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# Recent Study on the Chemistry of some Sumatran Plants

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Sumatra is the fourth largest island in the world and known to be very rich with varieties of tropical rainforest plants. Many of these plants have been used traditionally for centuries for many purposes such as medicines, coloring matters, food, spices,insecticides, aromatics, etc.

In continuation of our work to study the chemistry of Sumatran traditional medicinal plants,[1] recently we investigated the chemical constituents of Rubiaceous family; three species of *Lercheas* and two species of *Ophiorrhizas.*

Different from before, instead of working on only higher plants, we have broaden our interest to also study the chemistry of *Sumatran lower plants* i.e the liverworts *Bazzania* sp and *Dumortiera* sp.; the lichens *Stereocoulon philippinense* Rasanen and *S. massartianum* Hue; the fungus *Scleroderma sinnamariense* (Mont.) as well as the ferns *Gleichenia linearis* (Burm) Clarke, *Diplazium esculentum* Swartz, and *Hymenophyllum javanicum* A. Spreng

In addition, in collaboration with National Agency of Drug and Food Control of the Republic of Indonesia (BPOM RI) we have also studied the chemistry and standardization of extracts of some widely used Sumatran Medicinal Plants which surprisingly contained high flavonoid contents i.e *Syzygium polyanthum* (Weigh.) Walp. traditionally used as anti-diabetic, *Scurulla ferruginea* Danser (Loranthaceae) as anticancer, *Piperomia pelucida* (L.) Kunth. (Piperaceae), *Sida rhombifolia* L. (Malvaceae) as anti-rheumatic, *Gynura procumbens* (Lour.) Merr. (Asteraceae) as anti-pyretic and anti-inflammatory, *Pluchea indica* (L.) Less, (Asteraceae), as anti-pyretic *Uncaria gambier* (Hunter) Roxb. (Rubiaceae) as anti-diarrhoea and industrial sources of tannins.

The isolation, structure elucidation, analysis of chemical contents of these Sumatran medicinal plants asa well as some biological activity testings will be discussed.

**Reference**

1. Dayar Arbain, "A Quarter of Century Study on the Chemistry of Sumatran Plants; The Dream and the Reality," *Science and Culture*, 2008, **74**, 65-70.