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## Estimation of diuretic activity of methanolic extract of Piper betle Linn. leaves

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Aim: In the present study, it is aimed to evaluate the diuretic activity of methanolic extract of Piper betle Linn. leaves.

**Methods:** The dried leaf powder was subjected to successive soxhlet extraction with solvents of varying polarities (water, methanol,ethyl acetate and hexane). Their phenolic and flavanoid contents were determined using colorimetric assays. The diuretic effect was found in wistar rats by Lipschitz et al method using furosemide as standard drug. It was assessed in terms of urine output and levels of sodium,potassium and chloride in urine. Methanolic extract of *Piper betle* leaveswas administered to experimental rats orally at the doses of 250 and 500 mg/kg.The methanolic extract had the additional advantage of methanolic extract had the additional advantage of a potassium conserving effect.

**Results:** The results obtained revealed that the methanolic extract of Piper betle leaves treated rats showed diuretic activity at a dose of 500 mg/kg body weight by increasing the total volume of urine and levels of sodium, potassium and chloride in urine as compared to control but effect was less than furosemide.

**Conclusion:** The diuretic activity of the extract was significant (p<0.05) when as compared to control. The extract increases sodium excretion to larger extent than potassium, which is a very quality of diuretic with lesser hyperkalaemic side effect.