

SUPPLEMENTARY MATERIAL

ONE-STEP EXTRACTION VERSUS QuEChERS FOR PESTICIDE ANALYSIS
IN SELECTED FRUITS AND VEGETABLESDarko Andjelković¹, Milica Branković^{2*}¹University of Niš, Faculty of Agriculture, Kosancićeva 4, 37 000 Kruševac, Serbia²University of Niš, Faculty of Science and Mathematics, Višegradska 33, 18 000 Niš, Serbiamilica.chem@outlook.com

Table S1. LC/MS features of the targeted analytes

Pesticide	Pesticide class	Molar mass	<i>m/z</i> of detected MH ⁺ ion (MS ¹ spec.)	Retention time, min ^a
Acetamiprid	Insecticide	222.67	223.52	9.91
Azoxystrobin	Fungicide	403.40	404.20	12.19
Boscalid	Fungicide	343.20	343.40	12.69
Buprofezin	Insecticide	305.40	306.21	16.71
Chlorpyrifos	Insecticide	350.60	350.20	23.80
Cyprodinil	Fungicide	225.29	226.50	12.39
Difenoconazole	Fungicide	406.30	406.34	17.84
Fenhexamid	Fungicide	302.20	302.46	13.35
Imidacloprid	Insecticide	255.66	256.24	11.10
Kresoxim-methyl	Fungicide	313.30	314.11	14.52
Metsulfuron-methyl	Herbicide	381.37	382.15	11.14
Propiconazole	Fungicide	342.20	342.46	15.59
Pyraclostrobin	Fungicide	387.80	388.14	15.93
Pyrimethanil	Fungicide	199.25	200.44	11.25
Pyriproxyfen	Insecticide	321.40	322.26	21.64
Tebuconazole	Fungicide	307.82	308.46	15.26
Thiacloprid	Insecticide	252.72	253.33	10.27
Thiamethoxam	Insecticide	291.72	292.04	8.54
Trifloxystrobin	Fungicide	408.40	409.17	18.15

^a mean value (n=10) for solvent-based standard (5.00 µg mL⁻¹)

