12,13

No.	Wood Species	Specific Gravity			Class		Distribution	Uses
		Min	Max	Mean	Durability	Strength		
49.	Resak	0.49	0.99	0.70	III	II	1,3,5,7	1,2,4,6,7,11
50.	Salimuli	0.44	0.75	0.64	I/II	II – III	2,5,6	3,4,9,12
51.	Saninten	0.63	0.82	0.76	III	II	1,2	1,4,5,7
52.	Sonokeling	0.73	1.08	0.90	I	II	2	3,4,5,9,12,13
53.	Sonkembang	0.39	0.94	0.65	II(I – II)	II (I – II)	1,2,4,5,6	1,3,4,5,12,13
54.	Sungkai	0.52	0.73	0.63	III	II – III	1,2,3	1,3,4,5,12,13
55.	Tembesu	0.72	0.93	0.81	I	II	1,2,3	1,4,5,6,10,11
56.	Teraling	0.52	0.99	0.75	II – IV	II	1,2,4	1,2,3,4,5,7,9
57.	Terentang	0.32	0.52	0.40	IV	III – IV	1,3	2,8,14,15
58.	Tusam	0.40	0.75	0.55	IV	III	1,2,4,6	1,2,8,14,15,16,17
59.	Ulin	0.88	1.19	1.04	I	I	1,3	1,4,6,10,11
60.	Weru	0.60	0.95	0.77	II	II – I	1,2,6	1,3,4,5,13
61.	Ampupu	0.68	1.02	0.89	III – II	II – I	5,6	1,4,5,6,10,11
62.	Balsa	0.15	0.28	-	V	V	2	9,12
63.	Benuang laki	0.27	0.51	0.39	IV – V	IV – V	2,3,4,5,6,7	1,2,5,8,11
64.	Berumbung	0.74	0.94	0.85	II	II – I	1,3	1,3,4,5,7,9,11,12,20
65.	Bugis, k.	0.41	1.02	0.80	III – IV	II – III	3,4,5,7	1,3,4,5,6,7,11,20
66.	Cemara	1.04	1.18	-	II – III	I – II	1,2,4,5,6,7	1,4,5,6,10,11,18
67.	Cempaga	0.57	0.90	0.71	II – III	II	1,2,3,4,5,6	1,2,3,4,5,7,9,10,11
68.	Cempaka	0.41	0.61	-	II	III – IV	1,2,3,4,5,7	1,2,3,4,5,7,9,12,13,16,17,20
69.	Gadog	0.55	1.00	0.75	III – II	II – (III-I)	1,2,4,5,6,7	1,4,5,11
70.	Gelam	0.73	0.85	-	III	II	1,2,3,4,5,6,7	1,4,5,6,10,11,18
71.	Gia	0.77	1.06	0.91	I – II	I – II	3,4,5,7	1,4,5,6,10,11
72.	Gifasa	0.57	0.93	0.74	II – III	II – III	4,5,7	1,3,4,5,6,7,9,11,12,18,20
73.	Jangkang	0.41	0.87	0.63	IV – V	III – II	1,3,4,5,7	2,5,7,8,12,20
74.	Johar	0.68	0.96	0.84	I – II	II – I	1,2	1,3,4,5,12,13,18
75.	Kapuk hutan	0.12	0.47	0.30	V	IV/V	1,2,4,5,6,7	2,8,14,15,20
76.	Kedemba	0.45	0.52	0.48	IV	III	1,3	1,2,3,4,5,7,20
77.	Kemenyan	0.47	0.63	0.57	IV/V	III – II	1,2	1,2,5,8,12,14,17,20
78.	Kenanga	0.20	0.44	0.33	V	IV – V	1,2,4,5,7	2,8,12,14,15,20
79.	KerANJI	0.84	1.04	0.98	I	I – II	1,2,3	1,2,4,5,6,7,11
80.	Kesambi	0.94	1.10	1.01	III	I	2,4,5,6	1,4,5,6,11,18
81.	Ketapang	0.41	0.85	-	III – V	II – III	1,2,3,4,5,6,7	1,2,3,4,5,7,8,11,14,20
82.	Kolaka	0.73	1.09	0.96	III	I	1,2,3,4,5,6,7	1,4,5,6,11
83.	Kupang	0.54	0.78	-	II – IV	II – III	1,2,3,4,5	1,2,3,4,5,7,11,13,20
84.	Leda	0.39	0.81	0.57	IV(V – II)	III(II – IV)	4,5	1,2,5,7,8,10,11,20
85.	Mahang	0.30	0.55	-	IV – V	II – IV	1,2,3	1,2,5,7,8,14,15,20
