

DIAFOETIDA: A NATURAL REMEDY FOR DIABETES

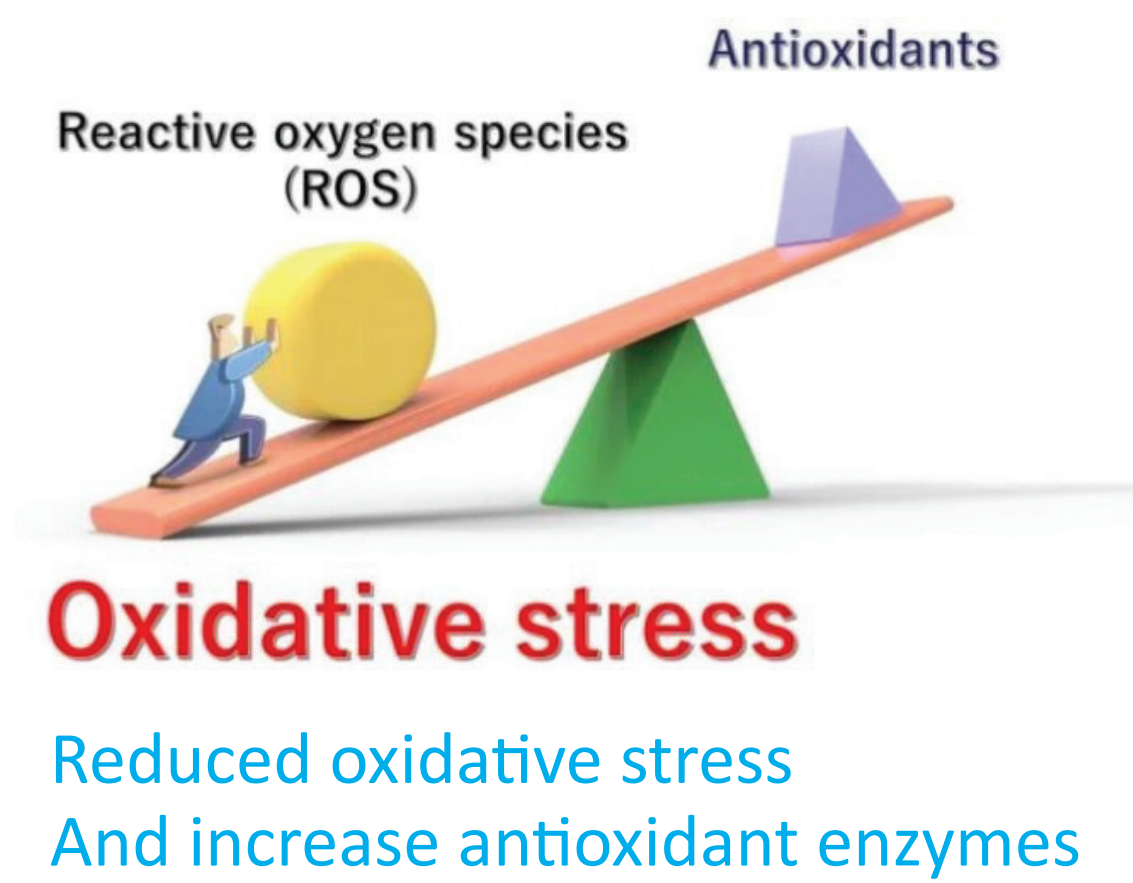
PATENT NO. PI2020000673



Animal Testing (In vivo)



-High fat diet/
streptozotocin-
induced
diabetic model
(blood glucose
test,
hematology
test &
oxidative
stress test)



BRIEF TECHNOLOGY

The present invention is a standardized *Paederia foetida* extract products commercially known under the name of Diafoetida, subjected to cytotoxicity and toxicological tests, which antidiabetic and antioxidant markers therein are quantified. This invention provides a safe and effective dosage of standardized *Paederia foetida* extract containing antidiabetic agent, scopoletin. Nonetheless, the antidiabetic effect from *Paederia foetida* extract may rely on the various phytochemicals therein. *Paederia foetida* standardized extract can be a potential herbal medication which is effective in reducing blood glucose, triglycerides level, fatty liver, protect the kidney and increase antioxidant level

