

Article

Development of a novel LC-MS/MS multi-method for the determination of regulated and emerging food contaminants including tenuazonic acid, a chromatographically challenging *Alternaria* toxin

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Table S1: Quality control and proficiency test materials.

| QC name | Code | Origin | Matrix | Compound group | Compounds with assigned value \pm standard deviation, expressed in $\mu\text{g/kg}$ |
|----------|-------|------------------------|--------|------------------|--|
| EURL2017 | EA047 | JRC (Geel, Belgium) | Rye | Ergot alkaloid | Ergocornine/inine SUM 295 ± 65 ; α -Ergocryptine/inine SUM 231 ± 51 ; Ergocrystine/inine SUM 752 ± 165 ; Ergometrine/inine SUM 116 ± 26 ; Ergosine/inine SUM 242 ± 53 ; Ergotamine/inine SUM 695 ± 153 |
| FAPAS | 22180 | Fera (Sand Hutton, UK) | Rye | Ergot alkaloid | Ergocornine 32.4 ± 7.2 ; Ergocorninine 12.4 ± 2.7 ; α -Ergocryptinine 19.5 ± 4.3 ; Ergocrystine 107 ± 23 ; Ergocrystinine 36.4 ± 8 ; Ergometrin 25.9 ± 5.7 ; Ergometrinine 4.2 ± 0.95 ; Ergosine 22.2 ± 4.9 ; Ergotamin 50.2 ± 11.1 ; Ergotaminine 13.6 ± 2.9 ; Total Ergot Alkaloides 419 ± 76 ; |
| EURL2017 | A004 | JRC (Geel, Belgium) | Wheat | DON | DON 551 ± 121 |
| EURL2016 | C257 | JRC (Geel, Belgium) | Maize | Mycotoxin | DON 611 ± 134 AFB1 10.6 ± 2.3 FUMB1 768 ± 170 FUMB2 224 ± 49 ZON 162 ± 36 |
| EURL2016 | O161 | JRC (Geel, Belgium) | Oat | Mycotoxin | HT2 150 ± 33 T2 70.3 ± 16 |
| EURL2016 | E087 | JRC (Geel, Belgium) | Cereal | Tropan alkaloids | Atropine 7.44 ± 1.52 ; Scopolamine 1.03 ± 0.22 ; |
| EURL2016 | C029 | JRC (Geel, Belgium) | Cereal | Tropan alkaloids | Atropine 1.16 ± 0.25 ; Scopolamine 0.183 ± 0.081 ; |
| Fapas | 22179 | Fera (Sand Hutton, UK) | Cereal | Tropan alkaloids | Atropine 9.8 ± 2.16 ; Scopolamine 3.88 ± 0.85 ; |

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|----------|---------------|--------------------------------|-----------------|-----------------|---|
| QC 2018 | B56 | JRC (Geel, Belgium) | Wheat | Alternaria | AME 1.17±0.25; AOH 2.1±0.46; TEA 297±60; |
| QC 2018 | T15 | JRC (Geel, Belgium) | Wheat | Alternaria | AME 5.06±1.11; AOH 5.11±1.12; TEA 52±11; |
| QC 2018 | X06 | JRC (Geel, Belgium) | Sunflower seeds | Alternaria | AME 2.1±0.45; AOH 2.06±0.44; TEA 146±32; |
| Romer QC | 10006460 | RomerLabs (Tulln, Austria) | Wheat | Don, Zon, Ochra | DON 825±124; ZON 34.9±5.95; OTA 10±2.1; |
| Romer QC | 10003613 | RomerLabs (Tulln, Austria) | Maize | Aflatoxins | AFB1 9.5±2.1; AFB2 2.1±0.4; |
| Trilogy | TQC-MMF11-100 | R-Biopharm (Budapest, Hungary) | Maize | Multi-Toxin | DON 1900±200 AFB1 18.6±4.1 AFB2 1.3±0.28 Total Aflatoxins 19.9±4.4 FUMB1 1400±150 FUMB2 400±35 FUMB3 100±15 Total Fumonisin 1900±200 HT2 127±12.3 T2 94.8±7.95 OTA 18.5±3.1 ZON 359.7±40.1 |
| Gafta PT | 2022-M2 | Gafta (London, UK) | Maize | Aflatoxins | AFB1 1.60±0.35 AFB2 0.50±0.11 AFG1 1.50±0.33 AFG2 0.5±0.11 Total Aflatoxins 3.73±0.82 |
| Gafta PT | 2022-M1 | Gafta (London, UK) | Wheat | T2, HT2 | HT2 7.3±3.2 T2 43.8±19.3 |
| Romer PT | M21161DZO | RomerLabs (Tulln, Austria) | Wheat | Don, Zon, Ochra | DON 2841±255; OTA 30.7±7.75; ZON 177±38.9; |

