

Corn cob filled chitosan biocomposite films

Abstract

Recently, there has been renewed interest in chitosan as materials in producing of biocomposite films. The chitosan (CS)/corn cob (CC) biocomposite films were prepared by solvent casting method. The effect of CC content on tensile properties of CS/CC biocomposite films was studied. The tensile strength and elongation at break of CS/CC biocomposite films decreased as increasing of CC content. However, the increasing of CC content was increased the tensile modulus of CS/CC biocomposite films. Scanning electron microscopy (SEM) was indicated that the decreasing of tensile properties was due to the poor interfacial adhesion between CC filler and CS matrix.

Keywords

Biocomposite; Chitosan; Corn cob; Films