WORK PLAN & METHODOLOGY

The whole study is carried out as follows:

1. Review of literature including epidemiology of epilepsy, ayurvedic concept of disease, related work on other plants etc.
2. Identification, collection and authentication of the plant.
4. Preparation of various extracts with powdered parts of plant using Soxhlet apparatus.
5. HPTLC analysis of various extracts.
6. Carry out toxicity studies and determine the LD$_{50}$ as per OECD guideline.
7. Dose Titration for the study.
8. Selection of various animal models for antiepileptic activity.

Selection of animal models shall be based on tonic-clonic convulsion, tonic extensor phase, straub tail response, turning behavior, protection against mortality etc.

The models used for this study are as follows:

a) PTZ (Pentylenetetrazole) induced convulsive model
b) Maximal Electro Shock (MES) induced convulsive model
c) Strychnine induced convolution model
d) N-methyl D-aspartate test
e) Lithium-Pilocarpine-induced status epilepticus
f) Picrotoxin induced convulsion model
g) Estimation of biogenic amines like dopamine, GABA etc.