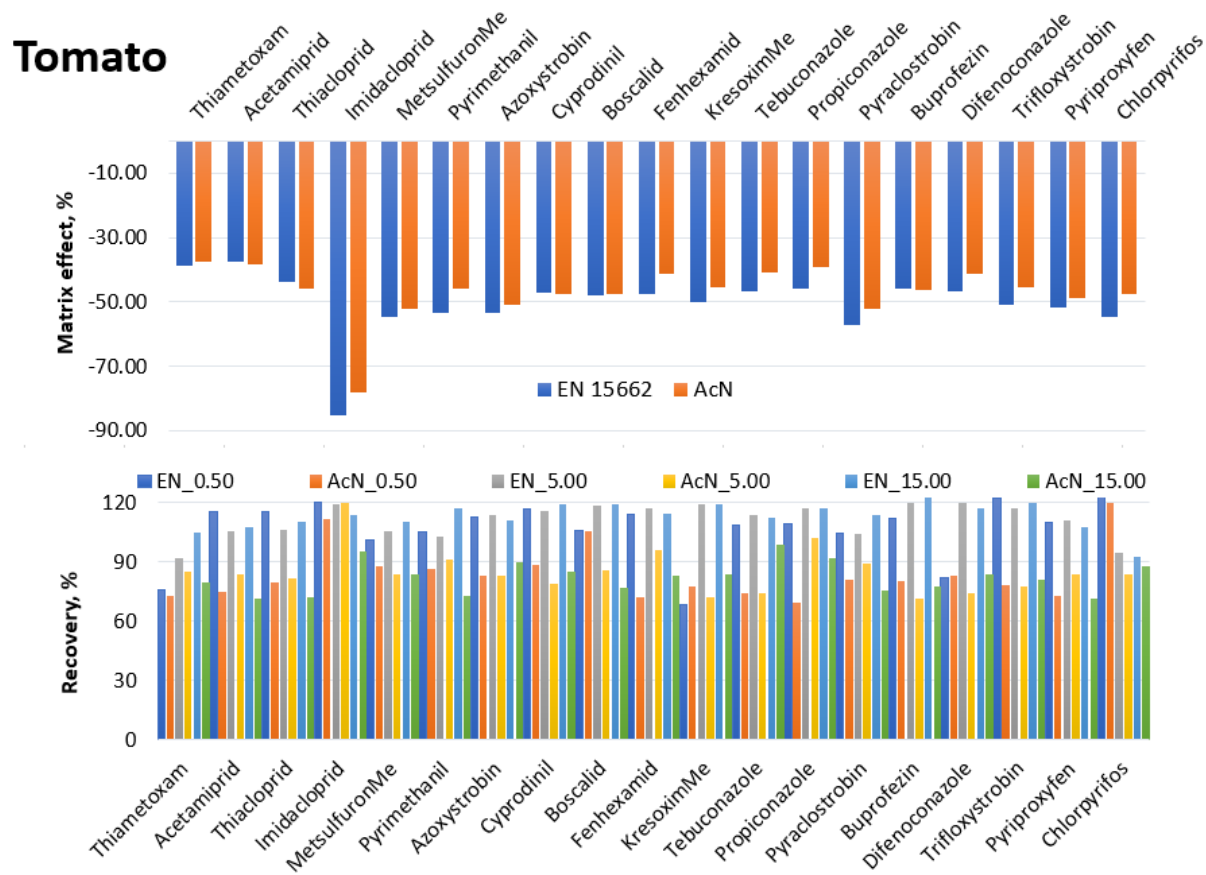


Figure S1. Matrix effects and recoveries at three spike levels (0.50, 5.00 and 15.00 mgkg⁻¹) in tomato treated with EN 15662 and AcN method

