

International Conference And Expo On **BIOMEDICAL ENGINEERING**

August 25, 2023 | Webinar

Medicinal plants of Africa and possibility of pharmaceutical manufacture of improved traditional medicines**Tsbang Nole***Independent consultant, Cameroon*

Since antiquity, Africans have suffered great loss of life due to infections, metabolic and genetic diseases. The products of African socio-cultural medicine allowed them to survive until the arrival of pharmaceutical drugs. Nowadays emergent and resurgent diseases as well as resistance of certain pathogens to usual antibiotics can find solutions in African forests. Therefore, for the world' needs of new phytodrugs, more efficient, not toxic and very cheap, African forests can supply pharmaceutical laboratories with several plants with astonishing medical values. Unfortunately, herbal medicines are very bad prepared by local therapists. The work aims to describe and document the standard procedure of ethno pharmacological preparation of improved traditional medicines with antihyperglycemic plant for illustrated example. In general the different stages of ethno pharmacological preparation are:

1. Plant(s) and/or animal identification according to the international rules of binomial nomenclature and/or mineral added.
2. Verification of therapeutic indication of the plant or the recipe
3. Research of non-toxicity of the plant or the recipe:
 - 3.1- Bibliographic research of the non-toxicity of the plant or the recipe
 - 3.2- Confirmation of the non-toxicity of our sample of plant (or recipe) collected in a precious habitat to be characterized.
4. Determination of standardized recipe which is a accuracy of the minimum quantity of herbal material(s) (K in gram) and/or animal and/or mineral used and the minimum quantity of solvent used (X liter) and the precious time of preparation (t mn).
5. The determination of the duration of treatment (T)
6. Determination of the efficient quantity of the final product from the ethno

Importance of Research: The method promotes the verification of the non-toxicity of herbal medicines. Their improving through standardization and stabilization those are necessary for a better valorization of traditional medicine. The method also promotes the aseptic conditions for good conservation of the ITM that are the guarantee of security of the tablets, the capsules, the oral suspension and the powder in sachets. Except the lyophilizer other instruments used are easily accessible. The availability of plant materials makes it possible to sustain the mass production of our ITM. The method also prolongs the duration of conservation of traditional medicines from a week to many years. It permits to define the dosages, the duration of treatment, the easy use and transportation of herbal medicine. The method simplifies a lot the classic procedure of drug preparation.

The following improvements of *Laportea ovalifolia* traditional hypoglycemic recipe were conducted: the verification of the high blood glucose rate decreasing by following 30 non complicated diabetics, previously diagnosed in Fongo-Tongo health center and treated by a traditional healer; the formalization of the dose; the improvement of the hygiene conditions and certainly the overtaking of the usual conservation duration. The simplification of the standard approach of pharmaceutical preparation of medicines and the extraction by water make the originality of this new approach.

Key words: African medicinal plants, traditional healers' herbal medicines, efficacy, new strategy of manufacturing. Stability and standardization.

Biography

Tsbang Nole has completed his PhD at the age of 48 years. He is a botanist and ecologist with many skills in Ethnobotany, Ethnopharmacology and Environmental Sciences. Later on he obtained his post-graduation from the University of Yaounde 1. He started working at The Institute of Medical Research and Studies of Medicinal Plants. Presently he is an independent consultant serving as visiting lecturer at the institute of Environmental Sciences under the supervision of the University of Yaoundé 1. Tsbang Nole has 82 publications and 4 books edited by Heifer Project International Cameroon and he is editor and/or reviewer in many international journals.

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