Chapter 2
Aim and scope of the study

Rahmath A. “Neuroprotective effect of Moringa oleifera Bedd. and Vitex negundo L. in scopolamine induced cognitive impairment and oxidative stress in Wistar albino rats” Thesis. Department of Life Sciences, University of Calicut, 2016
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Advances in the understanding of dementia have been hindered by the absence of appropriate animal models. Memory loss is one of the characteristic features of dementia. Hippocampus is the principal region associated with learning and memory. The Indian system of medicine is stuffed with medicinal plants claimed to promote memory, learning and intelligence through its neuroprotective effect [203]. Even a micro additional advantage over the side effects may bring a mega advantage or progress in disease recovery. So this particular comparison might help in choosing preferably a better understanding of the function of memory.

Looking for the pathophysiology of dementia and possible usefulness of these herbs, objectives of the present investigation were:

1. To evaluate the mechanism of action of *Moringa oleifera* and *Vitex negundo* in scopolamine induced dementia.

2. To carry out pharamacognostical study of *Moringa oleifera* and *Vitex negundo*.

3. The main purpose of the present study was to compare the neuroprotective effect of *Moringa oleifera* and *Vitex negundo* with the standard drug donepezil on scopolamine induced cognitive impairment and oxidative stress in *Wistar albino* rats.