



961/E2

Medicinal Plant Research in Sri Lanka: A study based on Scopus and Patentscope databases

H N K Dissanayake

Main Library, University of Peradeniya, Peradeniya

Investigation of medicinal plants is a popular research area in this country. A study was conducted using the Scopus abstracting and citation database to find out the publications related to Sri Lanka on medicinal plants. A total of 151 studies were selected. Full articles were examined when the plant names were not available in the abstract. The total number of plants was 156 and out of these 23 were endemic. There were 41 general studies and 110 activity related studies. The general studies were mainly chemical, physico-chemical and propagation studies. The activity based studies were on toxicity, antibacterial, anti adhesive, hypoglycaemic, immunomodulatory, antioxidant, antinociceptive, anti-inflammatory, hypolipidaemic, liver protection, diuretic, pregnancy termination, sperm motility, sedative, larvicidal, hyperalgesia, nematicidal, antifungal, antimicrobial, aphrodisiac, anxiolytic, fetal growth inhibition, anti aflatoxin, drug interaction, anti hepatocarcinogenic, chemiluminescence inhibition, anti diarrhoeal activity, insecticidal activity, urilithic activity and analgesic activity. The majority of studies were on activities of different medicinal plants on hypoglycaemic, toxicity, antibacterial and antioxidant activities. 114 studies were done only in Sri Lankan universities and research institutes. 37 studies were done in collaboration with other countries. Japan is the partner for the highest number of collaborative studies. Universities were involved in 117 studies. Research institutes have contributed to 60 studies and 19 other organizations other than universities and research institutes were involved in conducting these 151 studies.

The highest number of publications was found in Journal of Ethnopharmacology (16). The second highest was in Phytochemistry (12). The total number of journals in which these 151 studies were published was 67. The publications were found from 1976 to 2011 with the highest number in the year 2003. Patents obtained for endemic medicinal plants studied using PATENTSCOPE database showed that international patents were obtained for the plants *Cinnamomum verum* and *Micromelum minutum*. *Garcinia quaesita* was mentioned in one of the related documents in a patent.

Keywords: Medicinal plants, biological activity, patents, Sri Lanka