Medicinal plants in Maliau Basin, Sabah, Malaysia

Abstract

This report consists of a combination of diversity and phytochemical studies on medicinal plants at Maliau Basin Conservation Area during the Maliau Basin Scientifi c Expedition 2005. The diversity survey was conducted by a team from the Forest Research Centre Sepilok, Sabah Forestry Department, from 7 Mar until 17 Mar 2005. Two methods of survey were applied, namely 100% survey in a 20m x 20m plot and random surveys. A total of 55 species of medicinal plants were collected. The relative density of medicinal plant species found was 12.8% in 38.8% plant individuals. Plant samples for phytochemical screening were collected by the Institute for Tropical Biology and Conservation, Universiti Malaysia Sabah plant team from 27 February until 5 March 2007. Plant samples were tested for the presence of phenolics, alkaloids, saponins, steroids and triterpenoids. The presence of all alkaloids was determined using the method of Culvenor and Fitzgerald, and ferric chloride was used to determine the presence of phenolics. For steroids or triterpenes, the Liebermann-Burchard test was used, and the froth test for saponins. From the samples screened, 80 species tested positive for alkaloid, 93 were positive for phenolics, 67 gave positive result for saponin and 110 contained steroid.