CURRENT ISSUES

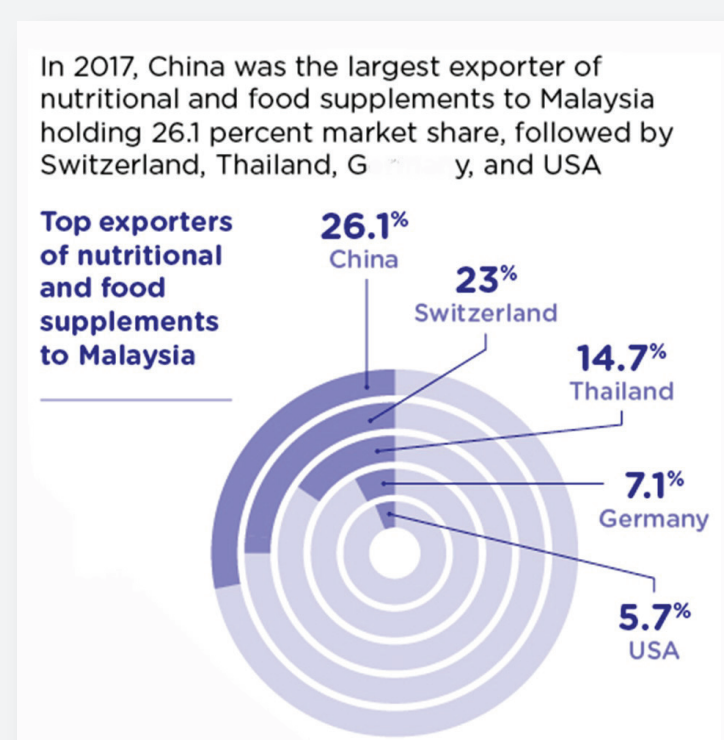
- Major drawbacks associated with the use of the conventional anti-diabetic drugs include high cost, severe hypoglycemia, weight gain, and other side effects. This causes many to be reluctant to take conventional antidiabetic drugs
- Many people with diabetes stop taking Metformin (<https://www.healthline.com/health-news/why-so-many-people-with-diabetes-stop-taking-metformin>)

INVENTIVENESS & NOVELTY

Paederia foetida L. is a plant widely distributed in Asian Countries. The plant has been used as a traditional remedy for diabetes, rheumatism, digestive problems, and etcetera. Scopoletin is a compound from the plant known for its antidiabetic properties. However, traditional use of plant extract may not be in a standardised dosage which impede the controlled quality from raw material to the final product. Hence, *P. foetida* is prepared with good quality control via standardised method.

