4.1 CONCLUSION

From the present study, it is concluded that *Euphorbia neriifolia* ethanolic extract possess significant dose dependent antidiabetic and antihyperlipidemic activity in streptozotocin-nicotinamide and with high with no visible signs or symptoms of toxicity indicating a high margin of safety. The extracts exhibited anti diabetic and anti hyperlipidemic activity *Euphorbia neriifolia* Linn. to treat diabetes is supported by laboratory results from this study, suggesting a need to isolate and evaluate active constituents responsible for the exhibited biological activity. Besides exact mechanism of action very chronic models are the in order to develop as a potent required to elucidate diabetic drug longer duration studies on Euphorbia neriifolia Linn along with antihyperlipidemic activity.
4. 2 SUMMARY

_Euphorbia neriifolia_ Linn. were orally administered to Wistar albino rats of both sex. As a standard drug glibenclamide 2.5 mg/kg was used to compare potency of extract. Body weight, Oral Glucose Tolerance Taste (OGTT), serum lipid profile, fasting blood glucose (FBG), liver glycogen, serum insulin and glycated haemoglobin. In OGTT, decline in fasting blood glucose content occurred from 60 mins after administration of extract. _Euphorbia neriifolia_ ethanolic extract (ENEE) produced significant dose dependent decrease in FBG. At the end of the treatment after fifteen days with ENEE, 400 mg/kg dose. Lipid levels of serum were observed reversed near to normal in treated Insulin level and liver glycogen. In diabetic rats glycosylated hemoglobin was observed increased and decreased in treated rats. Results demonstrated that _Euphorbia neriifolia_ Linn. possesses significant antidiabetic and antihyperlipidemic activity.

Evaluation of antidiabetic and antihyperlipidemic activity of _Euphorbia neriifolia_ was also performed animal model. SD weighing between 200 -250 gm were consumed HFD. After two weeks, the animals were given establish repeated oral administration the ENEE at on FBG levels and after 21 days ENEE produced a dose dependent decrease on body weight, FBG, triglycerides, total cholesterol, LDL, VLDL. There was significant increase in HDL content and liver glycogen. As a standard drug glibenclamide 2.5 mg/kg was used to compare potency of extract. In OGTT reduction of FBG levels were observed after sixty mins of extract administration. From the overall data, it was concluded that ENEE showed dose dependent antidiabetic potential along with the potent antihyperlipidemic effect after treatment.