

Supplementary file

Simultaneous determination of 27 pesticides in corn and cow matrices by ultra-performance liquid chromatography-tandem mass spectrometry

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Table S1. Precision, and accuracy of target compounds in corn and fresh corn

Pesticide	Corn									Fresh corn								
	spiked level (mg/kg)									spiked level (mg/kg)								
	Recovery (%)			RSD _r (%)			RSD _R (%)			Recovery (%)			RSD _r (%)			RSD _R (%)		
	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1
Cyhalothrin	99.5	79.7	84.4	2.2	7.4	9.2	9.5	5.8	4.2	104.2	84.3	90.5	14.9	5.1	5.9	15.0	9.9	6.7
Imidacloprid	75.7	81.3	87.1	9.6	12.7	4.8	11.0	10.8	1.9	86.3	92.0	84.8	11.6	4.1	2.8	1.2	2.5	5.0
Beta cypermethrin	65.2	75.0	75.8	12.3	10.0	9.1	2.7	2.4	7.6	117.6	116.3	108.3	8.4	5.7	8.2	10.3	6.2	2.3
Chlorpyrifos	84.5	75.2	76.9	8.2	5.9	5.4	3.5	7.9	4.8	109.5	96.0	91.2	4.9	4.3	4.2	8.7	2.8	1.6
Chlorantraniliprole	116.6	110.1	105.6	4.2	10.3	7.2	16.4	1.8	15.3	95.7	73.1	83.7	18.5	6.0	2.4	6.1	2.9	3.7
Cyantraniliprole	66.2	74.4	76.8	14.2	6.8	7.4	19.5	3.1	6.8	90.7	91.0	94.3	17.7	9.8	3.4	2.1	4.4	6.0
Thiamethoxam	103.0	84.0	87.7	5.3	8.8	5.0	15.4	4.2	3.0	96.2	90.5	87.7	7.1	3.8	0.9	2.7	7.5	6.9
Carbaryl	79.3	86.6	96.6	6.2	10.5	5.6	6.2	2.0	5.4	78.9	83.1	87.4	7.6	3.8	2.5	10.4	2.5	1.6
Emamectin benzoate	71.3	71.4	81.7	9.1	5.2	3.1	7.6	5.1	2.0	63.1	82.4	103.8	5.9	7.4	4.9	4.7	1.8	7.7
Indoxacarb	92.2	85.5	80.0	11.6	6.5	7.7	3.2	1.6	2.5	92.6	83.3	93.7	12.2	4.6	9.8	7.0	8.1	5.1
Acetamiprid	81.0	70.0	70.7	5.6	14.7	3.6	2.6	12.7	8.9	83.5	81.6	83.9	7.0	6.0	8.2	7.3	1.0	6.6
Lufenuron	66.1	70.8	71.9	10.6	3.3	3.8	15.5	7.1	1.1	108.0	100.5	75.8	4.3	5.4	2.8	0.4	7.7	4.8
Dinotefuran	81.1	87.9	83.7	5.9	8.0	3.3	11.2	2.1	2.2	104.5	87.1	88.1	10.4	2.4	7.8	13.1	1.3	5.5
Tebuconazole	112.5	99.1	101.4	13.0	8.1	2.3	15.2	4.3	1.1	70.1	71.0	96.4	17.7	5.5	9.1	6.9	7.2	1.9
Azoxystrobin	105.5	94.6	87.5	2.5	10.9	5.2	14.4	6.1	5.0	80.8	71.1	75.6	3.8	2.8	7.9	2.6	8.4	11.2
Propiconazole	89.1	81.7	87.1	2.5	9.4	3.4	5.2	2.1	6.6	75.4	75.9	86.8	5.0	2.0	8.9	10.1	9.9	4.6
Triadimefon	110.5	88.4	85.3	8.4	4.2	4.7	8.9	1.8	2.7	100.9	84.2	83.8	8.4	2.2	8.8	10.0	4.1	6.8
Trifloxystrobin	97.5	98.2	96.8	3.0	9.4	2.0	12.4	14.7	10.3	77.4	73.6	74.6	7.1	1.8	7.3	9.7	13.9	17.0
Epoxiconazole	96.2	87.1	82.4	3.2	9.9	4.5	5.8	0.3	2.2	83.8	74.8	82.3	3.4	3.4	8.1	0.4	9.7	7.2

Pyraclostrobin	108.5	99.0	91.9	3.1	9.8	5.5	1.7	13.5	10.3	70.6	70.7	73.1	10.3	3.1	8.2	13.3	13.1	14.6
Difenoconazole	96.8	97.9	103.9	8.4	5.1	8.0	3.0	8.9	8.2	80.5	72.9	74.2	5.7	4.0	8.2	14.5	2.3	7.9
Metalaxyl-M	100.8	103.0	101.4	8.7	8.8	6.3	6.3	10.9	10.3	82.1	70.4	71.1	3.8	3.3	1.7	4.4	12.0	14.3
Carbendazim	75.7	74.9	77.8	3.4	7.1	5.5	5.1	5.4	3.4	76.9	75.1	75.9	7.4	1.7	6.7	2.4	3.6	6.7
Atrazine	86.4	81.8	84.7	3.6	8.5	8.3	1.6	2.4	0.2	85.2	82.4	83.6	5.1	1.0	8.0	5.5	3.4	6.8
Acetochlor	112.5	78.4	89.3	10.7	11.9	8.2	14.0	6.2	4.8	114.5	90.2	91.3	4.0	5.3	3.2	15.9	4.3	2.5
Clothianidin	78.2	74.8	74.4	18.4	18.9	8.2	13.6	5.0	12.7	102.7	77.1	99.0	14.4	11.0	7.3	11.8	9.3	2.7
Fludioxonil	84.1	77.3	81.0	3.6	12.0	11.5	0.2	8.7	6.9	84.5	82.9	76.3	7.1	4.0	8.6	0.3	4.2	11.6

Table S2. Precision, and accuracy of target compounds in fresh corn stover and old corn stover

Pesticide	Fresh corn stover									Old corn stover								
	spiked level (mg/kg)									spiked level (mg/kg)								
	Recovery (%)			RSD _r (%)			RSD _R (%)			Recovery (%)			RSD _r (%)			RSD _R (%)		
0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	
Cyhalothrin	92.8	89.0	91.4	5.5	5.6	4.0	11.6	10.9	2.2	105.1	88.6	76.7	10.8	11.7	3.6	4.2	6.1	5.5
Imidacloprid	102.3	84.1	85.3	18.6	5.3	1.7	9.2	9.1	4.6	101.9	90.5	86.0	18.8	6.7	5.2	10.0	1.9	1.0
Beta cypermethrin	110.3	101.0	103.5	8.4	10.3	3.5	6.4	7.9	11.9	82.9	88.1	83.7	5.9	6.3	2.5	16.0	8.3	3.4
Chlorpyrifos	66.9	87.6	77.2	3.8	2.2	4.2	8.9	3.1	3.7	77.2	85.8	72.8	4.6	2.0	3.4	4.5	5.1	2.0
Chlorantraniliprole	92.2	93.5	82.1	12.5	5.4	1.9	1.0	6.1	1.0	92.3	83.2	80.0	19.9	4.8	3.1	17.7	0.5	3.8
Cyantraniliprole	83.6	90.7	86.9	11.4	3.1	2.4	10.6	7.0	2.1	66.6	77.7	84.2	8.0	3.6	4.3	0.67	4.6	3.8
Thiamethoxam	93.4	94.6	89.7	4.3	2.7	1.3	6.1	0.8	5.3	91.5	87.6	83.1	8.1	4.6	4.2	2.6	3.2	0.9
Carbaryl	91.6	106.6	96.3	6.6	3.0	1.9	3.0	6.7	1.6	80.7	88.2	85.8	7.7	2.7	2.9	5.1	0.5	2.9
Emamectin benzoate	96.3	89.2	85.6	5.2	2.8	3.2	6.3	3.6	3.8	68.6	81.8	75.9	8.9	2.4	3.8	14.2	1.5	7.6
Indoxacarb	106.6	91.9	70.4	14.0	3.6	3.3	7.2	3.8	0.5	93.9	88.9	101.8	9.5	3.9	0.9	3.2	2.1	14.7

