

Mercury decontamination in water based fluid through the core of the fruit of the tree *Mangifera indica*.

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Abstract

The main purpose of this investigation is to create a mango seed based purification method of mercury contaminated water. The current water purification methods keep innovating and now materials that weren't contemplated before are being introduced to the project. Before the project started research was made about different fruits, concluding that the mango seed has depurating Hg contaminated water characteristics. Searching for a better process is not everything, an accessible, economic and efficient material is needed so it can overall help low- income communities to have an easier and cheaper access to drinking water as to give a use to the remaining fruit residue. PH variables, particles size, time of contact between the filtrating material and solution, as to the amount of filtrating material will be studied. When researching for different materials, it was found that the mango seed was the most viable option given that is a high-density seed, which makes the recollection process easier for a large scale procedure and brings the benefit of being rich in nutrients.

Keywords: Mango seed, Contaminated water, Mercury and Depurating.

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