

# Herbals & Natural Remedies

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## Possible alternative medicine for diabetes

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Raw leaves of *Passiflora suberosa* L. (Family:Passifloraceae) is used as a traditional remedy to manage diabetes. Yet, its ethnomedical usage is not scientifically proven. Hypoglycaemic effect of the aqueous leaf extract (ALE) of *P. suberosa* in mice was determined. ALE was prepared and mice (n=9/group), were treated with 25, 50, 100, 200 mg/kg ALE and Distilled Water (DW; control). Fasting and random blood glucose levels were determined at 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> hours of post-treatment. Acute administration of 50 mg/kg of ALE significantly (p<0.01) reduced fasting blood glucose levels (BGL) at 1st, 3rd and 5th hours of post-treatment. Similarly, 100 mg/kg of ALE significantly reduced fasting BGL at 3<sup>rd</sup> and 5<sup>th</sup> hours of post treatment. However, it did not change the random BGL in non-fasted mice. To evaluate the chronic effect of ALE, 18 mice (n=9) were treated orally either with DW or 50 mg/kg of ALE for 30 consecutive days and fasting BGL was measured on the final day of the treatment after 1, 3, and 5 hours. A significant reduction in fasting BGL was observed, at 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> hours, respectively. The same dose showed a significant (p<0.01) improvement in sucrose tolerance test after 5 hours. However, ALE did not show a significant improvement in glucose tolerance test following an oral glucose challenge. The findings from this study suggest that the ALE of *P. suberosa* may be prescribed as alternative medicine to manage diabetes mellitus.

## Biography

Dinithi C Peiris obtained her PhD from University of Sheffield, UK and Postdoctoral studies from Queen's University, and University of British Columbia, Canada. She is a Senior Lectuer attached to Univesity of Sri Jayewardenepura, Sri Lanka. She has published more than 15 papers in reputed journals and 6 text books for university students. She has been serving as an Editorial Board Member of two international journals. Her main resesarch area includes use of traditional medicine for treatment of cancer and diabetes.

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