

## ***New approach for the development of improved Antihyperglycemic Herbal Medicine from Laportea ovalifolia (Schumach. & Thonn.) Chew. (Urticaceae)***

Dr. Tsabang Nolé\*, Pr Tchounwou Paul Bernard and Yedjou Clement  
Independent consultant Cameroon, visiting lecturer in three Universities in Cameroon

<sup>1</sup>Cellomics and Toxicogenomics Research Laboratory, NIH-RCMI Center for Environmental Health, Jackson State University, Jackson, USA

<sup>2</sup>Molecular Toxicology Research Laboratory, NIH-Center for Environmental Health, College of Science, Engineering and Technology, Jackson State University, Mississippi, USA

### ***Abstract***

The world needs, as in the past, synergistic drugs more effective in the treatment of diseases and even the most complicated ones such as diabetes, hypertension, cancer, sickle cell anemia, etc. A majority of Africans rely on synergistic traditional medicine as the primary form of healthcare. Yet most traditional medicine products have a short shelf life, especially for water-based formulations such as macerations, infusions and decoctions. Indeed, many of these water extracts become unfit for human consumption after five to seven days of conservation either because of the degradation or toxicity of active components, and/or the growth of pathogenic organisms. The purpose of this study was to develop a new approach for an improved traditional medicine (ITM) which is cheap, efficient, safe, available, affordable and easy to produce, and that can be conserved for a longer time. Hence, *Laportea ovalifolia* was selected from an ethnopharmacological survey in Cameroon, and was used to prepare an oral antihyperglycemic ITM. This preparation required 9 steps which permitted to a multidisciplinary team of scientists to realized it standardization. Four galenic formulations of this antihyperglycemic ITM were produced. From October 2007 date of their preparation to 2018 they still undamaged. A relationship between these four formulations was described as follow: One spoon of oral suspension (10 ml) = one sachet of powder=2 tablets=3 capsules. Hence, our research provides new insight into a drug discovery approach that could alleviate the major problems affecting traditional medicine and enhance its effectiveness in addressing health care in developing and undeveloped countries.



### ***Biography:***

TSABANG Nolé has received his Ph.D in 2008 at the University of Yaounde 1. He is a retired researcher of the Journal Institute of Medical Research and Medicinal Plants Studies. Now he serves as Adjunct lecturer at the Faculty of Medicine and Biomedical Sciences, at the University of Dschang and at the Higher Institute of Environmental Sciences. Tsabang Nolé is an editorial member and Reviewers of reputed journals including OMICS Groups International. Indian Journal of Natural Products and Resources, International of Biological and Chemical Sciences. He worked as an Independent Consultant with Heifer Project International and Global Water Partnership. Dr. Tsabang is investigator of about 47 publications and 17 reports of ESIA, ethnobotanical and ethnoveterinary studies and co-presenter in conferences including 13th International Conference on Ethnobiology and 10th world conference on animal production. He is involving in

the publication of five books and establishing collaboration with the University of Jackson State, Mississippi, USA.

[16<sup>th</sup> International Conference and Exhibition on Nanomedicine and Pharmaceutical Nanotechnology](#); Webinar- May 04-05, 2020.

**Abstract Citation:**

Tsabang Nolé, New Approach for the Development of Improved Antihyperglycemic Herbal Medicine from *Laportea ovalifolia* (Schumach. & Thonn.) Chew. (Urticaceae), NanoPharma 2020, 16<sup>th</sup> International Conference and Exhibition on Nanomedicine and Pharmaceutical Nanotechnology; May 04-05, 2020- Webinar (<https://nanotechnology.pharmaceuticalconferences.com/abstract/2020/new-approach-for-the-development-of-improved-antihyperglycemic-herbal-medicine-from-laportea-ovalifolia-schumach-thonn-chew-urticaceae>)