

Use of Herbal Mixture of *Moringa oleifera* Seed, *Ocimum tenuiflorum* and *Azadirachta indica* in Wastewater Treatment

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Abstract: India has been investing in wastewater treatment since 2004. under the Swachh Bharat Abhiyan since 2014, a number of private corporations are taking increased interest in the sector of sanitation and wastewater recycling. As water quality testing is an important part of environmental monitoring and its recycling is a strong need of time. As per previous data available, *Moringa oleifera* seed powder can be used for water purification, we have tried to prepare the Herbal solution of *Moringa oleifera* seed extract, *Neem* extract and *Tulsi* extract for water purification in domestic level. Prepared herbal mixture then used in treatment of sewage water to get clean water so that it can be use in other domestic purpose..

Keywords: Wastewater Treatment

REFERENCES

- [1]. <https://www.fondriest.com/environmental-measurements/parameters/water-quality/>
- [2]. Babbitt, Harold E. & Doland, James J. Water Supply Engineering (1949) ASIN: B000OORYE2; McGraw-Hill p.388
- [3]. Linsley, Ray K. & Franzini, Joseph B. Water-Resources Engineering (1972) McGraw-Hill ISBN 0-07-037959-9 pp.454–456
- [4]. World Health Organization (2004). "Consensus of the Meeting: Nutrient minerals in drinking-water and the potential health consequences of long-term consumption of demineralized and remineralized and altered mineral content drinking-waters." Rolling Revision of the WHO Guidelines for Drinking- Water Quality (draft). From November 11–13, 2003 meeting in Rome, Italy at the WHO European Centre for Environment and Health.
- [5]. Canencia, Oliva P; Dalugdug, Marlou D; Emano, Athena Marie; Mendoza, Richard; Walag, Angelo Mark P. (31 August 2016). "Slaughter waste effluents and river catchment watershed contamination in Cagayan de Oro City, Philippines". ResearchGate. 9 (2). ISSN 2220-6663.5
- [6]. http://www.sulabhenviis.nic.in/Database/STST_wastewater_2090.aspx
- [7]. Briggs D (2003) Environmental pollution and the global burden of disease. Br Med Bull 68:1–24
- [8]. Arnoldsson E, Bergman M, Matsinhe N et al (2008) Assessment of drinking water bark extracts of *Moringa oleifera* in reducing bacterial load in water. Int J Adv Res 4:124–130
- [9]. Meneghel AP, Gonçalves AC Jr, Fernanda R et al (2013) Biosorption of cadmium from water using *Moringa oleifera* Lam.) seeds. Water Air Soil Pollut 224:1383
- [10]. Bina B, Mehdinejad MH, Gunnel D et al (2010) Effectiveness of *Moringa oleifera* coagulant protein as natural coagulant aid in removal of turbidity and bacteria from turbid waters. World Acad Sci Eng Technol 4:7–28
- [11]. Eman NA, Tan CS, Makky EA (2014) Impact of *Moringa oleifera* cake residue application on waste water treatment: a case study. J Water Resour Prot 6:677–687