Scope of the present investigation

Corm of elephant-foot yam is used in Ayurveda to cure various ailments. Lack scientific data on biochemical changes during development of corm and on antidiabetic and antiplatelet aggregation activity offered sufficient scope to undertake this research work. Further the antioxidant and antibacterial activities were not studied extensively for various non-polar and polar solvent extracts of elephant-foot yam. These aspects which we believe have practical significance. Understanding the peak accumulation of bioactive components during development of corm is essential. It may provide an opportunity to standardize the stage of nutraceutical maturity, which is critical to obtain quality raw material for design and development of products of health benefits.

The results of scientific pursuit carried out in this regard have been presented in four chapters for the convenience of reading

1. Screening of selected fruits and vegetables for their potential antioxidant activity.

2. Biochemical changes and antioxidant activity during development of corm of elephant-foot yam

3. *In vitro* functional properties of elephant-foot yam extracts

4. *In vivo* functional properties of active extract of elephant-foot yam