

A comparative study of *Bergenia ciliata*, *Bergenia ligulata* and *Bergenia stracheyi* against *in vitro* oxidative damage

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Free radicals or highly reactive oxygen species are capable of inducing oxidative damage to human body. Antioxidants are the compounds which terminate the attack of reactive species and reduce the risk of diseases. The antioxidant activity of *Bergenia ciliata*, *Bergenia ligulata* and *Bergenia stracheyi* (root, rhizome and leaf) alcoholic and hydroalcoholic extracts were screened for their free radical scavenging properties using ascorbic acid, BHT, quercetin and tocopherol as standard antioxidants. Free radical scavenging activity was evaluated using 1,1-diphenyl-2-picryl-hydrazyl (DPPH) free radical. The maximum antioxidant activity was seen in *Bergenia ligulata* rhizome ethanolic extract followed by extracts in descending order were *Bergenia ciliata* rhizome ethanolic>*Bergenia ligulata* rhizome ethanolic>*Bergenia ciliata* root hydroethanolic>*Bergenia stracheyi* rhizome hydroethanolic>*Bergenia ligulata* root hydroethanolic>*Bergenia ligulata* rhizome hydroethanolic>*Bergenia ligulata* leaf hydroethanolic>*Bergenia stracheyi* root hydroethanolic>*Bergenia stracheyi* rhizome ethanolic>*Bergenia stracheyi* leaf ethanolic>*Bergenia stracheyi* leaf hydroethanolic>*Bergenia ciliata* rhizome hydroethanolic>*Bergenia ciliata* leaf hydroethanolic. The study reveals that the consumption of these species would exert several beneficial effects by virtue of their antioxidant activity.

Biography

Km. Ruby is a research scholar in pharmaceutical chemistry in Banasthali University and had one year teaching experience in life science department SGRITS Dehradun. She has more than 10 papers in reputed journals and has participated in many national and international conferences.