



Diminutive Review on the Ethnomedicinal Uses of Drumstick (*Moringa oleifera* Lam.) Tree from 1998 – 2023

OGHAMA, OE

Rubber Research Institute of Nigeria, Off Km 19, Benin Sapele High Way, Iyanomo, P.M.B. 1049, Benin City, Edo State, Nigeria

*Corresponding Author Email: oghama.osarumen@rrin.gov.ng

ABSTRACT: Ethnomedicinal uses involve the comparative study of how different cultures view diseases, medical beliefs and practices of indigenous cultures on how they treat or prevent diseases. Hence, the objective of this paper is to provide a miniature review on the ethnomedicinal uses of drumstick (*Moringa oleifera*) tree by harvesting data and information from previous publications from 1998 - 2023 using online Google search. Data revealed that *Moringa oleifera* is also called “miracle tree” or the “tree of life,” horseradish tree or Ben oil tree. In almost all indigenous cultures, various parts of *Moringa oleifera* are associated as being used for treatment of a variety of health conditions ranging from wounds, skin infections, joint pain, hepatitis, ulcers, liver diseases, kidney stones, inflammation, ear and tooth pain, fever, diarrhea, hypertension, anxiety etc. It is recommended that a more elaborate literature review should be carried out dating back in times to keep an up-to-date record of ethnomedicinal uses of the plant and capture other ethnomedicinal uses of *M. oleifera* not included in this review.

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Moringa oleifera is indigenous to the sub-Himalayan tracts of India, Bangladesh Afghanistan and Pakistan and it is the species grown the most among the Moringaceae family (Fahey, 2005). It is also called “miracle tree” or the “tree of life,” (Ashutosh *et al.*, 2023) drumstick tree, horseradish tree or Ben oil tree (Fahey, 2005). *M. oleifera* is a fast-growing tree which grows up to 6 to 7 m in a year in regions with mean annual rainfall less than 400 mm (Odee, 1998). It is considered as a herbal plant of importance because of its tremendous and beneficial medicinal as well as non-medicinal uses (Ashutosh *et al.*, 2023). The plant is traditionally used to treat inflammation, cancer, wounds, heart and liver diseases, ulcers and pains (Ashutosh *et al.*, 2023).

People, all over the world, since the time of old, have added *Moringa oleifera* in their diet owing to its important medicinal values. Different medicinal

preparations of the plant are said to possess ethnomedicinal properties for the treatment of diseases and have been made use of for hundreds of years. Virtually every part (bark, leaf, root, pod, gum, seed, seed oil, and flower) of this plant has been used to treat one disease or another (Stohs and Hartman, 2015). Uses of *M. oleifera* are observed in pathological alterations such as anti-diarrheal (Misra *et al.*, 2014) antihypertensive (Aekthammarat *et al.*, 2019) anti-anxiety (Bhat and Joy, 2014) and as a diuretic (Tahkur *et al.*, 2016). Hence, the objective of this paper is to provide a miniature review on the ethnomedicinal uses of drumstick (*Moringa oleifera*) tree by harvesting data and information from previous publications from 1998 - 2023.

Ethnomedicinal Uses: *Moringa* is used for the treatment of colitis (Zhang *et al.*, 2020) and dysentery (Woldeyohannes *et al.*, 2022). A poultice made from

*Corresponding Author Email: oghama.osarumen@rrin.gov.ng

Moringa leaves proffers a fast cure for inflammatory conditions such as bronchitis, glandular inflammation and headache (Woldeyohannes *et al.*, 2022). The stem bark is used in treating wounds and infections of the skin (Rathi *et al.*, 2006) while the pods are used for relieving joint pain and treating hepatitis (Meireles *et al.*, 2020). The roots are used for the treatment of ulcers (Debnath and Guha, 2007), liver diseases (Ghasi *et al.*, 2000) kidney stones (Karadi *et al.*, 2006) inflammation (Paliwal *et al.*, 2011) as well as ear and tooth pain (Mahajan *et al.*, 2007). The people of India use the gum extracted from *M. oleifera* for treatment of fever and it is also used for abortions inducement (Bhattacharya *et al.*, 2018). *M. oleifera* seeds act as a laxative and are used for treating tumors, bladder and prostate problems (Pandey *et al.*, 2012). The seeds are promising for arthritis treatment by oxidative stress alteration and reduction of inflammation (Meireles *et al.*, 2020). Preparations from the leaves of *M. oleifera* is beneficial to infants who are malnourished as well as nursing mothers and improve the population general wellbeing. The leaves have been beneficial to patients with insomnia (Liu *et al.*, 2022) and for wound treatment (Gothai *et al.*, 2016). Nowadays, *Moringa* is greatly utilized in the cosmetic industry. Similarly, ancient Egyptian history recorded that its use was employed in the preparation of dermal ointments (Toma and Deyno, 2014).

Conclusion: *M. oleifera* has been utilized for the health benefit of man in the treatment of various diseases as well as improvement of health of infants, nursing mothers and for the general wellbeing of people. The present review has highlighted various ethnomedicinal uses of *M. oleifera* based on past and current literatures. However, it is recommended that a more elaborate literature review should be carried out dating back in times to keep an up-to-date record of ethnomedicinal uses of the plant and capture other ethnomedicinal uses of *M. oleifera* not included in this review.

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