3. AIM & OBJECTIVES OF STUDY

The main aim of the present research work was to investigate the neuroprotective effect of bacosides and curcuminoids in prevention of age associated neurodegeneration by transforming usual ageing to successful ageing and its impact in delaying SDAT progression. The present series of study has been conducted with following specific objectives:

1. Extraction of bacosides and curcuminoids from the standard extract and the quantification of its major components.
2. In – vitro studies of bacosides and curcuminoids for their acetylcholinestersae inhibition, total antioxidant and NO radical scavenging activity.
3. Determination of optimum dose of bacosides and curcuminoids through evaluation of their dose dependant activity over ageing biomarker (lipofuscin), dementia biomarker (acetylcholine).
4. Investigation of selected dose of bacosides and curcuminoids over age associated neurochemical, neurobehavioral deficits and structural alterations in hippocampal regions.
5. Evaluation of modulation of age dependant oxidative damage by bacosides and curcuminoids.
6. Assessment of amelioration of age related energy transduction system defects on bacosides and curcuminoids treatment.
8. Implications for the neuroprotective effect of bacosides and curcuminoids in the prevention and/or delaying the progression of SDAT.