Mangosteen seeds belonging to the recalcitrant seeds which have a short lifespan due to drought prone and easily germinated seed storage place. It is necessary for the proper storage to maintain seed viability during storage. The study aims to assess the concentration of PEG - 6000 and the appropriate kinds of storage media to maintain seed quality mangosteen. This research was conducted at the Seed Technology Laboratory of the Department of Agro Technology Faculty of Agriculture, University of National Development "Veteran" Yogyakarta. The method used was completely randomized design (CRD) and a 3x3 factorial repeated 3 times. Factor I concentrations of PEG - 6000 consists of 3 levels ie 0%, 15%, and 30%. Factor II kinds of storage media consists of 3 levels ie without storage media, storage media sawdust and rice husk storage media. The data were analyzed variability at 5% significance level, to know the difference between cedar followed by Duncan's Multiple Range Test (DMRT) at 5% significance level. The results showed that the interaction parameter germination and speed of germination of seeds. Treatment concentration of 30% PEG 6000 with sawdust storage media provide and speed germination of seeds germinated better. The use of PEG 6000 concentration of 15% and 30% were able to suppress the moldy seed, seed germination, and hit the high electrical conductivity values. Sawdust is the best storage media to maintain seed quality during storage mangosteen.