OBJECTIVE

According to World Health Organization (WHO), the world wide global population is in the midst of a diabetes epidemic with people in Southeast Asia and Western Pacific being mostly at risk. The number of cases for diabetes which is currently at 171 million is predicted to reach 366 million by the end of 2030. Therefore, it is necessary to search for new drugs and interventions that can be used to manage this metabolic disorder. The most prevalent form of diabetes is non-insulin dependent diabetes mellitus (WHO, 2006).

Accumulation of lipids in diabetes is mediated through a variety of derangements in metabolic and regulatory processes, especially insulin deficiency, thereby rendering the diabetic patient more prone to hypercholesterolemia and hypertriglyceridemia (Kasiappan R. et al., 2005). One of the major pathogenesis of lipid metabolism disturbances in diabetes is the increased mobilization of fatty acids from adipose tissue and secondary elevation of free fatty acid level in the blood. Hyperlipidemia is the major risk factor for Congestive Heart Failure (CHF) and it is one of the leading cause for cardiac complication like anginapectoris, myocardial infarction. World wide so many people dies because of diabetes associated with hyperlipidemia.

Our Indian meditional plant have large source for curing this type of serious diseases and use of meditional plant to treat diabetes associated with hyperlipidemia is devoid of dangerous side effect. Because of this reason in the present study meditional plant is selected.

In the present study one plant shall be evaluated for antidiabetic and antihyperlipidemic activity. *Euphorbia neriifolia* Linn. is also known as Common Milk Hedge in English, Sehund and Thohar in Hindi belonging to family Euphorbiaceae. *Euphorbia neriifolia* is a large succulent shrub, with stipular thorns and is found in throughout India. Traditional use of this plant in diabetes and no scientific and research data is reported to treat diabetes regarding this plant.

Our attempt is to establish the scientific data of this plant as common alternative antiepileptic agent.