Lettuce

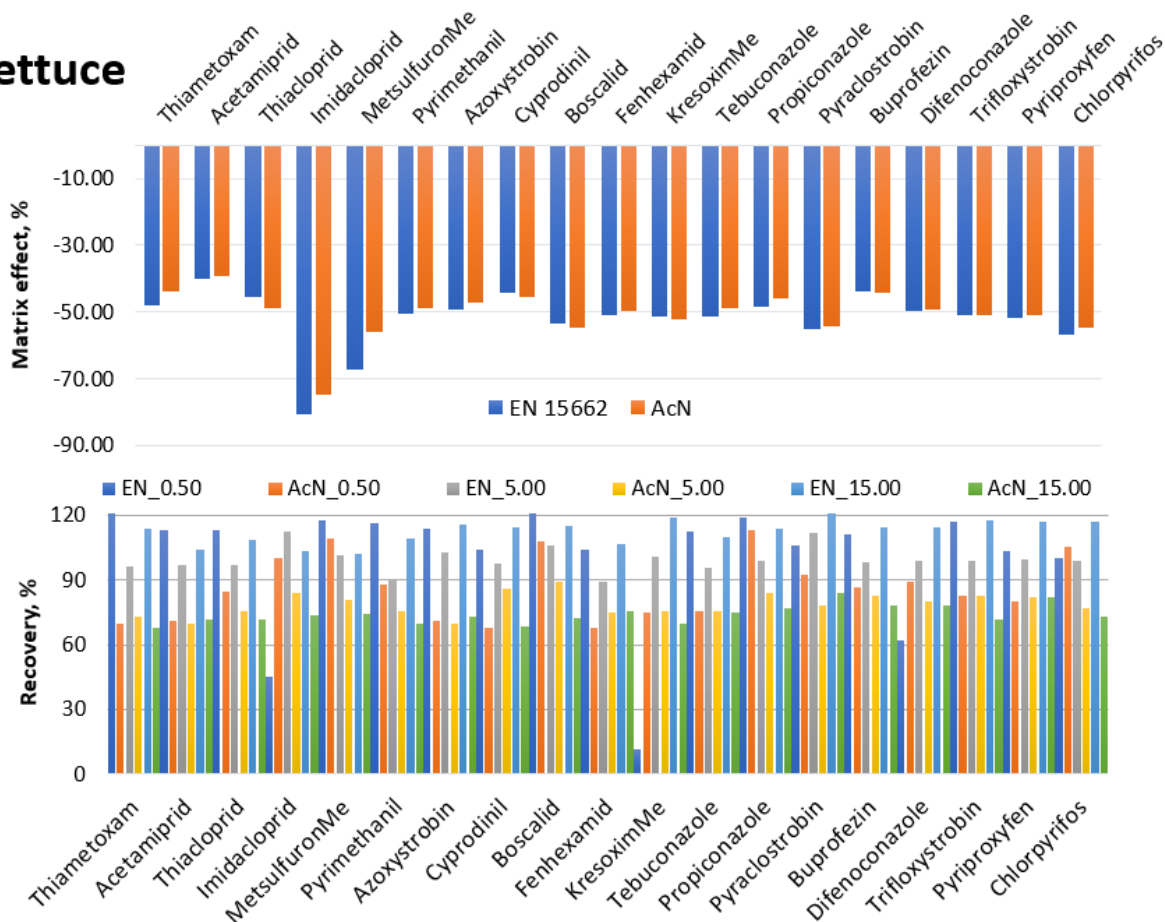


Figure S2. Matrix effects and recoveries at three spike levels (0.50, 5.00 and 15.00 mgkg⁻¹) in lettuce treated with EN 15662 and AcN method

