

Natural Cellulose Fibers from Renewable Resources

Keywords

Unconventional cellulose • Unconventional cellulose properties • Unconventional cellulose availability

In addition to the by-products from the major food crops, several other nontraditional lignocellulosic sources have been studied as sources for fibers. Examples of such plants used for fiber production include bamboo [07Rao], *Wrightia tinctoria* [05Sub], piassava [06Alm], blue agave [13Kes], stinging nettle [08Bod], sponge gourd [09Gui], *Luffa cylindrica* [10Siq], and others. Most of these sources are available in small quantities or need to be exclusively grown (bamboo) and do not have highly distinguishable properties. We have therefore not covered these fibers in this chapter.

References

- [05Sub] Subramanian, K., Kumar, P.S., Jeyapal, P., Venkatesh, N.: Eur. Polym. J. **41**(4), 853 (2005)
- [06Alm] Almeida, J.R.M., Aquino, R.C.M.P., Monteiro, S.N.: Compos. Part A **37**, 1473 (2006)
- [07Rao] Rao, M.M.K., Rao, M.K.: J. Compos. Struct. **77**, 288 (2007)
- [08Bod] Bodros, E., Baley, C.: Mater. Lett. **62**(14), 2143 (2008)
- [09Gui] Guimaraes, J.L., Frollini, E., Silva, C.G.D., Wyoch, F., Satyanarayan, K.G.: Ind. Crop. Prod. **30**(3), 407 (2009)
- [10Siq] Siqueira, G., Bras, J., Dufresne, A.: Bioresources **5**(2), 727 (2010)
- [13Kes] Kestur, S.G., Fores-Sahagun, T.H.S., Santos, L.O.D., Santos, J.D., Mazzaro, I., Mikowski, A.: Compos. Part A **45**, 153–161 (2013)