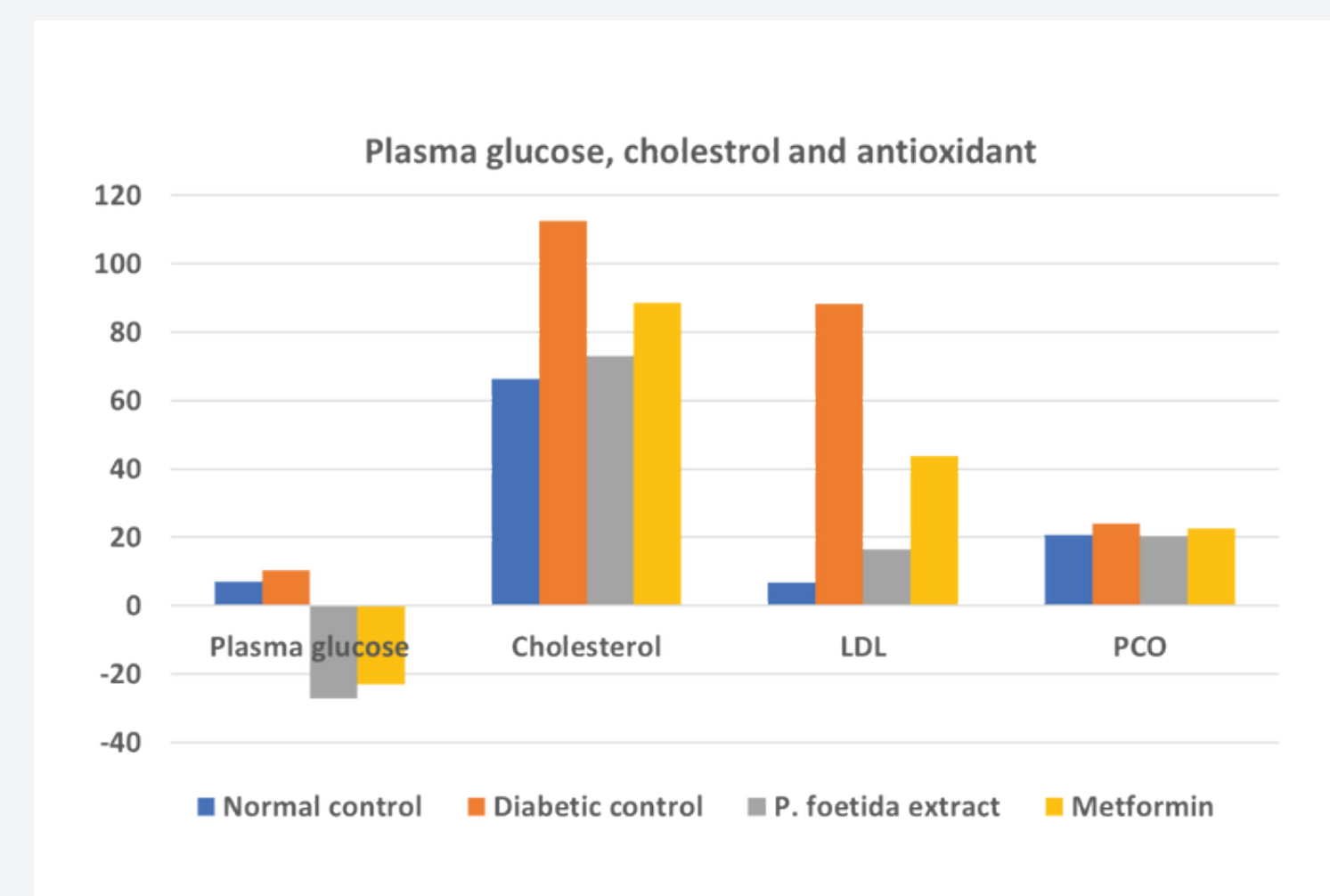
MARKET POTENTIAL

The herbal products market in Malaysia is estimated at US\$ 1.1 Bn, with 15% to 20% growth rate.

