Use of calculated indexes for prioritization of medicinal plants in the preparation of improved traditional medicine (itm)

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Several medicinal plants have a known chemical composition and pharmacological effects. Using their traditional uses across Cameroon, Africa and other continents and their chemical and pharmacological properties, we have defined for each species its convergence index, its index of efficiency and its index of sustainable use. The objective of this work was to classify the identified plants in order of priority for the preparation of the improved traditional medicines (ITM) according to the index of efficiency and sustainable exploitation (Ie-se) calculated from the previous indices. The fieldwork consisted, with the help of 37 traditional healers, in identifying the plants and in detailing their ethnopharmacological preparation. In order of importance, there are 9 efficacy parameters taking values 1 to 9. The average for a given plant corresponds to its Efficiency Index (Ie). Sixteen (16) parameters of sustainable exploitation taking values 1 to 16 were established. The average for a plant is its Sustainable Use Index (Ise). Finally, the sustainable efficiency index is the sum of the two indices (Ie + Ise = Ie-se) taking values 1 to 9. It allows plants to be classified into three groups. The production of ITMs with Group I [9-5] plants is recommended because of their chemical, pharmacological and conservation properties more available than Group II [4-3] and Group III [2-1] plants. Pausinystalia yohimbe (5) and Euphorbia hirta (7) belong to this group. This classification may be favorable for the inexpensive preparation of the ITMs and for the use of plant species that are more efficient and available in nature.

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