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| **Two New Kaurene Compounds from Rhizome Extract of P. cretica L. and Their Potent Bioactivity** | C:\Users\hp\AppData\Local\Packages\Microsoft.Windows.Photos_8wekyb3d8bbwe\TempState\ShareServiceTempFolder\my_pic-removebg-preview.jpeg |

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**Abstract**

The group of ferns from the genus *Pteris* (Pteridaceae) contains 250 cosmopolitan species. *Pteris cretica,* a constituent of Chinese medicine,called Cretan brake fern. Two new compounds *viz.* 2*α*,15*β*-dihydroxy-*ent*-kaur-16-ene (P-3) and methyl-2*β*,7*α*-dihydroxy-*ent*-kaur-16-en-19-oate 2-O-β-D-glucopyranoside (P-4) have been isolated and identified by their spectroscopic data. Metal chelating activity of the methanol extract, and hexane extract was significant having IC50 1.60 and 2.83 µL/ mL, respectively. IC50 values for DPPH radical scavenging activity of methanol extract, hexane extract were 2.83, 3.19 µL/ mL. The reducing power activity (absorbance at 700 nm) of methanol extract, and hexane extract were 2.55 and 0.50 nm, respectively at 20 µL/ mL. Ethyl acetate fraction of methanolic extract showed good activity against all tested microbes. Kaurene glycoside (P-4) isolated from ethyl acetate fraction showed comparable/slightly less activity than the original extract. Methanol extract was found to be less active against tested bacteria but showed good activity for fungal strains, *S. candidus* (ZOI 13.33 ± 0.57 mm)and *C. albicans* (ZOI 13.33 ± 0.57 mm), while hydroxy kuarene (P-3) isolated from methanol extract was found to be totally inactive against all the tested microbes.

**Biography of Author:**

Dr. Darshan Singh, is Assistant Professor and Head of Department of Chemistry in Government Post Graduate College, Dwarahat (Almora) Uttarakhand, India. He has completed his M. Sc. Chemistry from D. S. B. Campus, Nainital with first rank in University (Vice Chancellor Gold medal). He has more than twelve years experience of teaching chemistry in undergraduate, postgraduate courses and competitive exams. Dr. Singh completed his Ph. D. degree in Natural Product Chemistry under the dynamic supervision of Prof. C. S. Mathela from Phytochemistry Research Laboratory, D. S. B. Campus, Nainital (Kumaun University, Nainital). Dr. Singh has published more than twenty five research papers/book chapters in reputed international journals/books and two books for post graduate courses of Indian Universities. Dr. Singh got Young Scientist Award by Uttarakand State Council for Science and Technology, Dehardun in the year 2010. He has got INSPIRE Fellowship Award for Ph. D. degree from Department of Science and Technology, New Delhi in the year 2010. Dr. Singh got Hope Meetings Award from Department of Science and Technology, New Delhi in year 2012. He has also participated in 4th HOPE Meeting of Nobel Laureates organized by Japan Society for Promotion of Science, Japan in 2012. Dr. Singh is life member of Indian Science Congress association.

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