**ABSTRACT**

Flame tree is an affiliate of family Fabaceae, sub family Caesalpiniodideae.It is a very popular and most beautiful ornamental tree that has been very widely introduced to tropical countries around the world. The medicinal properties like Anti-diabetic activity, Anti-bacterial activity, Anti-diarrheal property, Antioxidant activity and Anti-microbial activity. The flower extract of Delonixregia also possessed strong antioxidant potential and thus capable of inhibiting, quenching free radicals to terminate the radical chain reaction. The results indicate that the plant material may become an important source of natural drug compounds with health protective potential and natural antioxidants of significant impact on the status of human health. The present study was carried out to identify the phytochemicals and evaluate antioxidant activity of chloroform extract of flowers of Delonixregia. The antioxidant activity of the extract was determined by DPPH assay. Thus the in-vitro studies clearly indicate that the chloroform extract of flowers of Delonixregia shows significant antioxidant activity and also a better source of natural antioxidants. The in silico antioxidant studies was carried out in specific protein tyrosine kinase (2HCK) was identified as the mark for antioxidant compounds using autodock 4.0 Software. Auto Dock was used to calculate the binding free energy of a given ligand to protein structure. It is used to determine the best fit of ligand moiety over enzyme. It is also used to find out the nature of binding of the ligand.