Acetamiprid	89.3	90.5	100.1	7.9	4.3	1.2	7.1	4.4	0.1	91.5	103.0	97.9	8.9	2.0	3.1	3.6	7.1	18.9
Lufenuron	117.3	100.4	72.3	8.9	4.0	5.3	8.0	0.5	1.7	103.3	95.0	74.5	12.7	7.7	6.4	15.6	5.2	0.3
Dinotefuran	79.4	81.1	83.1	4.4	2.5	4.5	3.9	4.1	9.8	82.4	80.3	70.3	6.2	3.9	0.4	7.8	2.1	1.2
Tebuconazole	80.6	71.9	92.5	8.1	12.0	3.5	3.5	6.2	16.5	80.0	70.4	92.3	9.0	6.1	4.0	7.2	7.9	14.6
Azoxystrobin	95.6	101.0	86.7	2.6	4.3	3.3	5.9	5.8	12.5	78.3	83.0	91.2	9.4	1.1	1.7	12.1	0.4	13.6
Propiconazole	82.9	84.5	87.8	2.3	2.8	2.8	5.7	5.3	12.0	74.1	85.6	92.7	7.9	1.6	1.6	8.8	1.6	14.8
Triadimefon	82.0	86.6	103.7	4.8	4.6	1.4	3.3	3.4	1.8	98.8	89.6	73.0	4.6	2.0	2.5	8.2	6.6	0.4
Trifloxystrobin	85.9	89.1	76.5	3.9	2.5	3.8	1.6	6.4	4.3	76.1	80.4	99.5	5.3	2.3	1.8	10.7	2.6	17.2
Epoxiconazole	76.3	80.1	78.4	4.8	5.9	2.4	5.6	7.3	5.7	71.7	82.2	89.0	3.3	2.0	3.7	10.5	3.4	13.8
Pyraclostrobin	81.0	89.2	75.0	6.5	3.3	3.6	2.6	3.1	1.2	81.5	82.9	94.4	7.4	3.5	1.9	12.2	2.8	18.2
Difenoconazole	80.8	90.7	70.6	7.3	7.5	3.5	4.9	3.6	6.9	72.7	83.5	77.2	10.5	5.3	4.8	11.3	5.2	2.1
Metalaxyl-M	95.8	102.2	95.3	7.8	2.1	1.1	4.5	3.2	1.7	83.9	87.9	90.4	5.9	2.0	2.3	8.3	4.6	5.0
Carbendazim	75.0	79.3	73.6	2.5	1.1	4.6	0.4	2.5	0.7	70.5	73.6	74.0	3.8	2.8	5.5	9.5	2.5	1.3
Atrazine	94.4	103.5	86.8	2.3	2.5	5.4	5.6	4.8	4.8	82.3	90.0	87.2	3.4	2.9	4.4	7.7	2.5	3.5
Acetochlor	82.7	91.8	84.2	10.5	3.7	2.4	15.9	2.0	1.3	74.7	80.5	77.6	8.3	11.1	3.6	5.7	4.5	2.0
Clothianidin	69.3	84.1	85.2	16.9	16.4	7.4	9.18	9.8	0.8	101.9	92.7	82.1	13.3	12.8	4.7	2.3	4.0	1.4
Fludioxonil	75.8	97.2	87.0	5.5	5.5	4.1	1.6	2.7	4.2	83.8	84.6	83.6	3.4	2.5	3.5	2.9	3.6	2.9

Table S3. Precision, and accuracy of target compounds in corn silage and beef

Pesticide	Corn silage									Beef								
	spiked level (mg/kg)									spiked level (mg/kg)								
	Recovery (%)			RSD _t (%)			RSD _R (%)			Recovery (%)			RSD _t (%)			RSD _R (%)		
0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	
Cyhalothrin	100.0	115.1	109.1	10.9	8.9	2.8	8.3	11.8	10.3	102.4	94.6	94.2	9.9	10.5	6.2	5.9	10.4	5.6

