CHAPTER 3

Aim and objectives of the experiments

Although obesity is one of the major health problems in the United States, there is not an effective drug to treat obesity because they all have undesirable side effects. However, it is believed that botanicals provide a safer and natural way to human body in both pharmaceutical and nutraceutical aspects. According to Food and Drug Administration (FDA) botanical drugs can be developed much faster and less costly than conventional single-entity pharmaceuticals.

The aim of the study was to standardization and determination of antiobesity potential of *Boerhavia diffusa*, *Saccharum spontaneum* and *Dalbergia latifolia* from natural origin.

The study comes of following objectives.

(A) *In-vitro study*

(I) To determine the total phenolic and flavonoidal contents in selected drugs.

(II) To perform antioxidant activities (DPPH, Nitrous oxide, Reduction potential & Ferric thiocyanate scavenging activity) of selected drugs.

(B) *In-vivo study*

(I) To investigate antiobesity activity in female SD rats.