

## Antitoxic impact of few novel plants against arsenic induced toxicity

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Arsenic is present in the environment and humans all over the world are exposed to small amounts, mostly through food, water, and air. But, the presence of high levels of arsenic in groundwater, the main source of drinking water in many countries around the world, has drawn the attention of the scientific community. In developing countries like Bangladesh and India, the high prevalence of contamination, the isolation and poverty of the rural population, and the high cost and complexity of arsenic removal systems have imposed a programmatic and policy challenge on an unprecedented scale. Although in India, arsenic poisoning in ground water in Gangetic basin especially the districts adjoining the river Ganges right from Eastern Uttar Pradesh, Bihar to West Bengal are the major problem of concern as due to which major health related problems are arising.

Arsenic contamination in drinking water in humans not only causes arsenicosis but also problems of liver dysfunction, infertility in men & women and probably gall bladder cancer also.

To combat the present problem, a pre-clinical study was done on Charles foster rats for 60 days and upon these arsenic pretreated rats, various novel plants were selected and administered for 45 days to study the antidote effects of these plants. The plants not only eliminated the effects of arsenic but also reversed the normal physiological activity in the animal. Thus, the present study concludes that these novel plants have the best antitoxic impact against arsenic induced toxicity.

### Biography

Arun Kumar has completed his Ph.D. in 2008 from Patna University, Patna, Bihar, India. He is presently serving as Scientist-I at a premier institute, Mahavir Cancer Institute & Research Centre, Patna, Bihar, India since last 5 years. He has published more than 30 research papers in reputed journals. He has received various awards during his academic career. He has been author and co-author of 3 international books published in year 2012. He has supervised 46 M.Sc. students for their M.Sc. dissertation work on various topics and co-supervised 2 Ph.D. students.

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