

CHAPTER V CONCLUSION AND RECOMMENDATIONS

In this study, the natural rubber was blended with the CM-chitin before preparing the blend films by solution-casting technique. The addition of natural rubber could improve shrinkage stability, flexibility and thermal degradation stability of the blend films. The addition of glycerol to the blend films could reduce phase separation between CM-chitin matrix and natural rubber. In addition, at 10 phr of glycerol could improve both the tensile strength and elongation at break of the blend films. Glutaraldehyde was able to effectively crosslink the blend films. As the increasing of crosslinking time, the degree of swelling and weight loss were found to decrease. Moreover, the addition of natural rubber could improve weight loss of the blend films which can be utilized for wound dressing applications.

We should evaluated biodegradability of CM-chitin/natural rubber blend and In addition some other plasticizer or compatibilizer for improving miscibility of the blend should be studied as well.