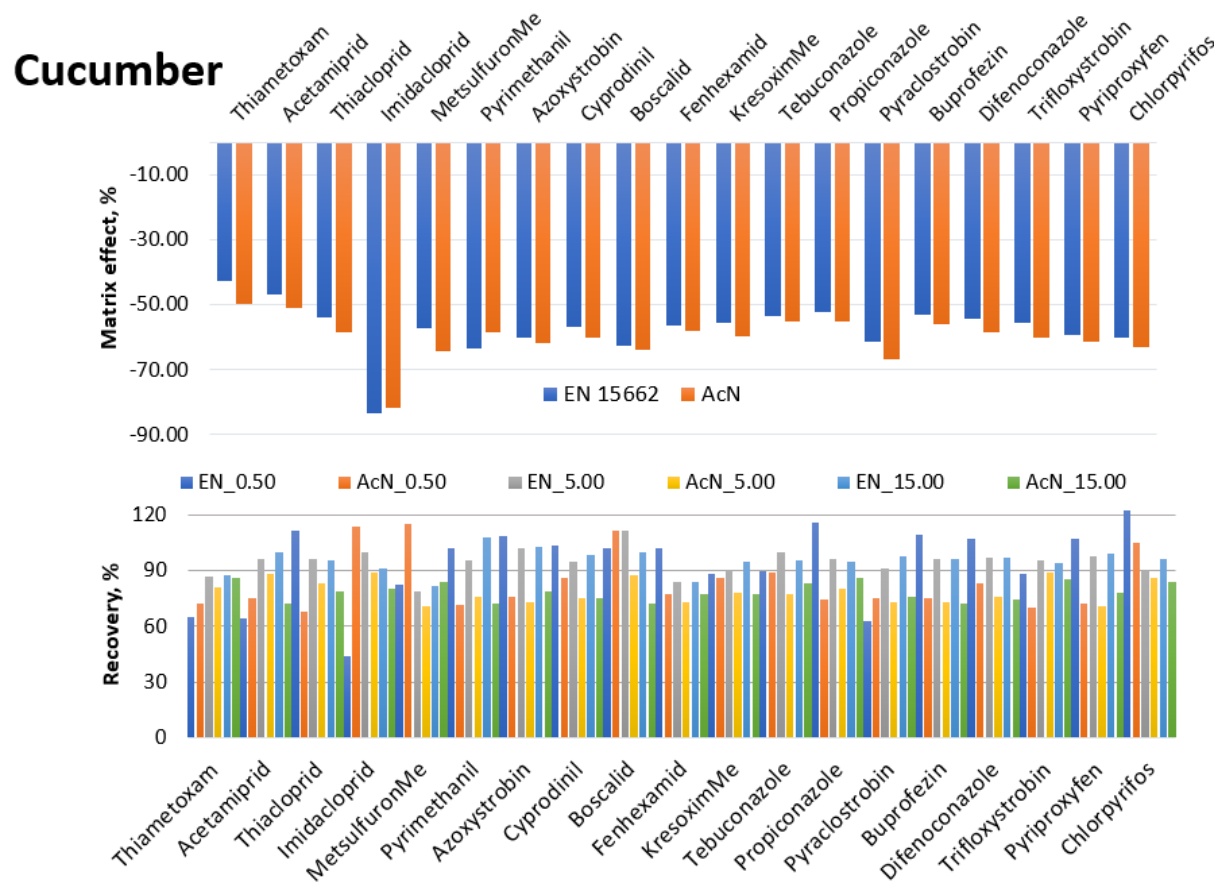


Figure S3. Matrix effects and recoveries at three spike levels (0.50, 5.00 and 15.00 mgkg⁻¹) in cucumber treated with EN 15662 and AcN method