Imidacloprid	90.9	91.5	85.1	11.7	4.0	4.9	1.4	4.5	1.8	85.2	99.7	98.7	7.1	2.2	3.0	9.4	0.4	4.8
Beta cypermethrin	113.1	109.0	108.9	6.9	10.8	2.7	10.2	6.2	10.3	98.7	94.3	94.0	15.3	5.9	4.0	0.1	4.9	2.4
Chlorpyrifos	86.9	97.0	89.1	5.0	4.8	4.0	4.1	4.6	9.1	92.2	93.5	92.7	7.4	5.8	1.9	0.59	9.25	0.8
Chlorantraniliprole	91.8	98.3	78.1	15.7	3.9	6.1	2.9	5.8	2.8	103.6	90.1	96.0	6.6	2.0	4.5	1.5	6.1	2.2
Cyantraniliprole	100.7	83.8	78.2	6.1	8.9	6.7	3.1	5.2	3.5	98.3	92.0	99.0	10.3	2.8	4.4	3.7	3.8	3.1
Thiamethoxam	95.0	96.1	92.5	9.0	4.4	5.4	8.8	2.9	1.1	82.1	95.7	102.5	9.5	1.6	3.4	11.6	0.4	4.8
Carbaryl	100.7	93.3	81.5	4.8	3.1	7.8	2.3	5.5	2.3	99.4	99.0	98.8	7.3	3.6	5.7	9.2	1.6	4.6
Emamectin benzoate	103.3	76.2	74.7	13.7	4.8	5.9	9.2	0.5	0.9	70.2	73.5	71.5	10.4	5.7	3.5	18.4	7.2	3.8
Indoxacarb	109.2	118.2	91.6	7.0	1.5	10.7	7.0	8.8	14.5	104.4	91.5	95.6	10.8	2.0	2.6	7.3	4.2	5.2
Acetamiprid	80.4	96.9	73.2	9.7	6.1	6.4	14.6	2.9	10.2	86.0	92.6	91.1	8.0	3.8	6.7	9.2	14.8	1.4
Lufenuron	95.8	113.1	87.4	15.2	7.1	2.1	16.1	17.8	3.3	100.4	98.6	98.5	18.2	4.3	2.7	2.7	9.7	6.1
Dinotefuran	88.4	85.3	72.7	3.6	2.1	4.0	4.2	1.0	2.1	76.2	90.3	90.9	17.9	5.6	3.1	13.0	5.7	1.9
Tebuconazole	68.0	93.6	74.8	5.3	9.7	7.7	12.5	7.7	3.6	87.2	93.3	96.3	14.4	4.7	3.8	17.6	2.6	2.7
Azoxystrobin	89.2	95.7	92.7	5.5	7.1	2.8	2.0	3.2	12.2	108.3	101.3	99.9	5.1	1.6	3.3	2.4	2.2	2.2
Propiconazole	91.4	91.5	71.6	1.3	4.9	6.2	4.2	2.2	1.1	95.0	87.6	95.0	4.8	0.5	1.6	5.6	3.9	2.7
Triadimefon	73.6	87.7	70.0	5.0	7.3	2.0	8.9	5.3	0.4	97.2	96.3	98.9	7.0	3.3	2.1	5.2	3.7	2.1
Trifloxystrobin	106.6	106.2	80.3	2.7	5.6	9.6	7.2	6.2	7.2	95.2	90.3	97.7	2.9	1.8	2.5	2.9	0.3	4.4
Epoxiconazole	86.9	91.9	74.1	3.6	3.0	2.9	1.9	1.1	2.3	94.7	92.6	98.7	2.3	1.5	2.6	7.6	1.3	4.0
Pyraclostrobin	103.9	116.7	84.9	3.3	4.0	10.8	5.7	15.1	9.4	97.6	84.8	97.4	3.6	2.9	0.5	12.9	2.5	2.2
Difenoconazole	92.5	97.0	86.9	11.5	6.1	3.3	9.5	2.5	5.1	97.4	89.4	91.2	10.8	6.8	2.9	6.8	1.6	1.5
Metalaxyl-M	106.7	98.9	82.5	6.6	6.1	8.6	8.2	1.5	3.5	93.3	93.6	97.6	6.5	1.2	2.4	4.2	1.3	4.5
Carbendazim	74.6	75.9	71.8	2.9	2.2	5.2	2.2	1.1	0.8	91.1	86.7	89.0	2.8	5.2	3.5	1.9	1.0	3.0
Atrazine	99.7	94.7	77.3	6.0	4.0	7.7	2.2	3.4	6.8	93.0	92.3	94.0	3.1	0.6	3.1	4.6	1.4	1.5
Acetochlor	80.1	101.7	97.7	6.8	9.2	4.1	14.8	8.5	5.8	94.1	94.9	96.7	12.2	2.0	2.8	3.3	1.0	1.6
Clothianidin	83.2	117.4	85.8	18.1	4.8	6.8	17.7	7.4	0.2	91.1	88.7	96.0	9.8	10.9	1.3	12.2	5.0	3.7
Fludioxonil	102.3	105.0	90.7	3.0	6.8	4.4	12.3	7.1	6.7	92.9	91.8	94.6	2.1	2.4	1.7	17.5	6.6	2.1

Table S4. Precision, and accuracy of target compounds in fat and milk fat

Pesticide	Fat									Milk fat								
	spiked level (mg/kg)									spiked level (mg/kg)								
	Recovery (%)			RSD _r (%)			RSD _R (%)			Recovery (%)			RSD _r (%)			RSD _R (%)		
	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1
Cyhalothrin	94.9	70.8	78.7	8.6	1.7	8.4	11.9	19.8	9.2	71.5	94.6	87.3	17.9	9.8	13.7	12.5	12.8	2.7
Imidacloprid	83.1	79.5	86.4	17.3	6.0	5.0	5.2	5.9	10.7	91.5	87.0	80.9	14.9	6.3	4.9	7.3	2.4	3.8
Beta cypermethrin	89.6	81.4	80.2	10.2	12.7	6.2	1.5	3.8	17.0	79.1	87.7	72.5	18.3	6.4	10.5	8.6	4.1	6.1
Chlorpyrifos	65.2	64.4	64.7	5.0	1.9	2.5	0.6	3.6	2.2	62.0	72.7	72.0	7.7	7.1	4.6	6.6	2.6	1.1
Chlorantraniliprole	97.2	84.2	90.9	13.9	4.9	3.3	10.3	3.1	13.0	106.2	87.7	90.4	14.9	5.8	3.1	11.4	6.4	2.1
Cyantraniliprole	81.8	92.3	90.9	15.7	4.7	2.2	4.8	4.6	13.0	87.2	83.2	81.5	10.5	3.0	6.7	6.3	6.7	2.1
Thiamethoxam	86.1	95.0	87.8	7.5	5.9	3.5	4.1	2.3	11.0	102.5	87.9	83.7	7.9	7.4	5.4	3.8	3.8	1.8
Carbaryl	79.4	90.5	87.0	4.4	3.2	2.4	6.7	4.7	12.8	82.6	88.9	81.0	10.1	4.3	3.5	5.0	4.2	1.0
Emamectin benzoate	65.4	74.5	75.4	3.7	5.4	5.8	2.4	3.1	4.1	69.9	60.8	62.0	16.8	9.7	5.0	5.1	3.9	4.1
Indoxacarb	84.7	94.2	93.5	8.3	5.0	2.0	4.9	7.5	11.1	95.3	101.0	98.3	11.7	9.8	5.3	6.5	4.6	3.0
Acetamiprid	78.4	95.7	95.9	6.1	6.2	3.5	8.8	4.6	13.1	81.2	78.6	78.2	11.0	4.1	8.0	14.1	5.4	4.2
Lufenuron	75.9	88.3	86.6	12.8	4.0	2.4	13.1	5.3	10.2	100.6	109.8	98.1	19.3	8.7	8.1	6.6	4.3	0.4
Dinotefuran	71.8	97.6	96.0	4.3	5.4	2.6	11.7	4.7	11.2	79.0	88.6	90.7	11.8	4.4	4.1	13.6	3.7	4.4
Tebuconazole	83.9	84.6	82.8	4.8	6.7	2.2	9.6	3.7	5.9	105.3	92.4	89.6	19.2	10.1	5.2	0.6	4.3	3.5
Azoxystrobin	95.5	95.9	96.3	8.3	2.8	1.7	5.9	1.7	12.9	91.1	92.8	90.4	3.7	5.6	3.6	0.9	1.0	2.0
Propiconazole	75.9	84.8	80.2	6.0	5.6	1.5	6.0	5.8	6.7	73.4	90.4	88.8	5.8	7.7	3.5	11.1	2.3	3.6
Triadimefon	74.3	87.9	85.9	7.5	2.4	1.9	0.8	3.4	7.9	98.8	94.2	85.8	4.4	7.4	6.1	1.7	3.3	1.8
Trifloxystrobin	104.2	89.5	87.3	17.1	5.5	1.8	4.4	4.0	7.8	90.3	96.1	100.0	6.1	4.6	2.8	3.1	1.9	5.6
Epoxiconazole	81.6	90.0	88.0	4.3	4.0	1.4	3.5	3.5	7.8	100.8	89.0	90.0	3.5	7.0	4.4	5.2	2.9	3.2

