

Supplementary

Table 1S. Comparison of the new method with other reported methods

Parameters	Method		
	GC-MS	HPLC	MAE-LC-MS/MS
Linear range (mg/kg)	10~550	20~200	2~200
LOD (mg/kg)	5	20	0.16
RSD (%)	3	2~4	3.3~6.6
Average Recovery (%)	95%	95%	102%
Extraction method	Heat reflux 2h	Ultrasonic extraction 60 °C 0.75h	MAE 180 °C 0.5h
Further pretreatment	Derivatization	SPE clean-up	-
Ref.	J. M. Renaud, et.al ¹⁶	S. S. Yang ¹⁷	Proposed method

Table 2S. The quantifier/qualifier ion ratios in calibration standards and in tobacco samples.

Sample	MH ion ratio (%)	Average ion ratio (%)	d ₂ -MH ion ratio (%)	Average ion ratio (%)
Calibration standard 1	186.4		286.9	
Calibration standard 2	191.1		287.9	
Calibration standard 3	191.1	189.7	287.9	287.3
Calibration standard 4	190.7		286.5	
Calibration standard 5	189.1		287.4	
Imported Sample A	191.5		285.8	
Imported Sample B	188.6		286.5	
Imported Sample C	192.0	190.6	281.0	284.4
Imported Sample D	190.9		284.0	
Imported Sample E	190.0		274.8	