



## **Using Riverine Natural Organic Matter to Test the Hypothesis that Soil Organic Matter is Modified by Contact with Sodium Hydroxide**

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It has been postulated by some scientists that soil humic acids and fulvic acids are an artifact of alkaline extractions of soil. Riverine natural organic matter (NOM) is obtained in part by dissolution and transport of organic matter from soils by meteoric waters at acidic to circumneutral pH. The NOM may be fractionated into humic acid (HA), fulvic acid (FA), and hydrophilic NOM by adsorption of HA and FA onto XAD-8 resin at  $\text{pH} < 2$ , followed by their desorption with NaOH at  $\text{pH} 13$ . Alternatively, riverine NOM may be concentrated using reverse osmosis (RO) and desalted by cation exchange. Several properties of Suwannee River NOM prior to its isolation, after concentration by RO, and after the XAD-8 process are compared to detect modifications that might have resulted from exposure of the sample to low and high pH.