

Malaysian Foxtail grass – A potential source of natural/agro fibre for polymer composite panel

Abstract

Foxtail grass, also known as 'rumput bulu' by the local people, is one of the fast growing grasses abundantly available all over Malaysia. A full grown Foxtail grass attains a height of about 0.5 - 1.5 meters. The fibres were prepared by mechanical grinding procedure and the fibre size and length produced can be controlled through the grinding time of this grass material. The weight loss of the different grinding time was calculated. The polymer composites panel were then made from the mixing the polystyrene with various size of fibre produced. Flexural test exhibited good and comparable strength properties. The results show that this grass fibre may be considered as one of the potential sources of natural/agro fibres for polymer composites panel.

Keywords

Grass fibre; Natural/agro fibre; Polymer composites