Pyraclostrobin	78.6	82.2	84.4	5.7	3.9	2.8	4.9	2.4	7.7	86.8	91.3	91.1	9.1	6.0	4.3	5.1	1.1	1.0
Difenoconazole	96.1	89.6	79.3	5.4	6.0	1.5	12.3	5.8	5.6	91.0	89.6	88.7	10.6	5.6	3.1	9.1	6.0	2.6
Metalaxyl-M	77.2	94.2	90.7	12.3	5.4	1.3	6.1	5.9	10.9	94.2	91.8	89.9	14.8	2.4	1.7	5.8	3.2	2.1
Carbendazim	69.1	81.1	78.8	3.7	2.2	2.3	1.6	2.5	7.9	84.3	90.8	85.1	4.4	2.7	3.5	2.0	4.9	3.9
Atrazine	77.1	79.7	77.4	2.9	3.2	2.5	7.6	1.9	1.7	75.0	84.7	82.9	8.3	5.6	2.7	8.9	2.0	3.8
Acetochlor	81.0	83.4	81.6	10.1	3.2	2.3	5.2	2.4	9.8	74.8	83.4	83.0	7.5	7.1	3.1	19.3	1.8	2.0
Clothianidin	96.7	114.0	86.3	13.2	16.6	6.3	17.3	17.0	2.2	64.2	83.5	81.9	12.9	7.0	5.4	17.3	10.4	2.0
Fludioxonil	85.1	88.1	89.5	6.4	1.9	1.9	3.2	1.1	4.6	91.7	90.6	88.5	6.9	6.7	4.0	2.5	3.2	3.0

Table S5. Precision, and accuracy of target compounds in liver and kidney

Pesticide	Liver									Kidney								
	spiked level (mg/kg)									spiked level (mg/kg)								
	Recovery (%)			RSD _r (%)			RSD _R (%)			Recovery (%)			RSD _r (%)			RSD _R (%)		
	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1
Cyhalothrin	93.6	92.3	90.7	9.1	7.1	7.9	2.7	8.1	3.3	106.0	87.3	83.4	18.7	4.3	4.6	9.4	15.6	4.1
Imidacloprid	104.1	100.7	85.4	17.8	17.3	3.6	14.0	6.0	0.6	85.7	96.8	88.9	9.9	3.8	3.0	3.9	2.7	0.8
Beta cypermethrin	97.1	81.8	83.0	15.0	8.9	4.6	14.3	7.9	2.9	98.1	96.2	83.5	14.1	4.9	3.0	5.0	5.4	1.8
Chlorpyrifos	80.8	84.0	90.4	5.7	3.2	4.5	15.9	2.4	4.4	87.1	85.1	84.3	5.8	2.8	2.5	11.3	3.8	1.5
Chlorantraniliprole	110.3	99.6	79.4	12.0	4.0	4.0	12.2	4.9	2.0	113.2	95.4	87.0	13.0	5.9	2.3	9.8	4.5	1.5
Cyantraniliprole	104.0	95.9	84.8	17.7	5.8	3.5	13.9	0.3	3.0	99.1	87.1	85.5	1.9	6.0	2.9	9.8	4.6	1.2
Thiamethoxam	76.7	91.5	89.7	13.8	5.2	2.8	2.6	1.0	0.4	88.0	91.2	87.4	5.0	2.6	3.1	0.9	2.8	1.6
Carbaryl	85.8	85.5	83.2	7.7	2.6	3.1	11.1	2.5	5.5	87.6	93.2	91.6	7.1	4.9	4.7	3.3	6.7	4.3
Emamectin benzoate	67.2	87.7	73.9	5.5	6.1	4.1	6.5	6.9	1.9	67.8	68.7	70.9	8.1	6.1	1.6	9.2	4.1	7.8
Indoxacarb	92.2	99.5	84.7	12.6	4.0	4.2	17.0	2.7	2.4	104.7	93.2	87.9	5.0	5.6	1.9	10.6	6.6	2.5

Acetamiprid	95.3	89.5	85.8	14.6	5.3	2.0	19.8	1.7	3.7	90.8	85.3	78.7	10.6	4.5	4.2	12.9	4.4	5.1
Lufenuron	87.5	92.6	88.3	19.8	2.7	3.1	17.2	1.8	1.7	91.6	93.0	82.0	8.8	5.7	3.6	4.4	1.4	4.1
Dinotefuran	69.7	83.1	81.5	5.5	2.9	2.1	13.5	1.7	3.0	97.2	90.1	86.4	6.9	3.6	1.9	17.4	2.8	4.1
Tebuconazole	91.5	92.3	86.9	5.8	5.8	3.7	4.4	4.1	4.0	93.5	94.8	77.7	9.4	6.3	2.3	9.0	17.7	4.6
Azoxystrobin	101.0	98.6	88.8	9.4	3.8	3.5	13.3	1.8	1.4	91.2	96.1	89.7	8.6	4.2	2.0	1.8	1.9	1.3
Propiconazole	82.9	91.9	84.9	5.8	1.5	3.0	9.4	1.3	1.2	81.2	90.9	85.1	4.9	3.5	3.8	8.3	1.4	1.8
Triadimefon	88.8	96.2	90.5	3.4	4.4	2.6	10.1	2.9	3.3	93.7	95.3	85.8	3.9	2.7	2.8	0.6	2.5	1.2
Trifloxystrobin	100.5	98.4	87.3	6.9	3.5	2.6	15.2	3.6	1.6	90.5	93.9	89.1	3.7	3.1	2.5	1.2	2.2	3.0
Epoxiconazole	92.1	98.5	86.0	5.5	3.5	3.8	13.0	2.1	0.3	90.5	94.5	85.7	4.2	3.2	1.8	1.7	2.8	1.2
Pyraclostrobin	100.6	90.7	87.1	4.6	4.2	3.6	18.2	1.7	2.3	95.6	92.5	86.9	5.2	4.0	3.5	2.2	3.3	2.4
Difenoconazole	105.1	92.8	89.9	7.3	2.7	5.7	4.6	4.5	2.3	93.3	93.3	84.5	8.4	5.9	1.9	2.2	2.5	0.8
Metalaxyl-M	84.5	94.8	84.9	17.8	1.9	1.9	8.7	2.7	2.4	94.3	92.3	90.5	6.2	3.7	2.8	3.3	0.7	3.6
Carbendazim	79.9	84.8	84.2	3.1	2.3	3.3	11.7	0.7	2.9	84.3	86.2	88.3	7.3	3.1	4.4	5.7	2.2	4.4
Atrazine	82.7	91.4	86.7	6.7	4.2	4.3	14.2	0.7	2.0	89.8	90.8	84.8	3.8	3.6	1.6	0.9	2.2	0.7
Acetochlor	99.2	100.6	86.3	14.1	4.8	3.1	8.5	4.7	0.6	94.4	94.1	84.2	3.1	3.0	2.7	1.9	1.9	4.3
Clothianidin	76.6	71.7	86.7	17.5	10.2	4.1	7.2	9.8	1.2	77.0	94.1	84.4	13.6	11.5	4.9	12.2	9.6	1.3
Fludioxonil	93.7	96.4	88.7	3.4	3.8	2.4	17.5	3.8	4.8	89.3	83.0	93.3	3.7	6.3	15.3	6.1	3.0	3.3

