**THE PROPERTIES AND USES OF INDONESIAN**

**COMMERCIAL WOOD**

Source:

Kartasujana, I.& Martawijaya, A. 1973. Commercial woods of Indonesia, their propertiesand 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.  2.  3.  4.  5.  6.  7.  8.  9.  10.  11.  12.  13.  14.  15.  16.  17.  18.  19.  20.  21.  22.  23.  24.  25.  26.  27.  28.  29.  30.  31.  32.  33.  34.  35.  36.  37.  38.  39.  40.  41.  42.  43.  44.  45.  46.  47.  48. | Agathis  Bayur  Bakau  Balau  Bangkirai  Bedaru  Belangeran  Benuang  Bintangur  Bongin  Bungur  Cendana  Cengal  Dahu  Durian  Ebony  Giam  Gerunggang  Gisok  Jabon  Jati  Jelutung  Jeungjing  Kapur  Kemiri  Kempas  Kenari  Keruing  Kuku  Kulim  Lara  Lasi  Mahoni  Matoa  Melur  Mentibu  Meranti merah  Meranti putih  Merawan  Merbau  Mersawa  Nyatoh  Perupuk  Petanang  Pilang  Pulai  Ramin  Rengas | 0.36  0.30  0.82  0.65  0.60  0.84  0.73  0.16  0.37  0.93  0.62  0.77  0.51  0.37  0.42  0.90  0.83  0.36  0.73  0.29  0.59  0.22  0.24  0.63  0.23  0.68  0.48  0.51  -  0.73  0.98  0.77  0.56  0.50  0.38  0.41  0.29  0.29  0.42  0.52  0.49  0.39  0.40  0.62  0.71  0.19  0.46  0.59 | 0.64  0.78  1.03  1.22  1.16  1.36  0.98  0.48  1.07  1.20  1.01  0.94  0.89  0.75  0.91  1.14  1.15  0.71  0.97  0.56  0.82  0.56  0.49  0.94  0.44  1.29  0.68  1.01  -  1.08  1.23  0.88  0.76  0.99  0.77  0.57  1.01  0.96  1.03  1.04  0.85  1.07  0.69  0.91  0.89  0.90  0.84  0.84 | 0.49  0.52  0.94  0.98  0.91  1.04  0.86  0.33  0.78  1.02  0.80  0.84  0.70  0.58  0.64  1.05  0.99  0.47  0.83  0.42  0.70  0.40  0.33  0.81  0.31  0.95  0.55  0.79  0.87  0.94  1.15  0.81  0.64  0.77  0.52  0.53  0.55  0.54  0.70  0.80  0.46  0.67  0.56  0.75  0.79  0.46  0.63  0.69 | IV  IV  III  I  I-(I-III)  I  II-(I-III)  V  III  III  II – III  II  II – III  IV  IV – V  I  I  IV  II – III  V  I – (III)  V  IV/V  II – III  V  III – IV  IV  III  II  I – (III)  I  II  III  III – IV  IV  IV/V  III – IV  III – IV  II – III  I – II  IV  II – III  IV/V  III  III  III – V  IV  II | III  II – III  I – II  I – II  I – II  I  (I)-II  IV – V  II – III  I  I – II  II – I  II – III  III – IV  II – III  I  I  III – IV  II – I  III – IV  II  III – V  IV – V  II – I  IV – (V)  I –II  III  (I)-II  I  I  I  II  II – III  II(I – III)  II – IV  III  II – IV  II – IV  II – III  I – (II)  II – III  II – (I – II)  II – III  II  II  IV – V  II – III  II | 1,2,3,4,5,7  1,2,3,4,5,6  1,2,3,4,5,6,7  1,3,4  3  1,3  1,3  1,3,4,5  1,2,3,4,5,6  1,3  1,2,3,4,5,6  2,6  1,2  1,2,3,4,5,7  1,2,3,4,5  4,5  1,3  1,3,4,5  1,3  1,2,3,4,5,6  2,4,6  1,3  1,5  1,3  1,2,4,5  1,3  1,2,3,4,5,6  1,2,3  1,3,4,5,7  1,3  4,5  4,5  2  1,2,4,5,6,7  1,2,3,4,5,6,7  1,3  1,3,4,5  1,3,4,5  1,3  1,2,3,4,5,6,7  1,3  1,2,3,4,5,7  1,3,4  1  2,6  1,2,3,4,5,6,7  1,3  1,2,3 | 1,2,3,7,8,9,14,15,17  1,2,3,7,11,12  1,15  1,4,6,10,11  1,2,3,4,6,11  1,3,6,9,11,12  1,3,4,6,7,11  2,8,14,15  1,2,3,4,5,6,11  1,3,4,13  1,3,4,5,6,7,11  12,19  1,2,3,4,5,6,7,11  3,4,5,13  