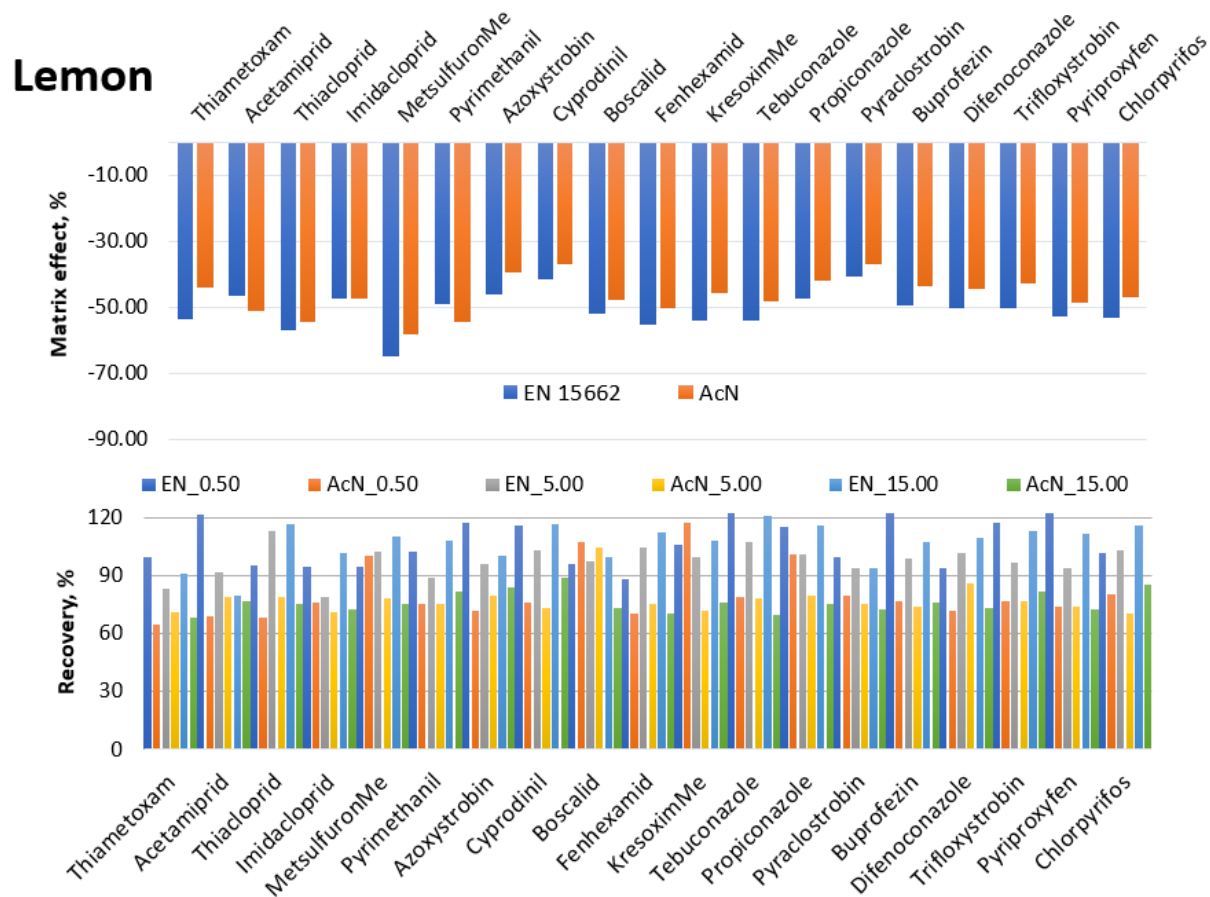


Figure S4. Matrix effects and recoveries at three spike levels (0.50, 5.00 and 15.00 mg kg⁻¹) in lemon treated with EN 15662 and AcN method

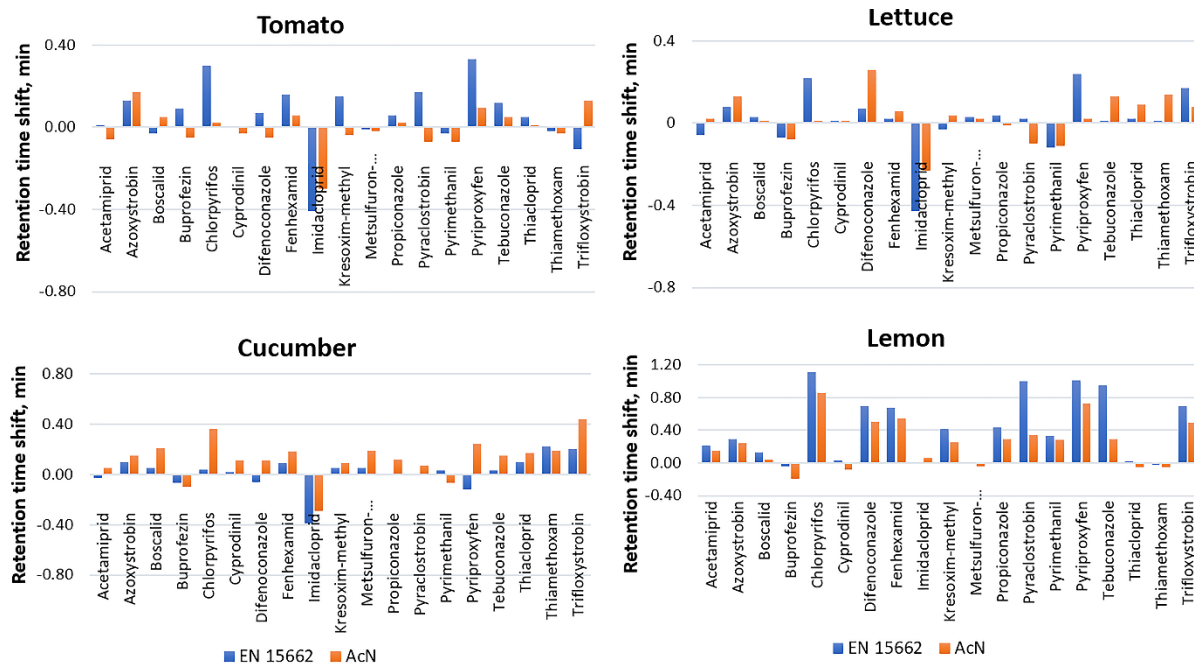


Figure S5. Deviation of procedural pesticides standard retention time (5.00 mgkg^{-1} , $n=10$) in tested matrices from the retention time of the solvent-based standard

