CHAPTER V
CONCLUSIONS

The composition of CM-chitin/PVA blend films had a large effect on the mechanical properties and swelling behavior of the blend films. Blending PVA with CM-chitin resulted in an improvement in tensile strength and swelling behavior. On the other hand, PVA enhanced the thermal stability and elongation at break of CM-chitin. The addition of cross-linking agent to the blend films enhanced the mechanical properties. Furthermore, cross-linking was very important for the swelling behavior since it enabled retention of structural intregity of the films in water, even though it reduced the degree of swelling of the films. The swelling behavior of CM-chitin/PVA blend films varied with respect to changes in pH and salt type. Therefore, these CM-chitin/PVA blend films had pH and salt-responsive properties. For oxygen permeability rates, oxygen could pass through the blend films less than that of pure CM-chitin and PVA films. It may say that the blend films have gas barrier property.