86.	Malas, k.	0.95	1.15	1.04	II – III	I	1,3	1,4,5,6,11,18
87.	Medang	0.36	0.85	-	III – V	II – V	1,2,3,4,5,6,7	1,2,3,4,5,7,8,11,12,20
88.	Membacang	0.49	0.74	-	II – V	II – III	1,2,3,4,5,6,7	2,5,8,12,14,20
89.	Mendarahan	0.36	0.74	-	V	II – IV	1,2,3	2,5,7,8,20
90.	Menjalin	0.58	1.04	-	V	I – III	1,2,3	1,2,5
91.	Mensira gunung	0.49	0.68	0.61	V	II – III	1,2,4,5,6,7	1,2,5,7,20
92.	Merambung	0.27	0.52	0.38	V	IV	1,2,3,4,5,6,7	2,8,14,15
93.	Merpayang	0.51	0.77	0.65	V	II – III	1,3	1,2,3,5,7,8,11,14,20
94.	Nyirih	0.70	0.74	-	II – III	II	1,2,3,4,5,6,7	1,2,3,4,5,6,7,11,13,18,20
95.	Pasang	0.58	1.21	-	II – IV	I – III	1,2,3,4,5,6,7	1,2,3,4,5,6,11,13,18
96.	Patin, k.	0.82	1.02	0.92	I	I – II	1	1,2,3,4,5,6,7,11,12
97.	Pelawan	1.00	1.19	-	I – II	I	1,3	1,4,6,10,11,18
98.	Perepat darat	0.67	0.85	0.76	III	II	1,3	1,3,4,5,11

No.	Wood Species	Specific Gravity			Class		Distribution	Uses
		Min	Max	Mean	Durability	Strength		
99.	Perepat laut	0.62	1.00	0.78	II – III	II – I	1,2,3,4,5,6,7	1,4,5,7,11
100.	Petaling	0.72	1.09	0.91	I – II	I – II	1,3	1,4,5,6,9,10,11
101.	Pimping	0.35	0.64	-	III – V	I – IV	1,2,3,4,5,6,7	1,2,5,7,8,11,14,20
102.	Pinang, k.	0.47	0.87	0.66	III – IV	II – III	1,3	1,2,3,4,5,7,11,20
103.	Punak	0.55	0.90	0.76	III – IV	II	1,3	1,2,3,4,5,7,11,20
104.	Puspa	0.62	0.71	-	III	II	1,2,3	1,2,4,5,10,11,18
105.	Putat	0.80	0.89	-	II – III	I – II	1,2,3,4,5,6,7	1,3,4,5,6,7,11,18
106.	Rasamala	0.61	0.90	0.81	II – (III)	II	1,2	1,4,5,7,10,11
107.	Sampang	0.39	0.59	-	V	III – IV	1,2,3	2,5,7,8,12,14,15,20
108.	Sawokecik	0.97	1.06	1.03	I	I	1,2,4,5,6	3,4,5,9,12,13,20
109.	Sendok-sendok	0.30	0.61	0.45	V	III – II	1,3,5,7	2,5,8,12,14,15,20
110.	Simpur	0.60	0.89	-	III – V	I – III	1,2,3,4	1,2,3,4,5,11,18
111.	Sindur	0.59	0.85	-	II – V	II – III	1,3,4,5	1,2,3,4,5,7,11
112.	Surian	0.38	0.50	-	III – V	III – IV	1,2,3,4,5,6,7	1,2,3,5,7,8,11,12,17,20
113.	Surian bawang	0.49	0.70	0.60	III – IV	II – III	1,3,5,7	1,2,3,4,5,7,11,20
114.	Tanjung	0.92	1.12	1.00	I/II	I	1,2,4,5,6	1,2,3,4,5,11,12
115.	Tempinis	0.92	1.20	1.01	I	I	1,4	1,4,5,6,7,9,11
116.	Tepis	0.41	0.82	-	IV – V	II – IV	1,3	1,2,3,5,7,14,20
117.	Terap	0.21	0.64	0.44	III – V	III – V	1,2,3,4,5,6,7	1,2,5,8,11
118.	Trembesi	-	-	0.61	IV	III	1,2,4,5,6	1,2,3,4,5,7,11,12,13
119.	Tualang	0.57	1.12	0.83	III – IV	II(I – II)	1,3,4	1,2,3,4,5,7,11
120.	Walikukun	0.90	1.08	0.98	II	I	2,6	1,4,5,6,9,10,11,18