Determination of saponin compound from Anredera cordifolia (Ten) Steenis plant (binahong) to potential treatment for several diseases

Sri Murni Astuti^a; Mimi Sakinah A.M^a; Retno Andayani B.M^b; Awalludin Risch^a
^aFaculty of Chemical and Natural Resources Engineering (Bio-Process) Universiti Malaysia Pahang, 26300
Gambang, Kuantan, Pahang, Malaysia

^bKuliyyah of Pharmacy International Islamic University Malaysia Istana Bandar, Indra Mahkota, 25200, Kuantan, Pahang, Malaysia

ABSTRACT

Saponin has various types; it can be bond with glycosides that form soapy lathers when mixed and agitated with water, and have been used to treat diabetes; liver, hepatitis, cardiovascular as high blood pressure, high cholesterol, and physical stress. In this study describe of saponins compound in Binahong, one of medicinal plant investigated from these plant probably contribute to the effectiveness the above plant for treatment several diseases. The sample were dried by oven (600 C) to be powder and extracted with solvents. After that used qualitative and quantitative test. The result of Binahong plant contains saponins compound on all a part of the Binahong plant, are positive indicate of presence of saponins triterpenoid and steroid. Moreover crude of saponins substances from Leaves (28.14±0.22), Stems (3.65±011) and Tubers (43.15±0.10) of mg/g. The research showed of the Binahong plant, importance of the distribution of determination of saponins compound from plant, has a potential to treatment for several diseases.

KEYWORDS:

Anredera cordifolia (Binahong) Saponin compound, Steroidal, Triterpenoidal

REFERENCES

- 1. Achinrwhu, S, C. (1983). The saponins Content of Some Nigerian Oil Seeds. Qual Plant Foods Human Nutr, 33: 3-9. http://dx.doi.org/10.1007/BF01093732
- 2. Blumert, M and Liu J. (2003). Jiaogulan (Gynostemma pentaphyllum), China's Immortality Herb 3rd ed. Torchlight.
- 3. Ceyhun. Sezgin.A.E and N.Artik. (2010). Determination of Saponin content in Turkish Tahini Halvah by using HPLC. Advance Journal of food Science and Technology, 2(2): 109-115.
- 4. Duke, J.A. (1992). Handbook of Phytochemical constituents of Grass herb and economic plants. Boca Raton, FL: CRS Press.
- 5. Edeoga. H.O, D.E Okwu and B.O Mbaeble. (2005). Phytochemical Constituents of Some Nigerian Medicinal Plants, African Journal of Biotechnology, Vol.4 (7) pp 685-688.