Table S6. Precision, and accuracy of target compounds in milk and cow stomach

Pesticide	Milk									Cow stomach								
	spiked level (mg/kg)									spiked level (mg/kg)								
	Recovery (%)			RSD _r (%)			RSD _R (%)			Recovery (%)			RSD _r (%)			RSD _R (%)		
0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	0.01/ 0.02	0.1	1	
Cyhalothrin	83.4	70.3	75.4	7.8	11.0	2.9	8.0	2.1	3.7	102.1	75.9	71.1	10.9	8.8	4.4	11.6	3.0	2.2

Imidacloprid	99.1	94.7	90.0	12.6	10.5	3.6	12.7	11.3	4.2	81.1	72.9	93.0	13.0	3.4	3.8	4.7	2.5	4.4
Beta cypermethrin	78.9	70.7	83.7	12.8	1.9	4.3	8.8	1.2	7.5	76.3	73.2	62.7	16.9	6.7	7.0	9.4	3.8	3.2
Chlorpyrifos	78.7	79.0	85.1	9.2	4.3	2.3	1.8	1.0	8.4	93.8	79.2	70.3	4.1	2.3	5.8	7.8	9.1	1.9
Chlorantraniliprole	102.8	96.0	97.6	9.3	6.8	6.3	9.4	8.9	4.0	98.9	74.4	85.3	13.3	2.4	4.8	15.4	4.2	2.5
Cyantraniliprole	95.7	99.2	93.1	13.5	4.3	4.6	11.0	16.7	5.9	95.0	69.4	82.1	12.8	5.3	4.9	18.5	6.5	1.2
Thiamethoxam	89.4	93.2	93.3	5.9	3.4	4.7	7.1	14.1	5.2	101.3	89.9	92.5	15.7	9.0	1.9	10.9	0.5	0.6
Carbaryl	94.0	84.6	91.2	3.6	2.8	2.0	5.0	6.3	7.1	68.1	66.5	79.9	8.2	3.3	5.0	3.7	4.9	4.1
Emamectin benzoate	76.5	74.8	77.6	6.0	6.2	5.7	12.2	8.4	2.6	60.7	61.0	63.6	7.6	8.1	9.0	9.2	5.2	10.6
Indoxacarb	103.4	90.0	91.3	9.2	5.2	5.5	4.4	6.4	1.9	82.5	72.8	71.8	9.0	1.8	3.9	5.5	10.9	7.7
Acetamiprid	87.5	88.3	98.3	9.1	4.4	4.1	5.0	9.8	6.5	89.7	80.6	85.9	3.9	2.9	3.9	8.4	2.9	2.8
Lufenuron	79.2	77.0	78.9	7.1	3.8	2.7	3.5	4.7	3.9	77.8	83.6	71.3	5.4	8.0	3.3	9.9	17.5	10.0
Dinotefuran	90.5	82.5	86.6	7.0	3.1	4.6	4.2	7.8	4.4	70.4	92.3	94.9	9.7	4.3	2.7	16.3	6.7	7.7
Tebuconazole	111.9	103.7	95.8	10.5	10.2	3.8	5.5	15.0	6.5	103.8	85.2	78.5	18.8	2.5	4.0	2.7	9.0	1.2
Azoxystrobin	101.7	94.1	95.2	1.3	3.0	4.4	4.7	10.1	3.4	112.1	83.7	85.2	13.5	5.0	4.6	1.1	0.5	2.1
Propiconazole	95.1	90.7	90.7	5.3	2.7	1.3	1.8	12.6	3.5	92.2	71.9	79.1	5.9	2.8	3.2	7.9	1.1	2.1
Triadimefon	95.6	96.2	90.3	6.6	2.2	2.2	2.2	13.5	4.5	93.4	77.3	81.4	5.6	3.6	3.7	5.9	2.3	1.2
Trifloxystrobin	92.7	87.6	90.7	2.7	3.7	4.3	2.6	12.0	3.8	89.7	74.4	73.5	4.2	3.2	4.3	6.5	8.8	5.7
Epoxiconazole	98.6	93.5	94.3	6.1	5.9	2.8	3.0	9.6	6.1	92.9	79.7	79.1	4.5	1.2	3.8	4.0	4.3	1.4
Pyraclostrobin	98.2	88.9	91.0	4.9	6.4	5.5	7.5	9.8	1.2	97.2	71.9	72.1	10.7	3.9	4.7	7.0	4.6	2.3
Difenoconazole	107.0	91.8	91.6	7.7	4.5	2.8	4.2	13.7	3.4	81.9	70.9	75.5	5.3	6.3	5.7	6.8	7.3	3.2
Metalaxyl-M	93.3	91.0	93.0	16.5	4.9	4.1	6.4	9.5	2.1	91.6	88.5	96.0	6.2	2.5	3.3	2.9	1.7	2.6
Carbendazim	93.2	87.9	84.9	2.4	3.2	3.6	2.5	10.4	3.4	84.4	88.2	90.1	3.4	3.2	4.7	2.1	3.8	1.1
Atrazine	93.1	89.5	86.7	2.5	3.7	2.0	1.9	11.9	2.7	87.3	85.1	87.6	6.9	1.3	2.6	0.5	1.7	1.5
Acetochlor	93.9	83.1	86.0	9.5	1.7	2.7	18.7	8.4	3.3	108.9	75.0	84.2	8.3	2.9	3.7	8.6	4.7	0.8
Clothianidin	82.8	78.7	94.2	11.5	5.5	4.1	24.2	3.5	8.2	100.2	113.7	88.6	13.6	9.4	4.0	11.7	17.5	3.3
Fludioxonil	93.3	91.2	95.0	3.9	1.5	4.1	9.6	2.1	1.6	89.6	80.8	85.1	6.1	2.6	3.6	14.0	2.1	0.8

Table S7. Analysis of variance (ANOVA) was used to evaluate the linearity of the compounds in corn, fresh corn, fresh corn stover substrates and old corn stove

