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Phytochemical and Biological Studies on the Selected Medicinal Plants of Dhading and Makwanpur Districts of Nepal and Isolation of Chemical Constituents from *Myrica Esculenta*

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Phytochemical and biological screenings of some medicinal plants collected from Dhading and Makwanpur District were performed. Phytochemical screening suggests that the selected plant sample contains Alkaloids, Flavonoids, Terpenoids, Glycosides, Quinones, Reducing sugars, Polyphenols and Saponins. Methanolic extracts of bark of *Myrica esculenta* showed high toxicity against brine shrimp naupili having LC50 value 20.89 μ g/ml. Among the ten selected medicinal plants, total phenolic content and total flavonoid content were also found highest in bark of *Myrica esculenta* having the values 262 \pm 6.64 mg/g gallic acid equivalent and 151.23 \pm 4.63 mg/g quercetin equivalent respectively. The antioxidant properties of ten samples were evaluated by using DPPH assay and their IC50 values were calculated. IC50 value of *M. esculenta* was found as the lowest (46.81 μ g/ml) and closest to that of Ascorbic acid (41.34 μ g/ml) taken as standard. Two pure compounds IPC1 and IPC2 were isolated from methanolic extract of bark *Myrica esculenta* by column chromatography. The compound IPC1 was proposed as β -sitosterol with the aid of Co-TLC and melting point of authentic sample. The compound IPC2 is under process for its structure elucidation.

Biography:

Ishwor Pathak, born in Dhading, Nepal, received his M.Sc. degree (Chemistry) in 2015 from Central Department of Chemistry, Kathmandu, Nepal. At present, he is working as an Assistant Professor of Chemistry at the Tribhuvan University, Amrit Campus, Kathmandu, Nepal.

His research interest includes Natural Product Chemistry and Organic Synthesis. He has published four research articles.