Moringa Filter

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The purpose of this project is to be able to provide a sustainable method of water filtration and to purify water safely and easily. Moringa Oleifera is a highly-valued plant, distributed in many countries of the tropics and subtropics and is easily found there. Moringa is best known as an excellent source of nutrition and a natural energy booster. Different parts of this plant are being employed for the treatment of different ailments in the indigenous system of medicine. It also compels water purifying powers which are focused on in this report. A water filter was designed to purify water with Moringa seeds. The oil contained in the Moringa seeds contains a natural coagulant that interacts with impurities in the water and allows them to settle safely to the bottom, providing fresh drinking water especially in areas where dirt and other contaminants typically render water supplies unsafe for human consumption. This filter is expected to purify, or at least, decrease the number of bacteria, concentration of heavy metals and turbidity of the filtered water so that it would be safe for human consumption. The experiments that were carried out were to test how the Moringa seed will affect contaminated water. This was done by adding Moringa seeds to different samples of contaminated water to observe their effect. The water samples were tested for heavy metals, bacteria and turbidity before and after adding Moringa seeds. Treated water samples are expected to have less bacteria, heavy metals and turbidity.

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