

Research projects of stakeholders funded at the National Park Bukit Duabelas (TNBD)

Name	Counterpart	Title
Asri Buliyansih, Asep Agus Fitria	Z01	Identification of the bioactive compounds of medicinal herbs in Bukit Duabelas National Park

Background and Methods

A special purpose of Bukit Duabelas National Park is to protect, preserve and develop medicinal plants that are living resources of the Orang Rimba (previously nomadic forest dwellers). The "Ekspedisi Biota Medika", conducted by Bogor Agricultural University (IPB) in cooperation with LIPI, the Ministry of Health (MOH) and the University of Indonesia (UI) in 1998 in Bukit Duabelas National Park, identified 101 kinds of medicinal plants, 27 kinds of medicinal fungi and 9 species of animal with medicinal properties. These medicinal herbs are still used by the Orang Rimba, especially those distant from health facilities. Nevertheless, further tests are still needed to confirm the content of bioactive compounds (phytochemical tests). Many of the bioactive compounds already identified are used by the pharmaceutical industry, e.g. alkaloids, flavonoids (painkillers), tannins (anti-bacterial properties), saponins (anti-virus properties), steroids (anti-oxidant properties), quinones and triterpenoids.

Results

Based on phytochemical tests, 29 samples from 28 medicinal herbs contain at least one bioactive compound and were confirmed as true medicinal herbs: Keduduk (*Melastoma malabatricum*), Semasam, Goamgodong (stem), Goamgodong (leaf), Berumbung (*Dillenia excels* (jack)), Akarkopu (*Mimosa pigra* L), Kelebu Gajah Rambutan Rimba (*Nephelium lappaceumL*), Kayu Salok (Knema cinera Worb), Timun Tikus Akar Kancil (*Smilax zeylanica* L), Puar Cacing (*Eltingera* sp), Petaling (*Ochanostachys amentacea*), Ganja Sayur, Rotan Cikai (*Daemonorops melanochaete*), Antu-iberbulu, Rumput Keratas, Sirih Kucing (Piper sp), Berisil, Akarsatolu (*Perycamphyllus glaucus*), Bekung, Akar Kuning (*Arcangelisiaflava*), Jelatang Ayam, Kayu Tutup, Cempedak (Arthocarpus integer), Tunggulbuto, Jelatang Api, Akar Keleketai.



Figure 1. Top from left to right: Ganja sayur, Bekung, Akarkopu; bottom from left to right: Goamgodong, Sekeduduk, Rumputkeratai.

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