1,2,8  3,12,13  1,4,6,10,11  1,2,8  1,2,3,4,5,7,11  2,8,14,15  1,3,4,5,6,10,11,12,13  2,8,12,16,17,20  1,2,8,14,15  1,2,3,4,5,6,7,11  2,8,14,15  1,2,4,6  1,2,4,5,7  1,2,4,5,6,11  3,4,5,11,13  1,2,4,6,10,11  1,4,6,10,11  1,3,4,5,12,13  1,2,3,4,5,7,11,12  1,3,4,7,11  1,2,3,4,5,7,9,16,17  1,2,7,8  1,2,3,4,5,8,15  1,2,3,4,5,8,15  1,2,3,4,5,7,9,11  1,4,5,6,10,11  1,2,4,5,11  1,2,4,5,7,9,11  1,2,3,8,12,14,15  1,4,5,6,11  1,2,3,4,5  2,8,12,14,15,16,20  1,2,3,4,5,7,20  3,4,5,6,12,13 |
| No. | Wood Species | Specific Gravity | | | Class | | Distribution | Uses |
| Min | Max | Mean | Durability | Strength |
| 49.  50.  51.  52.  53.  54.  55.  56.  57.  58.  59.  60.  61.  62.  63.  64.  65.  66.  67.  68.  69.  70.  71.  72.  73.  74.  75.  76.  77.  78.  79.  80.  81.  82.  83.  84.  85.  86.  87.  88.  89.  90.  91.  92.  93.  94.  95.  96.  97.  98. | Resak  Salimuli  Saninten  Sonokeling  Sonkembang  Sungkai  Tembesu  Teraling  Terentang  Tusam  Ulin  Weru  Ampupu  Balsa  Benuang laki  Berumbung  Bugis, k.  Cemara  Cempaga  Cempaka  Gadog  Gelam  Gia  Gifasa  Jangkang  Johar  Kapuk hutan  Kedemba  Kemenyan  Kenanga  Keranji  Kesambi  Ketapang  Kolaka  Kupang  Leda  Mahang  Malas, k.  Medang  Membacang  Mendarahan  Menjalin  Mensira gunung  Merambung  Merpayang  Nyirih  Pasang  Patin, k.  Pelawan  Perepat darat | 0.49  0.44  0.63  0.73  0.39  0.52  0.72  0.52  0.32  0.40  0.88  0.60  0.68  0.15  0.27  0.74  0.41  1.04  0.57  0.41  0.55  0.73  0.77  0.57  0.41  0.68  0.12  0.45  0.47  0.20  0.84  0.94  0.41  0.73  0.54  0.39  0.30  0.95  0.36  0.49  0.36  0.58  0.49  0.27  0.51  0.70  0.58  0.82  1.00  0.67 | 0.99  0.75  0.82  1.08  0.94  0.73  0.93  0.99  0.52  0.75  1.19  0.95  1.02  0.28  0.51  0.94  1.02  1.18  0.90  0.61  1.00  0.85  1.06  0.93  0.87  0.96  0.47  0.52  0.63  0.44  1.04  1.10  0.85  1.09  0.78  0.81  0.55  1.15  0.85  0.74  0.74  1.04  0.68  0.52  0.77  0.74  1.21  1.02  1.19  0.85 | 0.70  0.64  0.76  0.90  0.65  0.63  0.81  0.75  0.40  0.55  1.04  0.77  0.89  -  0.39  0.85  0.80  -  0.71  -  0.75  -  0.91  0.74  0.63  0.84  0.30  0.48  0.57  0.33  0.98  1.01  -  0.96  -  0.57  -  1.04  -  -  -  -  0.61  0.38  0.65  -  -  0.92  -  0.76 | III  I/II  III  I  II(I – II)  III  I  II – IV  IV  IV  I  II  III – II  V  IV – V  II  III – IV  II – III  II – III  II  III – II  III  I – II  II – III  IV – V  I – II  V  IV  IV/V  V  I  III  III – V  III  II – IV  IV(V – II)  IV – V  II – III  III – V  II – V  V  V  V  V  V  II – III  II – IV  I  I – II  III | II  II – III  II  II  II (I – II)  II – III  II  II  III – IV  III  I  II – I  II – I  V  IV – V  II – I  II – III  I – II  II  III – IV  II – (III-I)  II  I – II  II – III  III – II  II – I  IV/V  III  III – II  IV – V  I – II  I  II – III  I  II – III  III(II – IV)  II – IV  I  II – V  II – III  II – IV  I – III  II – III  IV  II – III  II  I – III  I – II  I  II | 1,3,5,7  2,5,6  1,2  2  1,2,4,5,6  1,2,3  1,2,3  1,2,4  1,3  1,2,4,6  1,3  