

# **Balancing Soil Fertility and Emerging Contaminants Risk: Insights from a 15-Year Biosolid Application Study Under Maize Production**

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Supplementary Information:

**Table S1** Types, chemical composition, and application rates of inorganic fertilizers used during various maize growth stages

Application timing	Fertilizer type and its constituents	Rates applied (Kg ha <sup>-1</sup> )					
		Rainfed			Rainfed + Irrigated		
		N	P	K	N	P	K
Planting	NPK (2:3:2)	13	20	13	6	9	6
	Lime ammonium nitrate	17					
	Potassium chloride			7			14
Three weeks after planting	Lime ammonium nitrate				90		
	Superphosphate					31	
Five weeks post-emergence	Lime ammonium nitrate				64		
	Super phosphate						
	Potassium chloride						40
Seven weeks post-emergence	Lime ammonium nitrate	66			66		
	Superphosphate						
	Potassium chloride			40			40
<b>Total yearly rate</b>		<b>96</b>	<b>20</b>	<b>60</b>	<b>226</b>	<b>40</b>	<b>100</b>

**Table S2** Multiple reaction monitoring parameters of the target analytes

Analyte	Product ion (m/z)	Precursor ion (m/z)	Dwell time (ms)
Triclosan	34.9	289.1	100
Sulfamethoxazole	155.95	254.1	100

**Table S3** Linear equations and the correlation coefficients (R<sup>2</sup>) of the calibration curves for the target analytes

Analyte	Linear equation	R <sup>2</sup>
Triclosan	y = 1050.5x - 889.89	0.9993
Sulfamethoxazole	y = 533.9x - 2630.1	0.9979

y is the peak area of the target analyte

x is the concentration of the analyte (ng g<sup>-1</sup>)