

Table 3.1 Natural fibre properties compared to Glass Fibre

Property	Glass	Flax	Hemp	Jute	Ramie	Coir	Sisal	Cotton
Density [g/cm ³]	2.55	1.4	1.48	1.46	1.5	1.25	1.33	1.51
Tensile strength [N/mm ²]	2400	800-1500	550-900	400-800	500	220	600-700	400
Stiffness [kN/mm ²]	73	60-80	70	10-30	44	6	38	12
Elongation at break [%]	3	1.2-1.6	1.6	1.8	2	15-25	2-3	3-10
Moist absorption [%]	-	7	8	12	12-17	10	11	8-25
Price of raw fibre 2003 [\$/kg]	1.3	0.5-1.5	0.6-1.8	0.35	1.5-2.5	0.25-0.5	0.6-0.7	1.5-2.2

1. What do the terms in the first column mean?
2. One of the advantages of presenting information in a table is the ease with which a chart or graph could be prepared. How could you make the data more useful?
4. The prices are for 2003. How would you find current prices?
5. What would be the next best fibre for a surf board if you could not get fibre glass?
6. Which property would make a fibre useless for clothing?

Reference:

Application of Natural Fibre
Composites in the Development
of Rural Societies
3. Natural fibres
FAO <http://www.fao.org/docrep/007/ad416e/ad416e06.htm>