

Abstract. Nypa palm (*Nypa fruticans*) is a type of palm-shaped mangrove. A nypa leaf contains 28.9% cellulose so that it is possible to produce an activated carbon applied for heavy metal removal in the solution. Thus, this study aimed to remove Fe and Mn in the FeCl₃ and MnCl₂ solution using the activated carbon produced from nypa leaves. In the experimental procedure, 5 grams activated carbon from nypa leaves (the particles that could pass through 40, 80, and 120 mesh size and retained on the sizes of 50, 100, and 150 mesh) were added and undergone in a batch system (for 60 and 120 minutes). The concentrations of Fe and Mn in the solution were investigated using the Atomic Absorption Spectrophotometer (AAS). The results showed that there were significant decreases in the Fe and Mn concentrations at the 60-minutes contact time with 150 mesh particle size (the absorption capacity values of Fe and Mn were 59.96 and 96.94 wt.%, respectively). This was due to the bigger surface area of the adsorbent and the longer contact time resulting in better interaction between the activated carbon from nypa leaves to remove Fe and Mn concentrations in the solution.