

SUMMARY

This report is presented in 2 main parts.

Part 1 describes the screening of 50 medicinal plants commonly employed in Sri Lanka traditional pharmacopoeia for alkaloids and pyrrolizidine alkaloids (PA). Positive results for PA have been obtained with Crotolaria verrucosa, Holarrhena antidysenterica and Cassia auriculata. Feeding trials in rats with materials from these 3 species produced liver lesions -disruption of the centrilobular veins, congestion and haemorrhage in the centrilobular sinusoids, centrilobular or focal heptaocellular necrosis- and histopathology in the lungs and kidneys which were compatible with the action of PA.

Part 2 describes the screening of a second batch of 75 medicinal plants chemically for alkaloids and PA. Of these, Crotolaria juncea was found to contain PA with biological effects compatible with PA toxicity. Feeding trials with rats with 2 non PA containing plants, viz. Aegle marmelos and Terminalia chebula, produced hepatic lesions which included central vein abnormalities while these 2 and Withania somnifera produced marked renal lesions.