E2-19: Anti-fertility activity of *Calotropis gigantea* root bark

W R Wimalasiri[1], Manel M Goonasekera[2]
([1]Div of Oral Biochemistry, Faculty of Dental Sciences & [2]Dept of Pharmacology, Faculty of Medicine, Univ of Peradeniya)

It is well known from ethnomedical and scientific sources, that medicinal plants with alleged anti-fertility properties exist. While herbal medicine is still being widely used in the developing countries, 25 % of marked drugs in the developed countries are also plant derived. Thus the acceptability of new anti-fertility drugs from indigenous plants could be very high.

Extracts of *Calotropis gigantea* (Family: Asclepiadaceae), a plant indigenous to Sri Lanka and India, were investigated for anti- fertility activity, using WHO bioassay protocol MB 30. Nine female Sprague-Dawley rats were used in each experimental and control group. Two groups of animals were assayed for the plant extracts and only 1 group of animals was used for each of the column fractions. The animals were dosed orally for 10 days.

The diethyl ether extract (dose: 0.3 g/kg and to column fractions obtained from the diethyl ether extract [viz 100% ethyl acetate (dose: 0.2 g/kg) and a mixture of ethyl acetate and methanol (1:1) (dose: 0.1 g/kg)] were found to have anti-fertility activity with a % pregnancy rate of 11.1% compared to the control group which had 100% pregnancy rate. The column fraction of pure methanol was found to be ineffective with a 100% pregnancy rate.

Support by HRP, Sri Lanka (Project No. TF.P05), is acknowledged.