High-lights of Invention

Salient features of herbal anti-diabetic compound isolated from fruit pulp of Eugenia - Jambolana and also chemically synthesized.

1. Unique selling points of our technology.

-Herbal ant diabetic compound (FIIc) has been isolated from fruit pulp of *Eugenia jambolana*

-Besides anti-diabetic activity , it is also having Hypolipidaemic and anti-oxidant potential. Hence effective not only in controlling hyperglycemia but also in diabetic complications.e.g CAD, nephropathy & retinopathy in diabetic animal models.

- Single dose (15 mg/kg b.w) is effective in controlling hyperglycemia for 48 hrs.

- It is effective in controlling both fasting and post –prandial blood glucose levels.

-A significant fall in serum DPP4 level and serum TNF- α was observed after oral administration of herbal ant diabetic compound (FIIc)

-A significant increase in GLUT-4 and GLUT-8 gene expression levels was also observed after oral administration of herbal ant diabetic compound (FIIc)

-Treatment for 30 weeks improves glycemic control and insulin sensitivity by increasing the mRNA expression of PPAR γ, IRS-1 and IRS-2. .

-Histomorphological studies shows partial regeneration of beta –cells of islets of Langerhans of Pancreas.

- No adverse effect was observed on liver and kidney functions.

- Acute and Sub- chronic toxicity studies shows no adverse effect in normal albino –rats.

- Due to seasonal barriers and less yield, the herbal antidiabetic compound (FIIc) isolated from fruit –pulp of E . Jambolana has now been chemically synthesized(α-HSA) in our lab.

- LD_{50} of the chemically synthesized herbal compound (α-HSA) was found to be 867mg/kg b.w.

Rafale
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