1,2,6  5,6  2  2,3,4,5,6,7  1,3  3,4,5,7  1,2,4,5,6,7  1,2,3,4,5,6  1,2,3,4,5,7  1,2,4,5,6,7  1,2,3,4,5,6,7  3,4,5,7  4,5,7  1,3,4,5,7  1,2  1,2,4,5,6,7  1,3  1,2  1,2,4,5,7  1,2,3  2,4,5,6  1,2,3,4,5,6,7  1,2,3,4,5,6,7  1,2,3,4,5  4,5  1,2,3  1,3  1,2,3,4,5,6,7  1,2,3,4,5,6,7  1,2,3  1,2,3  1,2,4,5,6,7  1,2,3,4,5,6,7  1,3  1,2,3,4,5,6,7  1,2,3,4,5,6,7  1  1,3  1,3 | 1,2,4,6,7,11  3,4,9,12  1,4,5,7  3,4,5,9,12,13  1,3,4,5,12,13  1,3,4,5,12,13  1,4,5,6,10,11  1,2,3,4,5,7,9  2,8,14,15  1,2,8,14,15,16,17  1,4,6,10,11  1,3,4,5,13  1,4,5,6,10,11  9,12  1,2,5,8,11  1,3,4,5,7,9,11,12,20  1,3,4,5,6,7,11,20  1,4,5,6,10,11,18  1,2,3,4,5,7,9,10,11  1,2,3,4,5,7,9,12,13,16,17,20  1,4,5,11  1,4,5,6,10,11,18  1,4,5,6,10,11  1,3,4,5,6,7,9,11,12,18,20  2,5,7,8,12,20  1,3,4,5,12,13,18  2,8,14,15,20  1,2,3,4,5,7,20  1,2,5,8,12,14,17,20  2,8,12,14,15,20  1,2,4,5,6,7,11  1,4,5,6,11,18  1,2,3,4,5,7,8,11,14,20  1,4,5,6,11  1,2,3,4,5,7,11,13,20  1,2,5,7,8,10,11,20  1,2,5,7,8,14,15,20  1,4,5,6,11,18  1,2,3,4,5,7,8,11,12,20  2,5,8,12,14,20  2,5,7,8,20  1,2,5  1,2,5,7,20  2,8,14,15  1,2,3,5,7,8,11,14,20  1,2,3,4,5,6,7,11,13,18,20  1,2,3,4,5,6,11,13,18  1,2,3,4,5,6,7,11,12  1,4,6,10,11,18  1,3,4,5,11 |
| No. | Wood Species | Specific Gravity | | | Class | | Distribution | Uses |
| Min | Max | Mean | Durability | Strength |
| 99.  100.  101.  102.  103.  104.  105.  106.  107.  108.  109.  110.  111.  112.  113.  114.  115.  116.  117.  118.  119.  120. | Perepat laut  Petaling  Pimping  Pinang, k.  Punak  Puspa  Putat  Rasamala  Sampang  Sawokecik  Sendok-sendok  Simpur  Sindur  Surian  Surian bawang  Tanjung  Tempinis  Tepis  Terap  Trembesi  Tualang  Walikukun | 0.62  0.72  0.35  0.47  0.55  0.62  0.80  0.61  0.39  0.97  0.30  0.60  0.59  0.38  0.49  0.92  0.92  0.41  0.21  -  0.57  0.90 | 1.00  1.09  0.64  0.87  0.90  0.71  0.89  0.90  0.59  1.06  0.61  0.89  0.85  0.50  0.70  1.12  1.20  0.82  0.64  -  1.12  1.08 | 0.78  0.91  -  0.66  0.76  -  -  0.81  -  1.03  0.45  -  -  -  0.60  1.00  1.01  -  0.44  0.61  0.83  0.98 | II – III  I – II  III – V  III – IV  III – IV  III  II – III  II – (III)  V  I  V  III – V  II – V  III – V  III – IV  I/II  I  IV – V  III – V  IV  III – IV  II | II – I  I – II  I – IV  II – III  II  II  I – II  II  III – IV  I  III – II  I – III  II – III  III – IV  II – III  I  I  II – IV  III – V  III  II(I – II)  I | 1,2,3,4,5,6,7  1,3  1,2,3,4,5,6,7  1,3  1,3  1,2,3  1,2,3,4,5,6,7  1,2  1,2,3  1,2,4,5,6  1,3,5,7  1,2,3,4  1,3,4,5  1,2,3,4,5,6,7  1,3,5,7  1,2,4,5,6  1,4  1,3  1,2,3,4,5,6,7  1,2,4,5,6  1,3,4  2,6 | 1,4,5,7,11  1,4,5,6,9,10,11  1,2,5,7,8,11,14,20  1,2,3,4,5,7,11,20  1,2,3,4,5,7,11,20  1,2,4,5,10,11,18  1,3,4,5,6,7,11,18  1,4,5,7,10,11  2,5,7,8,12,14,15,20  3,4,5,9,12,13,20  2,5,8,12,14,15,20  1,2,3,4,5,11,18  1,2,3,4,5,7,11  1,2,3,5,7,8,11,12,17,20  1,2,3,4,5,7,11,20  1,2,3,4,5,11,12  1,4,5,6,7,9,11  1,2,3,5,7,14,20  1,2,5,8,11  1,2,3,4,5,7,11,12,13  1,2,3,4,5,7,11  1,4,5,6,9,10,11,18 |