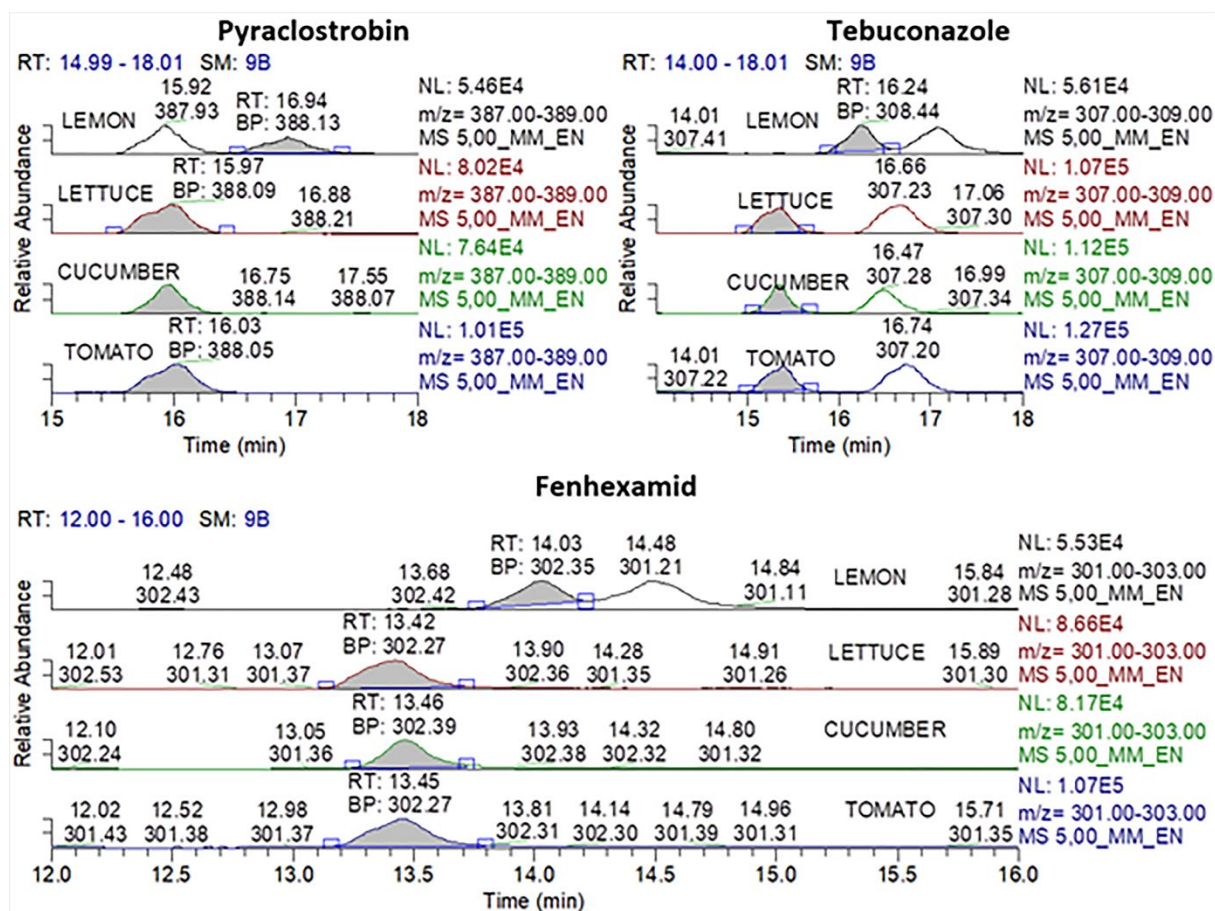


Figure S6. Extract ion chromatograms (isol. width $\pm 1 m/z$) of pyraclostrobin, tebuconazole and fenhexamid (5.00 mg kg^{-1} procedural standard) in tested matrices subjected to EN 15662 method; RT (retention time), BP (base peak in the MS^1 spectra)

