

## ABSTRACT

In the present study, ten medicinal plants have been investigated for oral diuretic activity. Detailed studies have also been carried out on the toxicity and possible mode of action of *Asparagus racemosus*. An attempt has also been made to isolate the active components responsible for diuresis from *Asparagus racemosus*.

The ability of five plants under investigation to increase the output of urine and urinary electrolytes at varying degrees in Sprague Dawley rats confirms the presence of diuretic agents in these plants. The magnitude of the diuretic effect varied with the dosage used and the time of storage.

Investigations carried out with normal human volunteers revealed that the medicinal plant, *Asparagus racemosus* was capable of improving the urine output and urinary output of electrolytes. This plant induces diuresis possibly by preventing or abolishing renal tubular reabsorption of sodium ions in humans.

Investigations with *Asparagus racemosus* showed that the extracts of this plant had no toxicological effects on the histopathology of various body organs, liver function, hematological parameters or on the reproductive ability of the experimental animals. The general conditions of the animals also did not change and all the animals remained in good health throughout the experimental period.

In the present investigation it was evident that diuretic activity of the crude extract of *Asparagus racemosus* plant is mediated by a mixture of alkaloids and glycosides.