Pesticide	Corn			Fresh corn			Fresh corn stover			Old corn stover		
	Linearity (R ²)	<i>F</i> value	<i>P</i> value	Linearity (R ²)	<i>F</i> value	<i>P</i> value	Linearity (R ²)	<i>F</i> value	<i>P</i> value	Linearity (R ²)	<i>F</i> value	<i>P</i> value
Cyhalothrin	0.9988	4845.342	<0.05	0.9989	5505.173	<0.05	0.9985	4015.869	<0.05	0.9942	1026.983	<0.05
Imidacloprid	0.9999	43436.199	<0.05	0.9915	700.413	<0.05	0.9946	1108.308	<0.05	0.9961	1542.661	<0.05
Beta cypermethrin	0.9942	852.461	<0.05	0.9975	2436.014	<0.05	0.9960	1496.584	<0.05	0.9989	5218.945	<0.05
Chlorpyrifos	0.9991	5494.204	<0.05	0.9999	41247.630	<0.05	0.9958	1429.462	<0.05	0.9945	1091.234	<0.05
Chlorantraniliprole	0.9997	15150.134	<0.05	0.9993	6786.684	<0.05	0.9961	1546.514	<0.05	0.9972	2148.307	<0.05
Cyantraniliprole	0.9937	19993.812	<0.05	1.0000	111324.495	<0.05	0.9973	2194.140	<0.05	0.9990	5728.607	<0.05
Thiamethoxam	0.9976	2072.279	<0.05	0.9959	1206.941	<0.05	0.9990	5148.663	<0.05	0.9937	940.777	<0.05
Carbaryl	0.9927	29342.154	<0.05	0.9986	3598.413	<0.05	0.9957	1379.877	<0.05	0.9926	800.539	<0.05
Emamectin benzoate	0.9989	4418.194	<0.05	1.0000	1282717.316	<0.05	0.9944	1066.804	<0.05	0.9948	1144.914	<0.05
Indoxacarb	0.9996	13642.879	<0.05	0.9976	2060.631	<0.05	0.9964	1373.826	<0.05	0.9944	1062.407	<0.05
Acetamiprid	0.9945	13553.385	<0.05	0.9999	35885.574	<0.05	0.9937	943.003	<0.05	0.9961	1541.731	<0.05
Lufenuron	0.9974	10420.894	<0.05	0.9999	41045.747	<0.05	0.9994	10532.938	<0.05	0.9992	7688.971	<0.05
Dinotefuran	0.9979	2336.274	<0.05	0.9929	559.335	<0.05	0.9923	515.098	<0.05	0.9955	1100.011	<0.05
Tebuconazole	0.9981	4039.635	<0.05	0.9993	7138.825	<0.05	0.9948	1152.862	<0.05	0.9959	1439.897	<0.05
Azoxystrobin	0.9964	1373.952	<0.05	0.9991	5743.127	<0.05	0.9993	7057.792	<0.05	0.9957	1396.921	<0.05
Propiconazole	0.9990	5085.411	<0.05	0.9989	4410.827	<0.05	0.9911	669.967	<0.05	0.9952	1236.529	<0.05
Triadimefon	0.9946	18810.185	<0.05	0.9998	20425.334	<0.05	0.9969	1946.017	<0.05	0.9974	2298.181	<0.05
Trifloxystrobin	0.9996	13544.423	<0.05	0.9976	2089.219	<0.05	0.9997	17422.136	<0.05	0.9927	814.336	<0.05
Epoxiconazole	0.9981	2607.845	<0.05	0.9988	4217.446	<0.05	0.9943	1054.755	<0.05	0.9943	1045.061	<0.05
Pyraclostrobin	0.9934	752.639	<0.05	0.9981	2618.970	<0.05	0.9989	4422.083	<0.05	0.9944	1068.041	<0.05

Difenoconazole	0.9932	728.132	<0.05	0.9980	2485.429	<0.05	0.9963	1599.857	<0.05	0.9968	1876.620	<0.05
Metalaxyl-M	0.9992	6085.230	<0.05	0.9993	7448.657	<0.05	0.9902	608.813	<0.05	0.9915	697.988	<0.05
Carbendazim	0.9995	9215.905	<0.05	0.9909	546.430	<0.05	0.9914	575.650	<0.05	0.9979	382.359	<0.05
Atrazine	0.9998	24739.515	<0.05	0.9999	42305.411	<0.05	0.9999	40479.574	<0.05	0.9963	1624.475	<0.05
Acetochlor	0.9997	15481.656	<0.05	0.9997	18133.883	<0.05	0.9995	9904.565	<0.05	0.9927	818.033	<0.05
Clothianidin	0.9987	3734.966	<0.05	0.9989	4655.272	<0.05	0.9994	8548.176	<0.05	0.9944	1059.554	<0.05
Fludioxonil	0.9910	548.263	<0.05	0.9919	615.900	<0.05	0.9916	589.884	<0.05	0.9975	1979.945	<0.05

Table S8. Analysis of variance (ANOVA) was used to evaluate the linearity of the compounds in corn silage, beef, fat and milk fat

Pesticide	Corn silage			Beef			Fat			Milk fat		
	Linearity (R ²)	F value	P value	Linearity (R ²)	F value	P value	Linearity (R ²)	F value	P value	Linearity (R ²)	F value	P value
Cyhalothrin	0.9945	724.296	<0.05	0.9961	2301.782	<0.05	0.9945	4850.436	<0.05	0.9934	1616.256	<0.05
Imidacloprid	0.9995	902.229	<0.05	0.9919	1169.404	<0.05	0.9995	3506.816	<0.05	0.9910	1716.532	<0.05
Beta cypermethrin	0.9962	1491.872	<0.05	0.9994	3303.725	<0.05	0.9962	11019.307	<0.05	0.9987	10390.576	<0.05
Chlorpyrifos	0.9966	2174.004	<0.05	0.9958	3483.103	<0.05	0.9966	7094.611	<0.05	0.9975	3607.871	<0.05
Chlorantraniliprole	0.9976	2571.619	<0.05	0.9999	5883.311	<0.05	0.9976	576.376	<0.05	0.9949	3820.697	<0.05
Cyantraniliprole	0.9975	5195.845	<0.05	0.9957	3256.062	<0.05	0.9975	17652.514	<0.05	0.9981	25513.666	<0.05
Thiamethoxam	0.9905	721.937	<0.05	0.9903	1293.771	<0.05	0.9905	1466.947	<0.05	0.9995	10955.232	<0.05
Carbaryl	0.9930	1854.680	<0.05	0.9947	3247.586	<0.05	0.9930	1498.109	<0.05	0.9983	6394.106	<0.05
Emamectin benzoate	0.9996	1240.414	<0.05	0.9997	12646.271	<0.05	0.9996	8888.297	<0.05	0.9976	9587.627	<0.05
Indoxacarb	0.9990	1389.636	<0.05	0.9995	2023.498	<0.05	0.9990	1347.535	<0.05	0.9953	5057.290	<0.05
Acetamiprid	0.9928	2191.773	<0.05	0.9996	18037.622	<0.05	0.9928	2402.956	<0.05	0.9936	3420.617	<0.05
Lufenuron	0.9972	986.022	<0.05	0.9986	18668.163	<0.05	0.9972	9430.591	<0.05	0.9985	29635.978	<0.05
Dinotefuran	0.9991	516.643	<0.05	0.9975	686.615	<0.05	0.9991	4083.067	<0.05	0.9993	2288.148	<0.05

