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***Gynandropsis pentaphylla* DC Extracts on the Production of Microbial Proteins**

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Indian scientists found that *G. pentaphylla*, cat's whiskers, would be of great value in drug designing against pathogens. According to their study, extracts of its seeds and leaves inhibited the extra cellular protein synthesis by the microbes thereby paving the way in reducing their pathogenicity.

The study published in the American Journal of Drug Discovery and Development, dealt with the effect of *Gynandropsis pentaphylla* (leaves and seeds) extracts (acetone, benzene, methanol, ether and water) on the production of extra and intracellular protein in 6 bacteria and 4 fungi. Effects of different type of extracts were done through the estimation of intra and extra cellular proteins content. Acetone extract of seeds inhibited the extra cellular protein synthesis at maximum level in *Bacillus subtilis* NCIM 2010, followed by benzene extract of seeds which inhibited the synthesis of extra cellular protein in *Escherichia coli* NCIM 2064. Water extract of seeds suppressed the extra cellular protein synthesis at maximum level in *Aspergillus niger* NCIM 501. Intracellular protein synthesis was highly affected after the addition of methanol extracts of leaves in *Staphylococcus aureus* NCIM 2120.

“Since this plant is easily available, their utilization makes possible the efficient exploitation of the local natural resource base”, says Francis Borgio *et al.* (2011), the lead and communicating author of this research paper. He is from the Department of Microbiology, St. Joseph's College, India.

The herb, *G. pentaphylla*, cat's whiskers, is edible and has long traditional use in India for medical practices. Its leaf, rich in vitamin C, is taken as a pot herb in soups, fresh or dried and used as disinfectants. Inhalation of the leaves also relieves headaches; leaf juice and oil, for earache and eye wash. Seeds have been reputed to have antihelmentic properties and oil is used as fish poison.

The author concludes as “the analysis of chemical composition of the extracts with remarkable effect can direct to discovery of new antimicrobial substances which might be promising lead compounds for development of new synthetic molecules with antimicrobial activity”.

However they also suggested the need of further research to assess the activity of this plant against a broad spectrum of pathogens.

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REFERENCE

Francis Borgio, J., B.J. Bency, P.K. Thorat and A.D. Lonkar, 2011. *Gynandropsis pentaphylla* DC extracts on the production of microbial proteins. Am. J. Drug Discovery Dev., 1: 129-136.