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|-------------------------------|-----------|---|-----------------|---------------------------|--|
| Romer PT | M22411AF | RomerLabs (Tulln, Austria) | Maize | Aflatoxins, fumonisins | AFB1 8.79±1.93 AFB2 0.63±0.14 AFG1 0.49±0.11 Total Aflatoxins 9.72±2.14 FUMB1 1425±185 FUMB2 387±75 FUMB3 168±35.5 Total Fumonisin 1911±230 |
| Romer PT | M22161DZO | RomerLabs (Tulln, Austria) | Wheat | Don, Zon, Ochra | DON 1826±264; OTA 25.9±5.6; ZON 545±86.5; |
| FAPAS | T09133QC | Fera (Sand Hutton, UK) | Kidney beans | Pesticides | Boscalid 107±23; Chlorpyrifos-ethyl 103±23; Flufenoxuron 55±12; Flusilazole 155±32 Isofenphos-methyl 77±17; Isoprothiolane 156±33; Methacrifos 119±27; Pirimicarb 101±22; Pyridaben 53±12; Thiacloprid 85±18; |
| FAPAS | T09140QC | Fera (Sand Hutton, UK) | Wheat flour | Pesticides | Chlorpropham 58.9±13 Dicotophos 33.2±7.3 Dimetoate 32.1±7.1 Oxadiazon 77.8±17.1 Paclobutrazole 98.3±21.6 Permethrin 64.7±14.3 Pirimiphos-methyl 104±23 Prochloraz 153±32.5 Tebuconazole 87.3±19.2 |
| PT, Chlorpyrifos- ethyl | 6 | Bálint Analitika Ltd. (Budapest, Hungary) | Wheat | Chlorpyrifos- ethyl | Chlorpyrifos-ethyl 33.0±7.26 |
| PT, Chlorpyrifos- ethyl | 8 | Mertcontrol- HL Ltd. (Debrecen, Hungary) | Wheat | Chlorpyrifos- ethyl | Chlorpyrifos-ethyl 16.9±3.72 |

Table S2: The scheduled MRM ion transitions of the tested compounds.

| Compound Name | Precursor Ion (m/z) | Product Ion (m/z) | Retention Time (min) | Fragmentor (V) | Collision Energy (V) | Polarity |
|----------------------------|---------------------|-------------------|----------------------|----------------|----------------------|----------|
| Acephate | 183.9 | 143 | 2.8 | 65 | 2 | Positive |
| Acephate | 183.9 | 125 | 2.8 | 65 | 17 | Positive |
| Acetamiprid | 223 | 126 | 6.4 | 83 | 22 | Positive |
| Acetamiprid | 223 | 90 | 6.4 | 83 | 35 | Positive |
| Afla B1 | 313 | 285 | 8.2 | 155 | 22 | Positive |
| Afla B1 | 313 | 241 | 8.2 | 155 | 38 | Positive |
| Afla B1- ¹³ C17 | 330 | 301 | 8.2 | 155 | 21 | Positive |
| Afla B2 | 315 | 287 | 7.8 | 155 | 24 | Positive |
| Afla B2 | 315 | 259 | 7.8 | 155 | 28 | Positive |
| Afla B2- ¹³ C17 | 332 | 303 | 7.8 | 155 | 21 | Positive |
| Afla G1 | 329 | 311 | 7.5 | 140 | 22 | Positive |
| Afla G1 | 329 | 243 | 7.5 | 140 | 24 | Positive |
| Afla G1- ¹³ C17 | 346 | 257 | 7.5 | 140 | 24 | Positive |
| Afla G2 | 331 | 313 | 7.1 | 155 | 23 | Positive |
| Afla G2 | 331 | 245 | 7.1 | 155 | 28 | Positive |
| Afla G2- ¹³ C17 | 348 | 330 | 7.1 | 155 | 23 | Positive |
| Alanycarb | 400 | 238 | 12.8 | 140 | 4 | Positive |
| Alanycarb | 400 | 91 | 12.8 | 140 | 50 | Positive |
| Aldicarb | 208 | 116 | 7.4 | 65 | 0 | Positive |
| Aldicarb | 208 | 89 | 7.4 | 65 | 12 | Positive |
| Aldicarb fragment | 116 | 89 | 7.4 | 65 | 4 | Positive |
| Aldicarb fragment | 116 | 70 | 7.4 | 65 | 4 | Positive |
| AME | 271 | 256 | 12.03 | 110 | 22 | Negative |
| AME | 271 | 228 | 12.03 | 110 | 28 | Negative |
| AME-d3 | 274 | 256 | 12.03 | 110 | 22 | Negative |
| AME-d3 | 274 | 228 | 12.03 | 110 | 28 | Negative |
| Amidosulfuron | 370 | 261 | 5.7 | 100 | 12 | Positive |
| Amidosulfuron | 370 | 218 | 5.7 | 100 | 22 | Positive |
| Aminocarb | 209 | 152 | 8.5 | 105 | 12 | Positive |
| Aminocarb | 209 | 137 | 8.5 | 105 | 24 | Positive |
| AOH | 257 | 215 | 9.3 | 110 | 26 | Negative |
| AOH | 257 | 213 | 9.3 | 110 | 26 | Negative |
| AOH | 257 | 147 | 9.3 | 110 | 34 | Negative |
| AOH-d2 | 259 | 216 | 9.3 | 110 | 24 | Negative |
| AOH-d2 | 259 | 215 | 9.3 | 110 | 24 | Negative |

