

Ethno-pharmacological investigations of *Moringa Stenopetala* Bak. Cuf. and its production challenges in Southern Ethiopia: An ideal approach to control infections disease

Azene Tesfaye

Arba Minch University, Ethiopia

Moringa stenopetala Bak. Cuf. is a native plant of Ethiopia with important nutraceutical applications. However, little is known about its nutritional, ethno-pharmaceutical and therapeutic properties. Hence, the present study sought to assess the nutraceutical applications of *M. stenopetala* among traditional healers in southern Ethiopia.

A community-based cross-sectional study was conducted on 50 selected administrative units in Gamo Gofa, Segen areas and south Omo zones of southern Ethiopia from May to June 2020. Data were gathered using a semi-structured interview, field observation and group discussion. Both quantitative and qualitative data were analysed using Excel 2019 and open code version 4.03, respectively. The results were presented using descriptive statistics, with the Fidelity Level (FL)% used to distinguish the preferential use of various plant parts.

A total of 120 individuals participated in the study and the majority of them, 89 (74.2%), were male and farmers by occupation. Eight four (70%) of them were residents of the Gamo Gofa Zone. The fidelity level revealed that the leaf and root were the most commonly used parts for nutraceutical purposes. Remarkably, *M. stenopetala* is used to treat human ailments such as leprosy and kidney and liver infections via various modes of utilisation and administration. As a result, the most common methods of utilising plant products are chewing or consuming crushed plant parts and the oral route is the much-preferred method of application. On the other hand, the larvae of Moringa moth *Nurda blitealis* are a defoliating insect during the rainy season and have been identified as a limiting factor for its production.

The nutraceutical aspects of *M. stenopetala* are extremely important to the rural community in southern Ethiopia. However, the defoliating moth larvae threaten its growth and biomass production, necessitating the need to manage and improve the plant's productivity and sustainable use. Additionally, conducting experimental studies to validate the plant's pharmacological potential correspond to a milestone in drug discovery.

Biography

Azene Tesfaye, a determined Medical Genetics graduate with intense theoretical, practical, strong communication and research skills, brings his expertise in assessment and passion for improving health and well-being through the use of indigenous knowledge and herbal medicine. Through his experience, he is well-versed in conducting research, analyzing data, managing databases and preparing reports in a detailed and scientific manner. In addition, he have gained the ability to integrate superior organizational and communication skills at all levels of research, which allows him to excel in both independent and team-oriented environments.

Received: October 12, 2022; **Accepted:** October 14, 2022; **Published:** February 22, 2023