



## Journal of Applicable Chemistry

2013, 2 (1): 73-80

(International Peer Reviewed Journal)



### Coagulation-Clarification of Turbid Colored Water by Natural Coagulant (*Strychnos potatoram*) Seed Extract

Sonal Choubey\*

\*Department of Chemistry, Disha Institute of Management and Technology

Email: [sonalchoubey@gmail.com](mailto:sonalchoubey@gmail.com)

Received on 13<sup>th</sup> December and finalized on 24<sup>th</sup> December 2012

---

#### ABSTRACT

*Performance of Strychnos potatoram seed extract as primary coagulant and compared with the performance of alum. S. potatoram seed extract is effective as prime coagulant. Compared with alum (residual filtrate turbidity 2 NTU and residual color 3 TCU), it produces water with slightly higher residual filtrate turbidity (4 and 3 NTU) and residual color (15 and 13 TCU), but the residual turbidity and residual color are within the WHO drinking water guideline values for turbidity (5 NTU) and color (15 TCU). The effectiveness of Strychnos potatoram in the removal of turbidity, total hardness, pH, COD, BOD and total dissolved solids (TDS) has been investigated. The results obtained from this study satisfy the drinking water standards prescribed by World Health Organization (WHO).*

**Keywords:** Coagulation-clarification, Turbid colored water, Natural coagulant, *Strychnos potatoram*, Seed extract

---