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|-----------------|-------|-----|------|-----|----|----------|
| AOH-d2 | 259 | 214 | 9.3 | 110 | 24 | Negative |
| AOH-d2 | 259 | 213 | 9.3 | 110 | 24 | Negative |
| Atropine | 290 | 124 | 6.2 | 135 | 26 | Positive |
| Atropine | 290 | 93 | 6.2 | 135 | 35 | Positive |
| Atropine-d5 | 295 | 124 | 6.2 | 135 | 26 | Positive |
| Avermectin B1a | 890.5 | 567 | 16.1 | 120 | 5 | Positive |
| Avermectin B1a | 890.5 | 305 | 16.1 | 120 | 24 | Positive |
| Azaconazole | 300 | 231 | 10.1 | 140 | 16 | Positive |
| Azaconazole | 300 | 159 | 10.1 | 140 | 32 | Positive |
| Azamethiphos | 325 | 183 | 8.1 | 120 | 12 | Positive |
| Azamethiphos | 325 | 112 | 8.1 | 120 | 37 | Positive |
| Azinphos-ethyl | 346 | 137 | 12 | 120 | 32 | Positive |
| Azinphos-ethyl | 346 | 132 | 12 | 120 | 31 | Positive |
| Azinphos-methyl | 318 | 261 | 10.4 | 60 | 0 | Positive |
| Azinphos-methyl | 318 | 132 | 10.4 | 60 | 8 | Positive |
| Azoxystrobin | 404 | 372 | 10.8 | 110 | 12 | Positive |
| Azoxystrobin | 404 | 344 | 10.8 | 110 | 24 | Positive |
| Beflubutamid | 356 | 162 | 12.7 | 145 | 24 | Positive |
| Beflubutamid | 356 | 91 | 12.7 | 145 | 28 | Positive |
| Benalaxyl | 326 | 294 | 12.9 | 100 | 5 | Positive |
| Benalaxyl | 326 | 148 | 12.9 | 100 | 17 | Positive |
| Benfuracarb | 411 | 252 | 14.2 | 95 | 12 | Positive |
| Benfuracarb | 411 | 195 | 14.2 | 95 | 22 | Positive |
| Benzoximate | 364 | 199 | 13.4 | 83 | 4 | Positive |
| Benzoximate | 364 | 105 | 13.4 | 83 | 22 | Positive |
| Bifenazate | 301 | 198 | 11.8 | 95 | 5 | Positive |
| Bifenazate | 301 | 170 | 11.8 | 95 | 17 | Positive |
| Bifenthrin | 440 | 181 | 16.5 | 110 | 5 | Positive |
| Bifenthrin | 440 | 166 | 16.5 | 110 | 22 | Positive |
| Bispyribac | 431 | 413 | 9.6 | 115 | 12 | Positive |
| Bispyribac | 431 | 275 | 9.6 | 115 | 5 | Positive |
| Bitertanol | 338 | 269 | 13.3 | 65 | 0 | Positive |
| Bitertanol | 338 | 70 | 13.3 | 65 | 0 | Positive |
| Bosclid | 343 | 307 | 11.2 | 145 | 12 | Positive |
| Bosclid | 343 | 271 | 11.2 | 145 | 28 | Positive |
| Bromuconazole | 378 | 159 | 11.7 | 115 | 35 | Positive |
| Bromuconazole | 378 | 70 | 11.7 | 115 | 22 | Positive |
| Bupirimate | 317 | 166 | 12.5 | 125 | 22 | Positive |
| Bupirimate | 317 | 108 | 12.5 | 125 | 24 | Positive |
| Buprofezin | 306 | 201 | 14.5 | 105 | 5 | Positive |
| Buprofezin | 306 | 116 | 14.5 | 105 | 12 | Positive |

