

ABSTRACT

Natural surface waters are normally characterized by the presence of suspended solids and pathogens, whereas groundwater is generally hard. In a typical water supply system with conventional water treatment, the raw water is treated centrally and supplied to consumers through water distribution system. Decentralized water supply system (supply and treat) is an alternative to the above system owing to the benefits like use of natural coagulants in small scale application, minimum possibility of contamination during distribution, and enhanced effectiveness in treatment. Natural coagulants were reported to possess potential to remove turbidity and hardness along with other operations/processes used in conventional water treatment. The literature review on natural coagulants and its analysis shows the research gaps viz., The effectiveness of seed type (location/type of species), nature of its occurrence (naturally dried/artificially dried), and extraction method for *Ricinus communis* and *Abutilon indicum* need to be studied in Indian context (with species available in India) to treat natural water with different turbidity levels. Household purifier having provision for coagulation, flocculation, settling and filtration for point of use application was not reported.