PO-17

Bioactivity Studies of some Edible Grains of Sri Lanka

D.S. Jayaweera[1], N. Savitri Kumar[1], G.J. Panagoda[2], B.M.R. Bandara[3], Lalith Jayasinghe[1]

[1]*Institute of Fundamental Studies, Hatana Road, Kandy, Sri Lanka.*
[2]*Devision of Microbilogy, Faculty of Dental Science, University of Peradeniya, Sri Lanka*
[3]*Department of Chemistry, University of Peradeniya, Sri Lanka.*
E.mail: sanjeevadj@yahoo.co.uk

Edible grains, which play a major role in human diet all over the world, contain carbohydrates, proteins, vitamins, minerals and other secondary metabolites. Scientific evidence suggests that whole grains consumed by humans reduce the risk of several chronic diseases including colon cancer, diabetes and coronary heart disease. Most of the edible grains belong to Leguminosae and Graminae.

Recently we examined the bioactivity of methanol extracts of fifteen edible grains used in Sri Lanka - *Cicer arietinum* (Local name: Kadala), *Lathyrus aphaca* (Batana), *Pisum sativum* (Green pea), *Vigna unguiculata* (Red cowpea), *Lence culinaris* (Mysore dhal), *Dolichos biflorus* (Kollu), *Zea mayse* (Badairringu), *Mucuna pruriens* (Wandurumae), *Phaseolus mungo* (Undu), *Phaseolus aureus* (Mung), *Sorghum almum* (Sorgham), *Paspalum scrobiculatum* (Amu), *Panicum miliare* (Meneri), *Eleusine coracana* (Kurakkan) and *Setaria italica* (Tanahal).

Here we report the results of the following bioassays performed on the methanol extracts of the fifteen edible grains: haemolysis test and froth test for the presence of saponins, antioxidant activity against DPPH, antifungal activity against *Cladosporium cladosporioides*, brine shrimp lethality against *Artemia salina*, phytotoxicity against seed germination of *Lactuca sativa*, mosquito larvicidal activity against *Culex quinquefaciatus* and anticandidal activity against *Candida albicans, C. Dubliniensis, C. gulliermondii, C. parapsilosis , C. paraplosis, C. Rugosa* and *C. sake.*