

Digital Colour Lustre Meter for Multiple Fibres

Background:

To compare the colour & luster of jute and others natural fibres with respect to the absolute value of white and to present the result in digital form. A low-cost instrument for measuring the colour and luster of jute and allied fibre has been developed by NINFET almost two decade ago using the principal of reflectance photometer, which can measure the brightness and luster of the fibre sample in terms of diffused and specular reflectance using photo electric cell. But this method is not sufficiently accurate as here the illumination of light source and parameters of the output from the light sensor are manually adjustable, and thus the method provides a probable source of error:

Technology Details:

To combat the problem, types of instrument have been developed. There is provided a system for colour and/or luster based lingo-cellulololic fibre grading comprising a light source for illuminating the fibre sample surface to be tested; sensor to detect reflection from the fibre sample surface a computing unit operatively connected to convert the said detected reflection to its equivalent whiteness value for grading of the fibre sample according to the computed colour and/or luster.