

Letter to the Editor

HYPOGLYCAEMIC EFFECTS OF *BAMBUSA DENDROCALAMUS*

Various plants have been reported by practitioners of Ayurvedic medicine to be effective in treating diabetics. Amongst them 'Bel' 'Kerela' etc. have been studied extensively. *Scoparia oleis*, another indigenous plant has been reported to be effective in treating diabetics mellitus(2). Water extract of leaves of *Bambusa dendrocalamus* has been a recent inclusion in the list. We were told of its efficacy in causing a prolonged lowering of blood sugar in diabetics after a single dose. This prompted us to investigate this plant in animals for its hypoglycaemic activity.

Albino rabbits weighing 1.5-2 kg were fasted overnight and different doses of 25% water extract of leaves of *Bambusa dendrocalamus* were administered orally. The blood sugar estimations were made after 4, 8, 24, 48 and 96 hrs. by the method of Folin and Wu(1). Similar studies were done in alloxan treated rabbits. The results obtained are given in tables.

TABLE I

Blood sugar level after the oral doses of 25% extracts in normal rabbits

Each figure represents the average of 20 readings

Control mg%	Dose c.c./kgm. body wt.	after 4 hrs. mg%	after 8 hrs. mg%	after 24 hrs. mg%	after 48 hrs. mg%	after 96 hrs. mg%
	2.5	120±4.2	120±4	120±4.2	120±3.8	124±4
±4.5	5.0	100±3.2	100±2.6	110±3.6	120±2.6	124±3.2
	7.5	80 ±3.4	80 ±4	90±3.8	100±3.6	122±3.4

TABLE II

Blood sugar level after the oral doses of 25% extracts in alloxan treated rabbits (200 mg/kg I/V, 96 hours prior)

Ech figure represents the average of 20 readings

Control mg%	Dose c.c./kgm. body wt.	after 4 hrs. mgm%	after 8 hrs. mgm%	after 24 hrs. mgm%	after 48 hrs. mgm%	after 96 hrs. mgm%
	2.5	120±5	120±4	125±3.6	130±2	145±3
±9.5	5.0	100±4	110±4.2	115±6	120±3	142±5
	7.5	80±4.5	85±4.2	90±2	100±4	140±8

From the results obtained, it can be seen that a single dose causes a lowering of blood sugar in both the types of animals, to a significant extent and that the effect persists for about 96 hours. Further work on chemical analysis and isolation of the active principle is in progress.

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2. Nath, M.C. Investigation on the New Anti-diabetic principle occurring in Nature. *Ann. Biochem. Exp. Med.*, **3**: 55, 1943.