

SUPPLEMENTARY MATERIAL

Fluorescence enhancement novel green analytical method for paraquat herbicide  
quantification based on immobilization on clay

Marina A. Dominguez, Matías Insausti, Romina Ilari, Graciela P. Zanini\*

INQUISUR, Departamento de Química, Universidad Nacional del Sur (UNS)-CONICET,  
Av. Alem 1253, 8000 Bahía Blanca, Argentina

\* Corresponding author. Graciela P. Zanini.

INQUISUR. Departamento de Química, Universidad Nacional del Sur, Av. Alem 1253,  
B8000CPB-Bahía Blanca, Argentina.

Tel.: +54 291 4595101; Fax: +54 291 4595160.

E-mail address: [gzanini@uns.edu.ar](mailto:gzanini@uns.edu.ar)

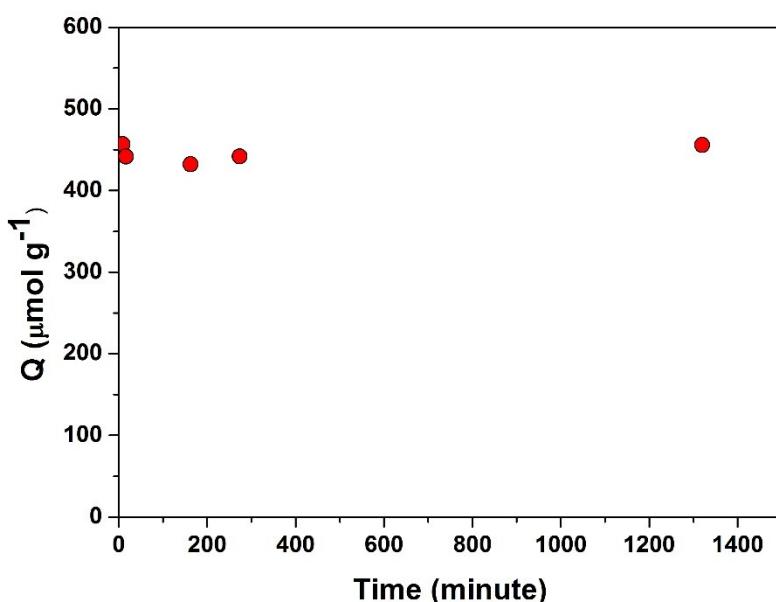


Figure S1. PQ adsorbed (Q) onto MMT as a function of time. 10 minutes were enough to achieve equilibration.  $C_0=9.16 \mu\text{mol L}^{-1}$

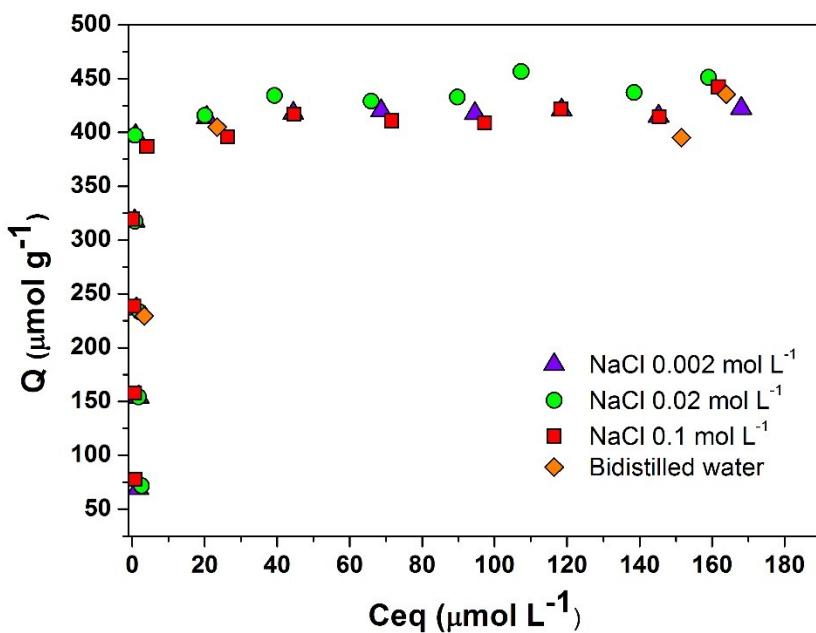


Figure S2. PQ adsorption isotherms on MMT at different NaCl concentration (0.002M; 0.02M and 0.1M). It can be seen that the cation  $\text{Na}^+$  concentration does not modify the amount of PQ adsorbed. The MMT has high affinity for PQ.

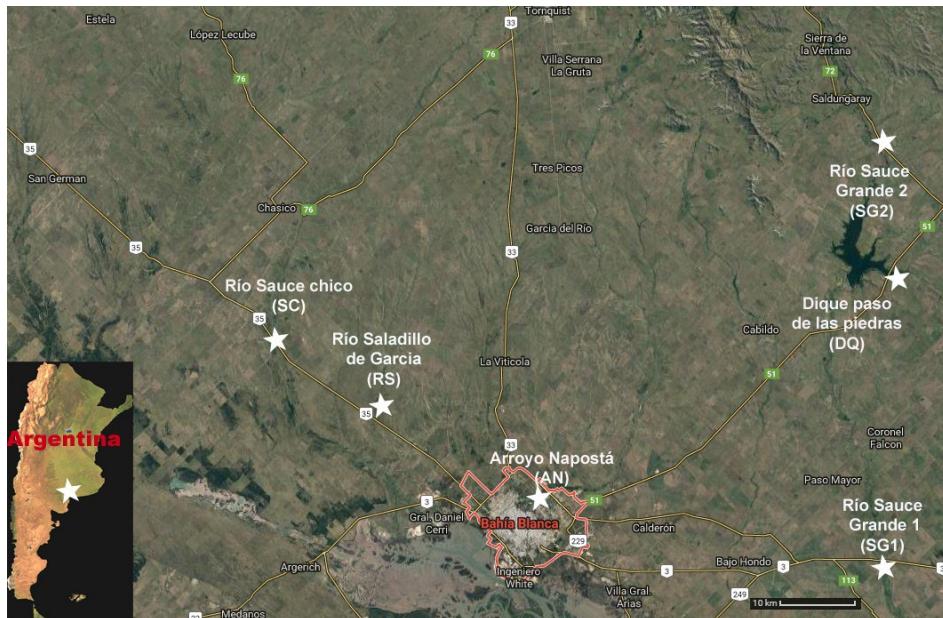


Figure S3

Map of Argentina and the southern part of the Buenos Aires Province with the location of the sites from where the natural water samples were taken. Each star indicates one location, with the following GPS coordinates: RS (-38.593329; -62.491032); SC (-38.497445; -62.645833); SG1 (-38.763437; -61.711939); SG2 (-38.129698; -61.793379); AN (-38.695517; -62.263958); DQ (-38.412163; -61.691895).