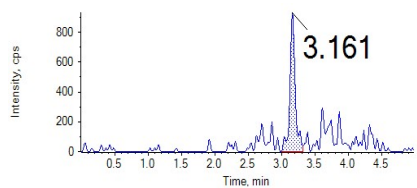
Tebuconazole	0.9989	1586.297	<0.05	0.9998	9814.909	<0.05	0.9989	1180.561	<0.05	0.9988	4962.292	<0.05
Azoxystrobin	0.9990	1232.295	<0.05	0.9999	4689.833	<0.05	0.9990	1752.948	<0.05	0.9994	1589.333	<0.05
Propiconazole	0.9996	942.887	<0.05	0.9996	2245.662	<0.05	0.9996	2842.301	<0.05	0.9997	5904.115	<0.05
Triadimefon	0.9982	2146.494	<0.05	0.9997	1951.961	<0.05	0.9982	828.452	<0.05	0.9993	2199.746	<0.05
Trifloxystrobin	0.9996	1295.198	<0.05	0.9904	1339.989	<0.05	0.9996	2568.968	<0.05	0.9996	4344.399	<0.05
Epoxiconazole	0.9920	2076.343	<0.05	0.9998	2355.443	<0.05	0.9920	1696.486	<0.05	0.9991	1276.731	<0.05
Pyraclostrobin	0.9997	821.361	<0.05	0.9999	4249.371	<0.05	0.9997	4197.654	<0.05	0.9988	50135.993	<0.05
Difenoconazole	0.9998	2084.787	<0.05	0.9999	5820.241	<0.05	0.9998	5859.806	<0.05	0.9991	30087.858	<0.05
Metalaxyl-M	0.9986	687.163	<0.05	0.9997	1834.319	<0.05	0.9986	1016.846	<0.05	0.9995	2105.642	<0.05
Carbendazim	0.9987	561.344	<0.05	0.9987	1054.178	<0.05	0.9987	5874.723	<0.05	0.9996	5039.866	<0.05
Atrazine	0.9994	2920.629	<0.05	0.9993	1268.867	<0.05	0.9994	2129.982	<0.05	0.9991	1254.832	<0.05
Acetochlor	0.9995	645.784	<0.05	0.9979	2837.905	<0.05	0.9995	1843.393	<0.05	0.9995	1954.344	<0.05
Clothianidin	0.9981	1130.873	<0.05	0.9999	9360.244	<0.05	0.9981	800.567	<0.05	0.9967	568.418	<0.05
Fludioxonil	0.9904	806.101	<0.05	0.9951	446.981	<0.05	0.9904	260.504	<0.05	0.9975	831.517	<0.05

Table S9. Analysis of variance (ANOVA) was used to evaluate the linearity of the compounds in liver, kidney, milk and cow stomach

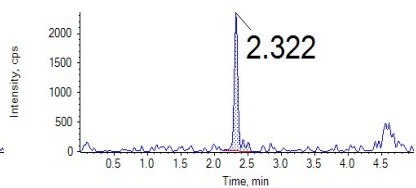
Pesticide	Liver			Kidney			Milk			Cow stomach		
	Linearity (R ²)	F value	P value	Linearity (R ²)	F value	P value	Linearity (R ²)	F value	P value	Linearity (R ²)	F value	P value
Cyhalothrin	0.9999	7457.823	<0.05	0.9987	22932.519	<0.05	0.9983	16722.183	<0.05	0.9958	2730.794	<0.05
Imidacloprid	0.9911	1538.382	<0.05	0.9994	2006.350	<0.05	0.9988	1070.399	<0.05	0.9938	1642.565	<0.05
Beta cypermethrin	0.9975	2046.010	<0.05	0.9920	1980.955	<0.05	0.9984	897.394	<0.05	0.9979	4283.926	<0.05
Chlorpyrifos	0.9991	16337.790	<0.05	0.9972	7372.305	<0.05	0.9993	1499.135	<0.05	0.9955	1971.373	<0.05
Chlorantraniliprole	0.9967	2445.333	<0.05	0.9978	728.321	<0.05	0.9987	1162.290	<0.05	0.9951	1601.784	<0.05
Cyantraniliprole	0.9983	8177.098	<0.05	0.9953	5677.258	<0.05	0.9998	3846.536	<0.05	0.9940	1197.421	<0.05

Thiamethoxam	0.9990	1579.117	<0.05	0.9987	1003.552	<0.05	0.9948	393.846	<0.05	0.9945	1831.645	<0.05
Carbaryl	0.9990	5940.991	<0.05	0.9992	1553.714	<0.05	0.9965	515.519	<0.05	0.9985	58073.808	<0.05
Emamectin benzoate	0.9912	1640.055	<0.05	0.9986	1001.817	<0.05	0.9989	1101.010	<0.05	0.9937	1424.886	<0.05
Indoxacarb	0.9992	1473.015	<0.05	0.9978	729.611	<0.05	0.9987	1012.389	<0.05	0.9928	1223.353	<0.05
Acetamiprid	0.9940	2890.162	<0.05	0.9991	1237.447	<0.05	0.9984	863.030	<0.05	0.9957	1642.961	<0.05
Lufenuron	0.9995	2638.177	<0.05	0.9994	4647.034	<0.05	0.9950	394.309	<0.05	0.9969	1785.214	<0.05
Dinotefuran	0.9970	650.271	<0.05	0.9985	1098.741	<0.05	0.9961	479.696	<0.05	0.9966	10191.937	<0.05
Tebuconazole	0.9975	911.562	<0.05	0.9975	645.768	<0.05	0.9988	1666.371	<0.05	0.9956	4395.505	<0.05
Azoxystrobin	0.9991	1781.140	<0.05	0.9987	1057.409	<0.05	0.9970	618.311	<0.05	0.9942	1353.306	<0.05
Propiconazole	0.9990	2145.122	<0.05	0.9994	1715.035	<0.05	0.9983	882.602	<0.05	0.9914	1048.625	<0.05
Triadimefon	0.9993	2206.965	<0.05	0.9995	2179.254	<0.05	0.9991	1513.661	<0.05	0.9909	826.235	<0.05
Trifloxystrobin	0.9994	2878.165	<0.05	0.9995	2720.533	<0.05	0.9986	1053.551	<0.05	0.9950	2173.957	<0.05
Epoxiconazole	0.9989	6937.240	<0.05	0.9975	679.200	<0.05	0.9979	800.149	<0.05	0.9930	1181.540	<0.05
Pyraclostrobin	0.9989	6434.524	<0.05	0.9998	4374.100	<0.05	0.9980	768.557	<0.05	0.9954	2343.282	<0.05
Difenoconazole	0.9992	4218.148	<0.05	0.9972	594.032	<0.05	0.9999	5142.282	<0.05	0.9935	1257.888	<0.05
Metalaxyl-M	0.9981	957.503	<0.05	0.9994	1985.879	<0.05	0.9975	662.540	<0.05	0.9920	1060.332	<0.05
Carbendazim	0.9988	1353.604	<0.05	0.9981	823.299	<0.05	0.9974	640.682	<0.05	0.9976	38504.189	<0.05
Atrazine	0.9990	1456.328	<0.05	0.9985	1024.944	<0.05	0.9986	562.032	<0.05	0.9944	1307.534	<0.05
Acetochlor	0.9984	996.620	<0.05	0.9990	1396.482	<0.05	0.9981	917.612	<0.05	0.9938	1309.658	<0.05
Clothianidin	0.9993	1819.413	<0.05	0.9983	937.647	<0.05	0.9976	666.402	<0.05	0.9975	5986.157	<0.05
Fludioxonil	0.9945	412.525	<0.05	0.9926	308.661	<0.05	0.9933	342.567	<0.05	0.9943	2509.866	<0.05

