

## Immunomodulatory potential of *Asparagus racemosus* willd and *Chlorophytum arundinaceum* baker in wistar rats

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Immunoregulation is a complex balance between regulatory and effector cells and any imbalance in the immunological mechanism can lead to pathogenesis. Dire need to look for herbal immunomodulators to treat various infections has been hammered out due to increase in antibiotic resistant strains of microorganisms and costly synthetic antibiotics. Immunomodulator plants have great promise in the prevention of varieties of disease, especially in relation to host defense mechanism. For this purpose two plants were selected: *Asparagus racemosus* and *Chlorophytum arundinaceum*.

*Asparagus racemosus* or "Satavar" is a creeper of family Asparagaceae while *Chlorophytum arundinaceum* is a tiny annual herb of family Agavaceae. The aim of present study was to evaluate immunomodulatory potential of ethanolic extract of *Asparagus racemosus* and *Chlorophytum arundinaceum* in comparison to established immunosuppressant *Cedrus deodara* wood oil (100 mg/kg b.wt.) in mice. Oral administration of in vitro and in vivo extracts at a dose of 300 mg/kg b.wt.) in adult male Wister rats significantly increased the percentage neutrophil adhesion to nylon fibers as well as these extracts also induces delayed type hypersensitivity. The study suggested that *in vivo* ethanolic extract of *Chlorophytum arundinaceum* is positively modulates the immunity of the host compared to *Asparagus racemosus*.

### Biography

Manorma Sharma has submitted her Ph.D. at University of Rajasthan and is doing postdoctoral studies. She has published more than 10 papers in reputed journals. Archana Sharma is Asst Professor at Govt. P.G. College and guided 3 students to Ph.D. Ashwani Kumar is Alexander von Humboldt Fellow, Professor Emeritus, Former Head of the Department of Botany, and Director Life Sciences, University of Rajasthan, Jaipur, India. He has guided research to 35 students to Ph.D. in various branches of botany. He is still continuing his researches on renewable sources of energy mainly *Jatropha curcas* and has been consultant in World Bank Project sanctioned to SPRI-HPPI.

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