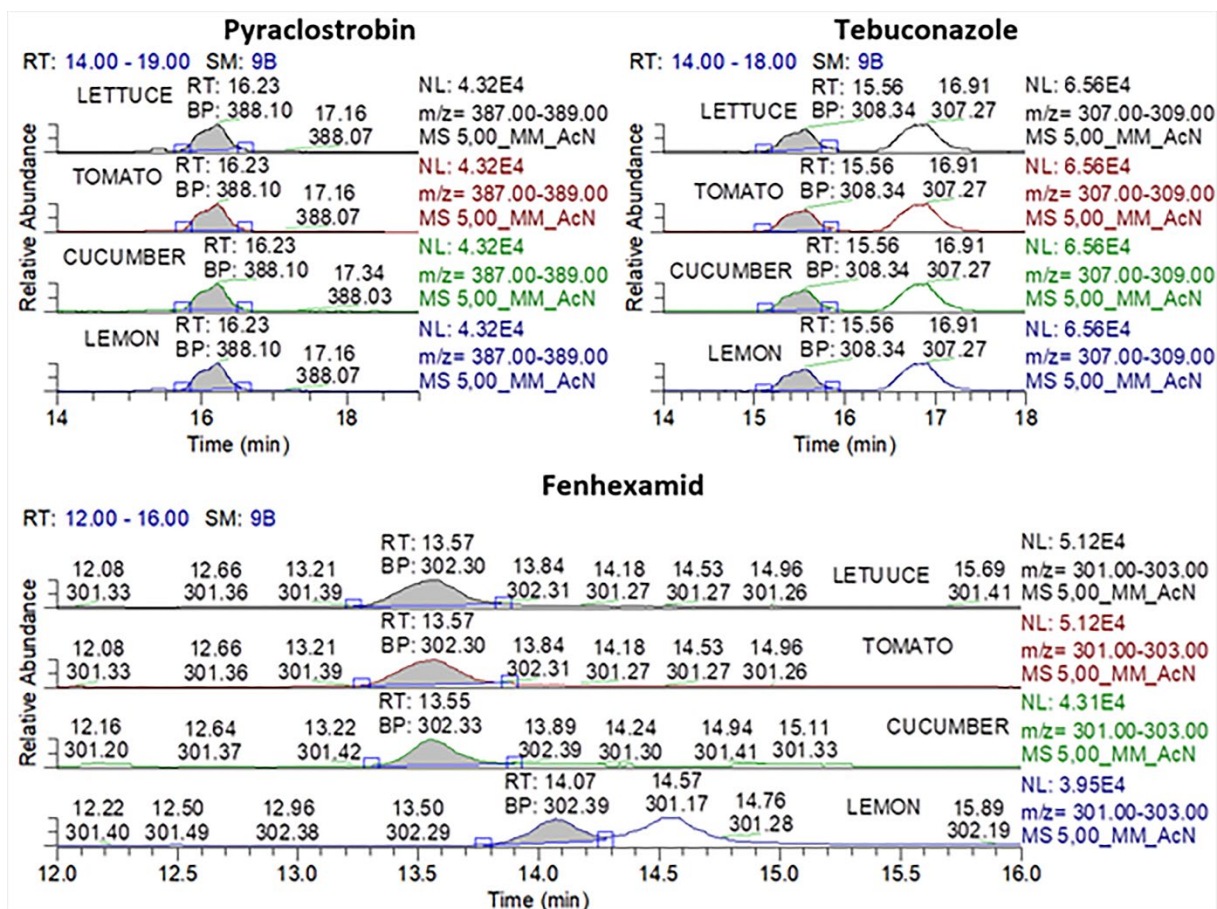


Figure S7. Extract ion chromatograms (isol. width ± 1 m/z) of pyraclostrobin, tebuconazole and fenhexamid (5.00 mg kg^{-1} procedural standard) in tested matrices subjected to AcN method; RT (retention time), BP (base peak in the MS¹ spectra)