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PII: S1383-5866(17)30577-4

DOI: http://dx.doi.org/10.1016/j.seppur.2017.02.040

Reference: SEPPUR 13571

To appear in: Separation and Purification Technology

Received Date: 21 April 2016 Revised Date: 11 February 2017 Accepted Date: 19 February 2017



Please cite this article as: A.T.A. Baptista, M.O. Silva, R. Guttierres Gomes, R. Bergamasco, M.F. Vieira, A.M.S. Vieira, Protein fractionation of seeds of *Moringa oleifera* Lam and its application in superficial water treatment, *Separation and Purification Technology* (2017), doi: http://dx.doi.org/10.1016/j.seppur.2017.02.040

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## ACCEPTED MANUSCRIPT

Protein fractionation of seeds of *Moringa oleifera* Lam and its application in superficial water treatment

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#### **Abstract**

Moringa oleifera Lam. has been reported as a natural coagulant in the treatment of surface waters; however its use presents some disadvantages such as low performance in the coagulation/flocculation of low turbidity waters and organic matter increase in the treated water. In addition, there is little specialized literature about coagulation proteins present in Moringa seeds and their characterization. Thus, this work had as objective the fractionation of Moringa oleifera seeds protein, characterization of the fractions obtained and evaluation of potential coagulant activity in different water turbidity. Based on the results obtained it was found that the globulin and albumin presented the highest values for protein fraction in Moringa seeds with 53% and 44% respectively. Percentage removals of 87.40% of color, 89.71% of turbidity and 79.46% of UV 254nm were reached using 13 mg/L of the globulin coagulant for treatment of low turbidity

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