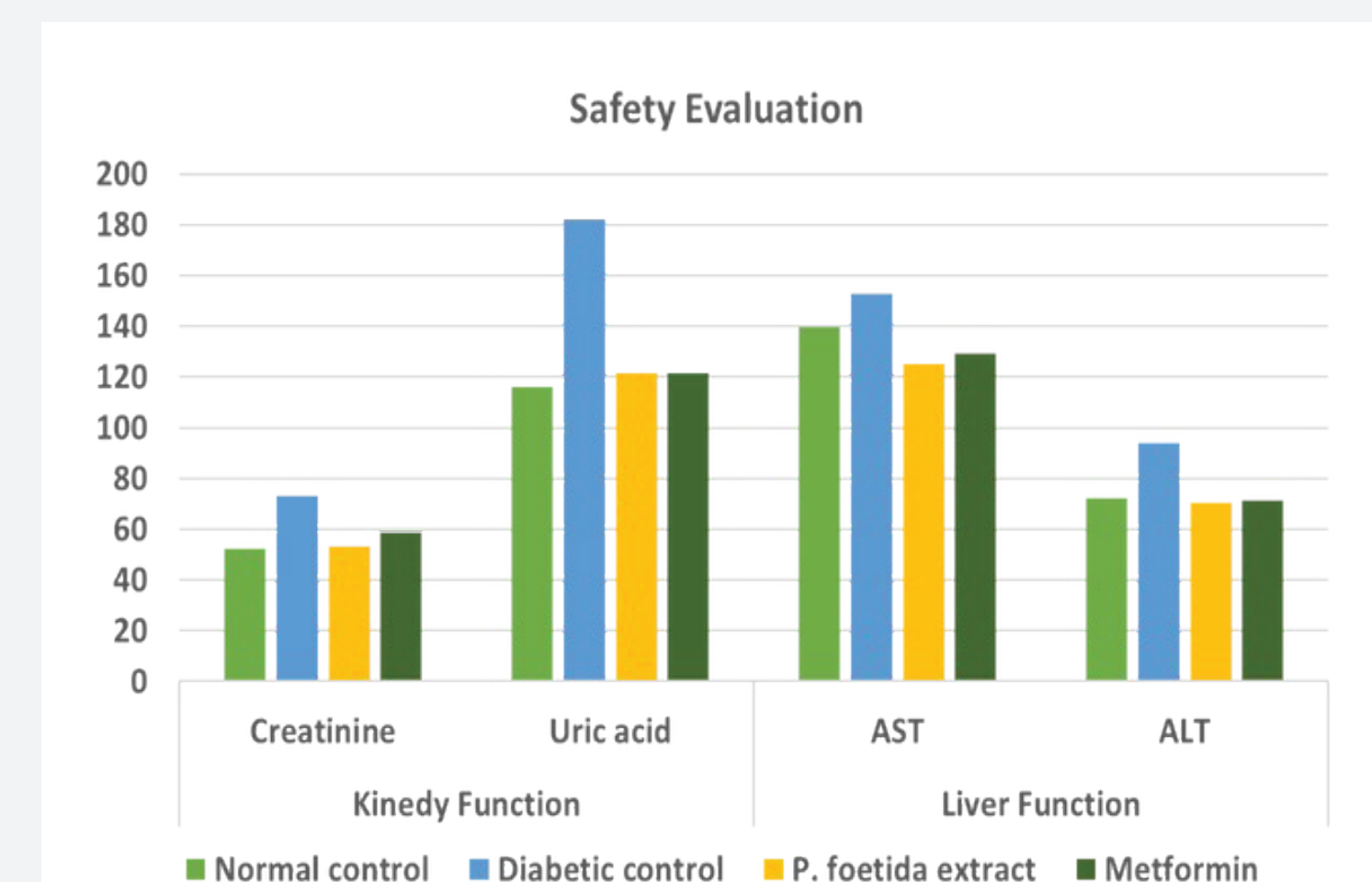


Commercialization partner with Tradisi Asli Sdn. Bhd

USEFULNESS & APPLICATION



50 mg/kg *P. foetida* extract lowers the blood glucose (27.2%), cholesterol, LDL, and oxidative stress of protein carbonyl content.



50 mg/kg *P. foetida* extract lower the creatinine and uric acid. Lower AST and ALT in *P. foetida* extract showed the lower inflammation and damaged cells compared to diabetic control.

PRODUCT IMPACT

MALAYSIA HERBAL INDUSTRY: Creation of new herbal product from local herbal plant source.

SOCIETY: Alternative choice of diabetic combat. Job opportunity for industrial herbal market including planters, manufacturers and marketers.

ENVIRONMENT: The invention production is via green method which are eco-friendly and sustainable.

PRIMARY HEALTH CARE: Herbal medicines make an enormous contribution to primary health care and have shown great potential in modern phyto-medicine against numerous ailments and complex diseases of the modern world.

TRL : 5 – VALIDATION IN REAL ENVIRONMENT



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