

Preparation coated of urea beads from banana peel bioplastic and epoxidized natural rubber 50

Abstract

This study produce coated urea beads with both banana peels bioplastics and epoxidized natural rubber 50 (ENR-50). In order to form small and homogenous pores of the coating materials, three types of different salt composites such as NaCl, MgCl₂ and MgSO₄ were used separately. The study between three different loadings for each salt were investigated. The interaction between salts and the both coating materials were investigated via Fourier transform infrared spectroscopy (FTIR) technique. FTIR spectra showed the peaks of the samples and it determined the functional groups present in the samples. ENR-50 was detected at peak 876 cm⁻¹ while the CH₃ reading show at peak 1472 cm⁻¹. However, the peak was overlap at 1470 cm⁻¹. Banana peel contain high amount of starch and it can increase the absorbance reading. Thus, it helps increase the nutrient taken up by the plants.