

Table S1. Emission wavelengths (λ), selected Limit Of Quantification (LOQ) and Linear Operative Limit (LOL), linear correlation coefficient (r), and relative standard deviation (RSD) of the external calibration for each element determined in AHP and AHH derived samples.

Element	λ (nm)	LOQ \div LOL (mg L ⁻¹)	r	RSD%
Ag	328.068	0.01 \div 10	0.9995	4.9
Al	308.215 394.401	0.1 \div 20	0.9997	5.6
Bi	223.061 306.766	0.1 \div 10	0.9968	8.1
Ca	396.847	1 \div 100	0.9998	5.4
Cd	226.502	0.01 \div 10	0.9990	4.9
Co	228.616	0.01 \div 10	0.9979	3.5
Cr	267.716 283.563	0.01 \div 10	0.9978	11.3
Cu	324.752 327.393	1 \div 30	0.9999	5.0
Fe	238.204 259.939	1 \div 100	0.9997	4.5
Ga	294.364	0.03 \div 10	0.9983	3.7
In	325.609	0.03 \div 10	0.9990	2.8
K	766.490	10 \div 200	0.9995	7.2
Mg	280.271 285.213	1 \div 200	0.9997	6.2
Mn	257.610 259.372	0.1 \div 10	0.9999	5.4
Na	330.237	1 \div 100	0.9998	4.6
Ni	231.604 341.476	1 \div 50	0.9999	6.7
P	213.617 214.914	10 \div 2000	0.9989	9.2

Pb	220.353 261.458	0.03 ÷ 10	0.9986	8.2
Se	196.026 203.985	0.001 ÷ 50	0.9998	5.1
Si	251.612	0.1 ÷ 10	0.9992	8.3
Sr	421.552	0.01 ÷ 5	0.9996	7.0
Zn	202.548 213.857	0.1 ÷ 20	0.9996	3.1

Table S2. Operating conditions of ICP-OES, maintained along the years.

	Elemental array reading	Se reading
Plasma view	15 mm axial	15 mm axial
Nebulizer type	Concentric glass / quartz	Concentric quartz
Sample uptake rate - Pneumatic injection	1.3 mL / min	2 mL / min
Washing time	30 s	30 s
Plasma power	1400 W	1100 W
Argon flow rate :		
- plasma	15 L / min	15 L / min
- auxiliary	0.2 L / min	0.2 L / min
- nebulizer	0.55 L / min	0.6 L / min
Replicate readings	3	3
Read time / replicate	40 s	60 s

Table S3. Analytical recoveries and cumulative standard deviations (s_{20}) for compounded standards added to the set of 20 floured seeds samples [5 horse-chestnut trees \times 2 specimen (spiked and fortified) \times 2 varieties] analysed by ICP-OES in the year 2016.

flour seeds AHP + AHH (20 samples)		
Element	Recovery %	s_{20}
Al	105.2	3.9
Ca	97.4	6.1
Cu	100.2	4.3
Fe	98.9	4.2
K	95.8	4.8
Mg	104.3	3.7
Mn	94.5	4.1
Na	96.4	5.2
Ni	104.2	3.8
P	93.0	4.9
Se	97.6	4.6
Si	105.7	5.4
Sr	102.3	4.7
Zn	107.3	8.1