Formulation of Solid Lipid Nanoparticle containing Lysimachia foenum-graecum Extracts

Lysimachia foenum-graecum Hance has been primarily used a spice, insectifuge and pest repellent. It has also been used as a traditional oriental medicine for the treatment of cold, rheum, headache, toothache and diseases of the digestive system. Although the chemical profile of the L. foenum-graecum has not been published yet to the best of our knowledge, triterpene saponins are found in abundance from the aerial part of L. foenum-graecum. Solid Lipid Nanoparticle(SLN) is used to control the release of drug carrier system. SLNs are a new generation of submicron-sized lipid emulsions where the liquid-liquid has been substituted by a solid lipid. SLNs are submicron colloidal carrier composed of physiological lipid, dispersed in water or in an aqueous surfactant solution. In this study, Lysimachia foenum-graecum extracts loaded stearic acid SLN was prepared using stearic acid as lipid matrix and pluronic F127 as emulsifiers by a hot homogenization method.