

Botanical Characters and Antimicrobial Activities of Leaves of *Hibiscus sabdariffa* L.

Khaing Zar Han*

Abstract

Hibiscus sabdariffa L. belongs to the family Malvaceae known as Chin-baung-ni in Myanmar. It is widely grown in everywhere in Myanmar for its palatable green leaves and red fruits. For the present study, the specimens were collected from North Dagon Township, Yangon Region. In botanical study, the plants were annual shrub, 2.0 to 2.5 m high, leaves simple and alternate, stipulate, palmately 5-lobed, inflorescence axillary and solitary cymes, flowers were pale yellow, stamens monadelphous, ovary penta-carpellary, pentalocular with axile placentation, fruits were capsule globose, seeds were obliquely, calvate black. In antimicrobial activity, various solvents extracts of leaves were tested on six pathogenic microorganisms by using agar-well diffusion method. Methanol and acetone extracts of leaves show higher activities than other extracts. Acetone extract show the highest antimicrobial activity on *Bacillus subtilis*. In addition, minimal inhibitory concentration (MIC) value was also investigated.

Keywords: Leaves of *Hibiscus sabdariffa* L. Botanical characters, Antimicrobial activities, Minimal Inhibitory Concentration (MIC) value

* Lecturer, Dr., Department of Biology, Yangon University of Education