Praparation of Tannin Based Hydrogel for Biological Application

Abstract:

Polymeric blends as potential wound dressing were prepared. Natural polymer (Tannin) and synthetic polymers (PVA and PEG) used to prepared heterogeneous blends. The product was identified by spectrophotometry. A diaphragm cell was used to measure the diffusion coefficient (D). The result showed that the PEG-PVA disk was faster in permeability for all solution. The D of PVA/ PEG-Tannin blend was 0.184×10-3 cm2/s higher than Tannin-PEG blend was 0.038×10-3cm2/s. The natural phenolic compounds can be used as artificial membrane to inhibit growth or kill microorganism such as bacteria or fungi.