

DEVELOPMENT AND CHARACTERIZATION OF POLYMER FILMS FOR THEIR APPLICATION IN REGENERATION OF EPITHELIAL TISSUE

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Polymeric films were prepared by casting and drying of aqueous solutions with different content of *Mimosa tenuiflora* extract and carboxymethyl chitosan and the physical, chemical, mechanical, *in vitro*, *in vivo* and antibacterial properties of films were investigated. The results indicate that the addition of active ingredient of *Mimosa tenuiflora* tree cortex in the polymer matrix helps to improve the proliferation of fibroblast and accelerates the wound healing process thus providing a biomaterial for epithelial tissue regeneration.

Keywords: Mimosa tenuiflora, Carboxymethyl chitosan, films

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