

Phytochemical Screening, Bioactive Compound Determination in Relation to the Ethnomedicinal Uses of Tambae (*Phyllanthus buxifolius*) on Indigenous People

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Abstract

Pharmaceutical drugs as prescribed by health experts or over-the-counter medicaments expanded rapidly in the entire community across the globe. The utilization of traditional medicines was almost non-existent especially to those who could bear the expense for pharmaceuticals medication considering their security and convenience in consumption. At present, there is a dearth of research evaluating the use of herbal medicines, especially in clinical trials. Hence, this study on Tambae (*Phyllanthus buxifolius*) used in traditional medication has gained immense importance vis a vis local folks. The 50 grams leaves sample of Tambae were air dried under average room temperature for 72 hours and were pulverized using mortar and pestle with approximately 2mm in size. The sample was then soaked in 220ml ethanol (C₂H₆O) or equivalent to 80% of the total solution and 55ml or 20% water (H₂O) at room temperature for 24 hours to perform the extraction of biologically active compounds in the plant. The leaves extract was submitted to Institute of Chemistry - Analytical Services Laboratory, University of the Philippines - Diliman for Rotary Evaporation and Phytochemical analyses. The qualitative phytochemical analyses of the plant extract revealed the presence of tannins, saponins, terpenoids, flavonoids, cardiac glycosides and phenolic compounds and the absence of alkaloids. The results of this study therefore show that the leaves extract of Tambae is a good source of phytochemicals that can be harnessed to combat some medicinal issues in the rural communities. The researchers crafted a checklist and administered to the local folks of Sto. Tomas, Loreto, Agusan del Sur to identify the frequency of the diseases controllable, preventable and curable by Tambae leaves extract. Upon knowing the two ailments (diabetes and hypertension) with the highest and higher frequency, clinical trials on sugar level and blood pressure with the help of health practitioners were conducted.

Keywords

Phytochemical Screening, Medicaments, Ethnobotanical, Indigenous People, Clinical Trial biologically active