An herbal hypoglycemic compound for controlling diabetes

ICMR is seeking potential agencies interested in manufacturing of a herbal anti-diabetic compound extracted from the fruit-pulp of Eugenia species to bring this herbal compound to next level.

Proposed work will include:

1) Manufacturing the herbal compound in large scale
2) Validation

Background

India is home to nearly 65 million diabetics - second only to China which has over 98 million diabetics. Diabetes is a chronic hereditary disease which is a disorder characterized by presence of abnormally high level of glucose in the blood and urine. There are two types of diabetes- type I and type II. In type I, also called Insulin Dependent Diabetes Mellitus (IDDM), insulin levels are less or absent and insulin treatment is needed. However, in type II diabetes mellitus also called Non-Insulin Dependent Diabetes (NIDDM), insulin levels are less and there is less sensitivity and /or resistance to insulin; so management of diabetes is usually by oral hypoglycemic agents.

SALIENT FEATURES OF THE TECHNOLOGY:

- This invention relates to a herbal therapeutic compound for controlling diabetes mellitus extracted from the pulp of fruit of Eugenia species comprising an active hypoglycemic compound.
- The compound is extracted with an elaborate process comprising grounding, lyophilising and series of chromatographic elution and extractions. It has been studied in detail by UV, IR and NMR spectra to establish novelty in its structure.
- This oral hypoglycemic herbal compound will be useful for the treatment of both type I and type II diabetes (in both moderate and severe diabetic conditions).
- Since it is herbal anti-diabetic compound, it has no side effects and toxic effects.
- It is a water soluble compound.
- It has immediate and longer lasting effects in controlling diabetes mellitus. The intake of doses can be postponed for 2-3 days after controlling the glucose level because of the long lasting effects of this hypoglycemic compound.
- The active hypoglycemic compound is also found to decrease glycosylated hemoglobin in diabetic rabbits.
- Due to its hypoglycemic and hypolipidemic effect, the compound may be beneficial for the treatment of NIDDM patients with cardiovascular complications.
- A patent has been granted on this technology.