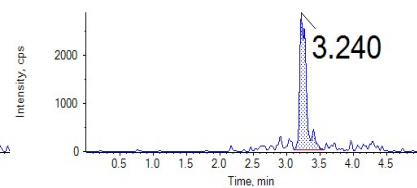
Cyhalothrin



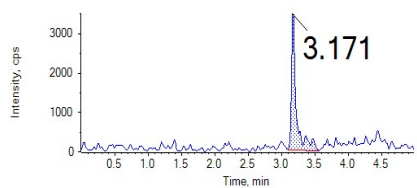
Imidacloprid



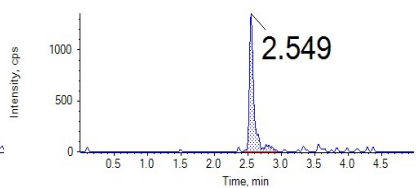
Beta cypermethrin



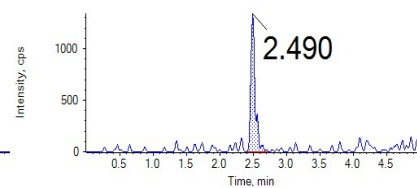
Chlorpyrifos



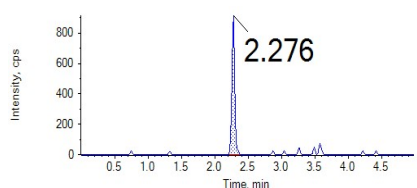
Chlorantranilipr



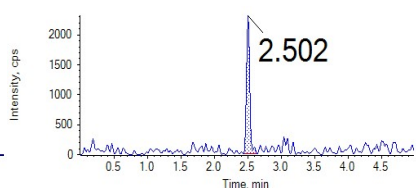
Cyantranilipr



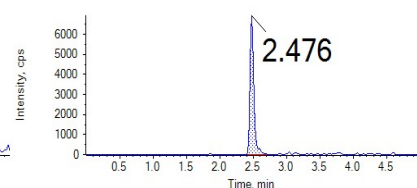
Thiamethoxam



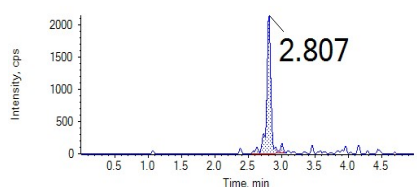
Carbaryl



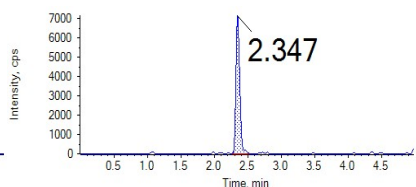
Emamectin benzoate



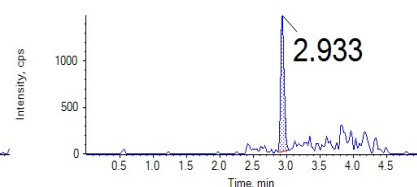
Indoxacarb



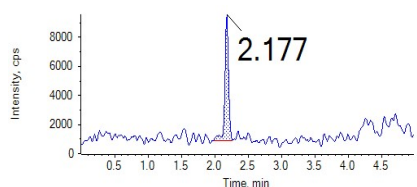
Acetamipri



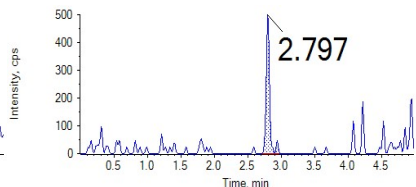
Lufenuron



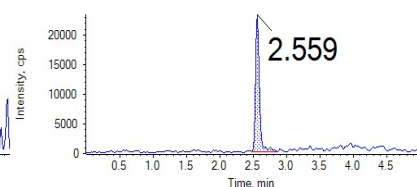
Dinotefuran



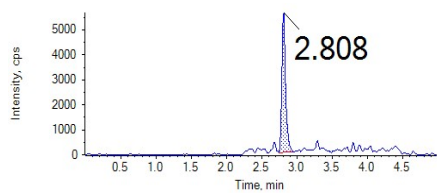
Tebuconazole



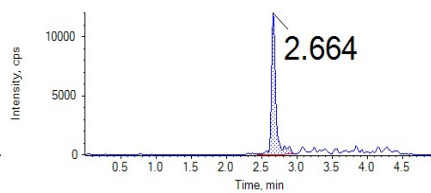
Azoxystrobin



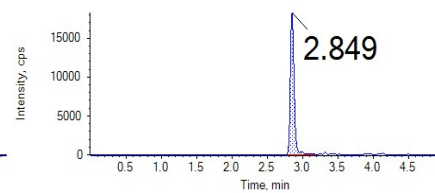
Propiconazole



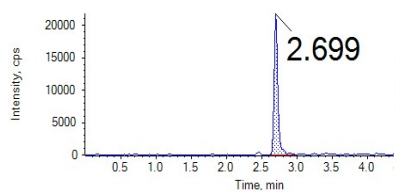
Triadimefon



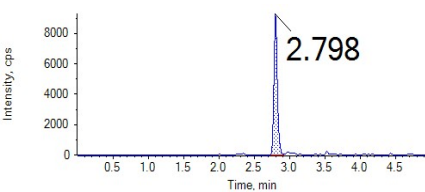
Trifloxystrobin



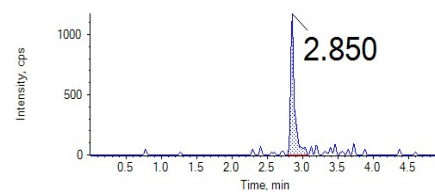
Epoxiconazole



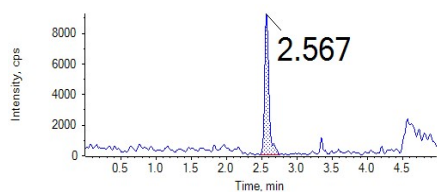
Pyraclostrobin



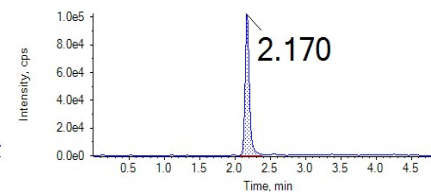
Difenoconazole



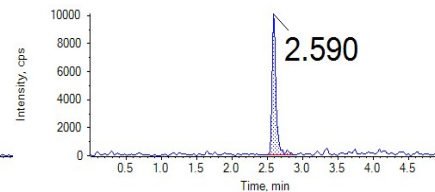
Metalaxyl-m



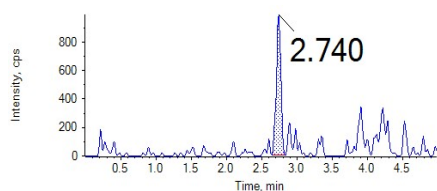
Carbendazim



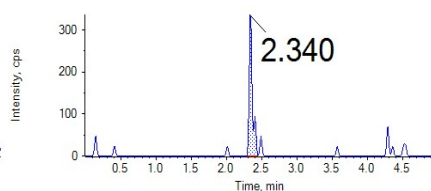
Atrazine



Acetochlor



Clothianidin



Fludioxonil

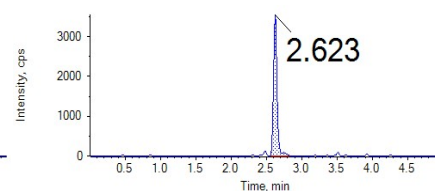


Fig. S1 MS chromatogram of 27 standard pesticides at low levels.