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Multiple inhibitory activities of *Urginea* species

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The genus *Urginea* belongs to family Asparagaceae is found growing in India, Africa, and Mediterranean regions of the world. It is one of the medicinally important genera showing multiple activities to cure various deadly diseases. In the present study anti-inflammatory, anti-diabetic, anti-Alzheimer's, anti-cancer, anti-oxidant and anti-osteoporosis activity of *Urginea* species have been discussed. Methanol extract of *U. wightii* has shown inhibition against raw 264.7 cell lines in lipoxygenase, inhibition assay and exhibited the IC value of 200.7 µg/ml with quercetin as standard. Anti-oxidant activity was determined by nitric oxide free radical scavenging assay where curcuminoids was used as standard. *U. indica* and *U. wightii* showed significant anti-oxidant activity with IC value of 174.1 µg/ml and 371.9 µg/ml respectively. Anti-diabetic activity was detected using alpha amylase inhibition assay with acarbose as standard. Both *U. indica* and *U. wightii* have shown significant results with IC value of 253.7 µg/ml and 202.2 µg/ml respectively. Anti-Alzheimer activity was analysed using acetylcholinesterase assay with neostigmine as standard. *U. indica* showed IC value 121 µg/ml against standard 0.04 µg/ml. Cell proliferative activity of the extraction on UMR 106 lines against osteoporosis, has revealed. IC₅₀ value of 185.9µg/ml in *U. indica* and 69.75µg/ml in *U. wightii*. Anti-cancer activity was determined against cell line MCF-7 using MTT assay. Both the species have showed significant results inhibiting cell growth in MCF-7 cell line and exhibited IC₅₀ value of 325.9µg/ml in *U. indica* and 424.3µg/ml in *U. wightii*. These results show *Urginea* species have a magical potential to heal deadly diseases. Further work is in progress.

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