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| Butocarboxim1 | 208 | 116 | 5.5 | 65 | 12 | Positive |
| Butocarboxim1 | 208 | 75 | 5.5 | 65 | 22 | Positive |
| Butocarboxim2 | 213 | 156 | 7.3 | 65 | 5 | Positive |
| Butocarboxim2 | 213 | 75 | 7.3 | 65 | 12 | Positive |
| Carbaryl | 202 | 145 | 8.8 | 65 | 0 | Positive |
| Carbaryl | 202 | 127 | 8.8 | 65 | 24 | Positive |
| Carbendazim | 192 | 160 | 6.9 | 105 | 17 | Positive |
| Carbendazim | 192 | 132 | 6.9 | 105 | 28 | Positive |
| Carbofuran | 222 | 165 | 8.4 | 83 | 5 | Positive |
| Carbofuran | 222 | 123 | 8.4 | 83 | 22 | Positive |
| Carbosulfan | 381 | 160 | 16.2 | 105 | 8 | Positive |
| Carbosulfan | 381 | 118 | 16.2 | 105 | 16 | Positive |
| Carboxin | 236 | 143 | 8.8 | 105 | 12 | Positive |
| Carboxin | 236 | 93 | 8.8 | 105 | 37 | Positive |
| Carfentrazone-ethyl | 412 | 366 | 12.7 | 140 | 17 | Positive |
| Carfentrazone-ethyl | 412 | 346 | 12.7 | 140 | 22 | Positive |
| Chlorantraniliprole | 484 | 453 | 10.4 | 105 | 17 | Positive |
| Chlorantraniliprole | 484 | 286 | 10.4 | 105 | 12 | Positive |
| Chlorfenvinphos | 359 | 170 | 13 | 105 | 37 | Positive |
| Chlorfenvinphos | 359 | 155 | 13 | 105 | 8 | Positive |
| Chloridazon | 222 | 104 | 6.5 | 140 | 24 | Positive |
| Chloridazon | 222 | 77 | 6.5 | 140 | 35 | Positive |
| Chlorotoluron | 213 | 140 | 9.4 | 120 | 22 | Positive |
| Chlorotoluron | 213 | 72 | 9.4 | 120 | 22 | Positive |
| Chloroxuron | 291 | 164 | 11.7 | 140 | 12 | Positive |
| Chloroxuron | 291 | 72 | 11.7 | 140 | 22 | Positive |
| Chlorpyriphos-ethyl | 352 | 200 | 14.9 | 110 | 17 | Positive |
| Chlorpyriphos-ethyl | 350 | 198 | 14.9 | 110 | 17 | Positive |
| Chlorpyriphos-ethyl -d10 | 360 | 199 | 14.8 | 110 | 17 | Positive |
| Chlorpyriphos-ethyl -d10 | 360 | 163 | 14.8 | 110 | 21 | Positive |
| Chlorpyriphos-ethyl -d10 | 360 | 99 | 14.8 | 110 | 17 | Positive |
| Chlorpyriphos- methyl | 322 | 290 | 13.7 | 110 | 12 | Positive |
| Chlorpyriphos- methyl | 322 | 125 | 13.7 | 110 | 24 | Positive |
| Chlorsulfuron | 358 | 167 | 6.3 | 120 | 12 | Positive |
| Chlorsulfuron | 358 | 141 | 6.3 | 120 | 17 | Positive |
| Clethodim | 360 | 268 | 9.2 | 110 | 12 | Positive |

