PO-20

Bioactivity Studies of some Plants Used in Traditional Medicine to Treat Inflammations

Dhakshila Niyangoda[1], N. Savitri Kumar[2], Lalith Jayasinghe[3]

[1]*Department of Pharmacy, Faculty of Allied Health Sciences, University of Peradeniya,*
[2]*Institute of Fundamental Studies, Kandy, Sri Lanka.*
E.mail: dhakshila@gmail.com

Continuous use of available topical anti-inflammatory drugs causes toxic effects as in the case of their oral counterparts. Hence development of cheaper and effective anti-inflammatory drugs is of prime importance. Leaves of *Amaranthus viridis*, *Hibiscus rosa-sinensis*, and *Plumeria* sp.; milky latex of the bark of *Artocarpus heterophyllus*; barks of *Bombax ceiba*, *Litsea glutinosa*, *Moringa oleifera* and *Plumeria* sp.; fruit of *Dillenia retusa*; and flower buds of *H. rosa-sinensis* are some of the popular plant parts used in traditional medicine to treat local inflammations. Here we report results of some bioactivity tests performed for methanol extracts of these plant materials.

MeOH extracts of dried and powdered plant parts were subjected to antifungal activity against *Cladosporium cladosporioides* by TLC bio-autograpy; antioxidant activity against DPPH radical scavenging activity; haemolysis test using blood agar plates and brine shrimp lethality bioassay against *Artemia salina*. Froth test was performed for both aqueous extracts and MeOH extracts of each plant.

All extracts were positive in the haemolysis test for saponins. All the samples except milky latex of the bark of *A. heterophyllus* were positive for froth test. All the samples except milky latex of the bark of *A. heterophyllus* and leaves of *A. viridis* showed strong antioxidant activity. Leaves of *A. viridis*, milky latex of the bark of *A. heterophyllus*, flower buds of *H. rosa-sinensis* and leaves of *Plumeria sp.* showed significant activity in the brine shrimp lethality bioassay. None of the extracts showed antifungal activity.