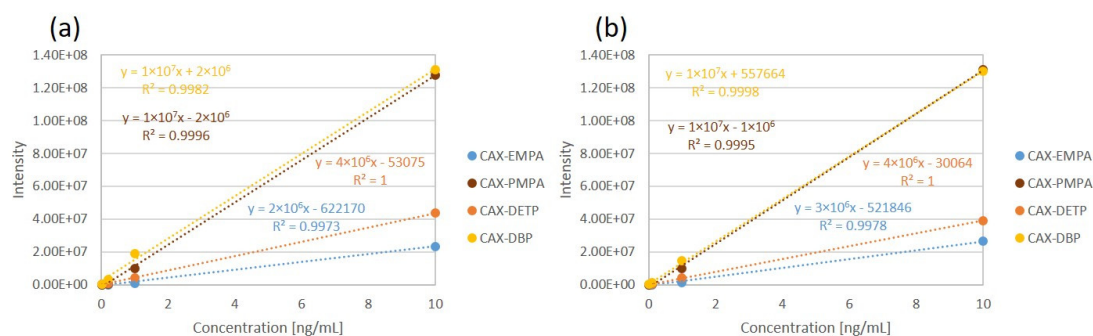


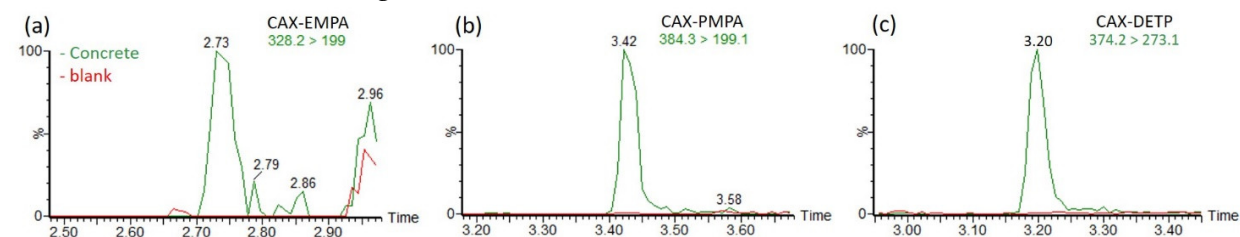
## Supplementary Material-

### “Enhanced LC–ESI–MS/MS Sensitivity by Cationic Derivatization of Organophosphorus Acids”

**Figure S1.** Linear calibration curves of CAX-EMPA, CAX-PMPA, CAX-DETP and CAX-DBP in acetonitrile extracts of concrete (a) and plant (b).



**Figure S2.** Chromatograms of 200 pg/mL CAX-EMPA (a), CAX-PMPA (b) and CAX-DETP (c) in concrete extract (green) over blank concrete extract (red).



**Table S1.** Limits of identification (LOIs) of OP-acids before and after derivatization in real-world matrices.

Compound	LOI in Plant ext. (ng/mL)		LOI in Concrete ext. (ng/mL)		LOI in Hair ext. (ng/mL)	
	Before der.	After der.	Before der.	After der.	Before der.	After der.
EMPA	10	0.02	10	0.2	10	0.2
PMPA	10	0.1	1	0.2	10	0.2
DEP	10	0.02	10	0.02	10	0.02
DBP	10	0.02	10	0.02	10	0.02
DETP	10	0.1	10	0.02	10	0.02