Peptic ulcer is a conglomerate of heterogenous disorders which manifests itself as a break in the lining of the gastrointestinal mucosa bathed by acid and/or pepsin. NSAIDS ingestion is associated with erosions, petechiae type C gastritis, ulceration, interference with ulcer healing, Ulcer complications and injury to the small and large intestine (Wallace, 1992). Although a number of antiulcer drugs such as H2 receptor antagonists, proton pump inhibitors and cytoprotectants are available for ulceration, but all these drugs have side effects and limitations (Ariyoshi et al., 1986). Herbal medicine considered safer because of the natural ingredients with no side effects (Clouatre and Rosenbaum, 1994). In India, Acanthus ilicifolius known as “sahachara” (Singh et al., 2009), It is available in almost all coastal states of India, It is a folklore medicinal plant used mainly against rheumatism, paralysis, Astma, snakebites, skin diseases and in the treatment of Ulcers (P. Thirunavukkarasu et al., 2011). A decoction of the plant with sugar candy and cumin is used in dyspepsia with acid eructation (Kathiresan and Ramanathan 1997, Ramanathan et al., 2000). The MEAI leaf has shown the presence of phytochemical active compounds such as proteins, resins, tannins, steroids, glycosides, reducing sugars, carbohydrates, saponins, sterols, terpenoids, phenols, cardioglycosides and catachol. In GCMS analysis, cyanocolchicine bioactive compound was identified (S Ganesh and J Jannet, 2011). Another Phytochemical compound Quercetin, of this plant is found to be shown antioxidant activity (T. Gusdinar et al., 2011). A new cumaric acid derivative acancifoliuside, acteoside, isoacteoside, acanthaminoside, (+)-lyoniresinol 3a-O-beta-glucopyranoside, (-)-lyoniresinol, and alpha-amyrin, have been isolated from
the methanolic extract of the leaves of A. ilicifolius (Huo et al 2008, Zhang et al 2004). The flavonoids present in the Acanthus ilicifolius plant are found to have hepatoprotective and antioxidant activities (Babu et al., 2001) Flavonoids exhibit several biological effects such as anti inflammatory, anti hepatotoxic and antiulcer actions (Bors W et al., 1990 and Colerige smith PO et al., 1980).

In this present study we evaluated the antulcer activity of of MEAI leaf in ulcer induced experimental rats and It is further investigated and confirmed by using bioinformatics studies like Homology modeling and Docking by taking the consideration of Phytochemical compounds of MEAI leaf.