Summary and Conclusion
SUMMARY AND CONCLUSION

In the present investigation, the toxicity associated with water & alcoholic extract of Vitex negundo and Ficus religiosa have been evaluated in experimental animals. The acute toxicity was evaluated in mice. The 50% mortality was noted at 1550mg/kg po & 2800mg/kg, po for alcohol and water extract of Vitex negundo, respectively. The LD$_{50}$ for alcohol and water extract of Ficus religiosa was found to be 3200mg/kg, po and 5000mg/kg, po; respectively.

The chronic toxicity was evaluated by using the rats. In histopathological studies, abnormalities induced by diabetic agents including both alloxan and streptozotocin was caused necrosis, lysis with vacuoles and cyst formation at frequent intervals in heart, pancreas, liver and kidney. However, in saline treated animals the structure and architecture of all the organs were intact. All the doses of alcoholic extract of Vitex negundo significantly inhibited the cellular changes induced by both alloxan and STZ dose dependantly. The alchololic extract of Ficus religiosa shown moderately effects on toxicokinetics effect of diabetes inducing agent was evident from the present histopathological study. The water extract of both Vitex negundo and Ficus religiosa were found to be less effective in countering the molecular, cellular, haemodynamic, necrosis, collection of mononuclear cells & hammerize caused by alloxan & STZ in all the organs considered of the present study. The typical histopathological changes observed in this study should be regarded as diagnostic aid for toxicity of Vitex negundo and Ficus religiosa.
RESULT

From the present study, we conclude that the alcoholic extract of Vitex negundo leave has shown more potent antidiabetic activity than the water extract. The Ficus religiosa selected for the present study has also shown antidiabetic property for both water and alcoholic extract but less in potency than comparative to Vitex negundo leave. This indicates the possibility of developing Vitex negundo as a potent, safe & effective herbal formulation for the treatment of diabetes as evidenced by histopathological studies. However, further studies are required to explore the chemical constituents of the extracts of both Vitex negundo and Ficus religiosa for finding the molecular, cellular, biochemical and receptor mechanism.