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|----------------|------|------|------|-----|----|----------|
| Clethodim | 360 | 164 | 9.2 | 110 | 17 | Positive |
| Clethodim2 | 360 | 268 | 10.1 | 110 | 12 | Positive |
| Clethodim2 | 360 | 164 | 10.1 | 110 | 17 | Positive |
| Clofentezin | 303 | 138 | 13.4 | 110 | 12 | Positive |
| Clofentezin | 303 | 102 | 13.4 | 110 | 37 | Positive |
| Clomazone | 240 | 125 | 10.5 | 65 | 17 | Positive |
| Clomazone | 240 | 89 | 10.5 | 65 | 45 | Positive |
| Coumaphos | 363 | 307 | 13 | 120 | 16 | Positive |
| Coumaphos | 363 | 227 | 13 | 120 | 28 | Positive |
| Cyazofamid | 325 | 261 | 12.2 | 100 | 5 | Positive |
| Cyazofamid | 325 | 108 | 12.2 | 100 | 12 | Positive |
| Cycloate | 216 | 82.9 | 13.7 | 100 | 12 | Positive |
| Cycloate | 216 | 55 | 13.7 | 100 | 36 | Positive |
| Cycluron | 199 | 89 | 10 | 120 | 12 | Positive |
| Cycluron | 199 | 72 | 10 | 120 | 28 | Positive |
| Cymiazol | 219 | 171 | 11.8 | 95 | 24 | Positive |
| Cymiazol | 219 | 144 | 11.8 | 95 | 35 | Positive |
| Cymoxanil | 199 | 128 | 6.8 | 50 | 0 | Positive |
| Cymoxanil | 199 | 111 | 6.8 | 50 | 17 | Positive |
| Cypermethrin | 433 | 208 | 15.5 | 120 | 17 | Positive |
| Cypermethrin | 433 | 191 | 15.5 | 120 | 12 | Positive |
| Cypermethrin | 433 | 163 | 15.5 | 120 | 24 | Positive |
| Cypermethrin | 433 | 127 | 15.5 | 120 | 24 | Positive |
| Cyproconazole | 292 | 125 | 11.8 | 110 | 35 | Positive |
| Cyproconazole | 292 | 70 | 11.8 | 110 | 17 | Positive |
| Cyprodinil | 226 | 93 | 12.9 | 140 | 37 | Positive |
| Cyprodinil | 226 | 77 | 12.9 | 140 | 45 | Positive |
| DEET | 1924 | 119 | 9.8 | 110 | 16 | Positive |
| DEET | 1924 | 91 | 9.8 | 110 | 32 | Positive |
| Deltamethrin | 523 | 506 | 15.6 | 120 | 8 | Positive |
| Deltamethrin | 523 | 281 | 15.6 | 120 | 14 | Positive |
| Desmedipham | 318 | 182 | 10.3 | 83 | 5 | Positive |
| Desmedipham | 318 | 136 | 10.3 | 83 | 24 | Positive |
| Diazinon | 305 | 169 | 13 | 105 | 22 | Positive |
| Diazinon | 305 | 153 | 13 | 105 | 22 | Positive |
| Dichlorvos | 221 | 109 | 8.2 | 110 | 12 | Positive |
| Dichlorvos | 221 | 79 | 8.2 | 110 | 24 | Positive |
| Diethofencarb | 268 | 226 | 10.8 | 65 | 0 | Positive |
| Diethofencarb | 268 | 124 | 10.8 | 65 | 28 | Positive |
| Difenoconazole | 406 | 337 | 13.6 | 120 | 17 | Positive |
| Difenoconazole | 406 | 251 | 13.6 | 120 | 24 | Positive |

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|------------------------|-------|-----|------|-----|----|----------|
| Diflubenzuron | 311 | 158 | 12.4 | 83 | 12 | Positive |
| Diflubenzuron | 311 | 141 | 12.4 | 83 | 35 | Positive |
| Diflufenican | 395 | 266 | 13.8 | 140 | 24 | Positive |
| Diflufenican | 395 | 246 | 13.8 | 140 | 37 | Positive |
| Dimethachlor | 256 | 224 | 10.2 | 120 | 12 | Positive |
| Dimethachlor | 256 | 148 | 10.2 | 120 | 24 | Positive |
| Dimethoate | 230 | 199 | 6.4 | 65 | 0 | Positive |
| Dimethoate | 230 | 125 | 6.4 | 65 | 22 | Positive |
| Dimethomorph | 388 | 301 | 11.4 | 145 | 22 | Positive |
| Dimethomorph | 388 | 165 | 11.4 | 145 | 28 | Positive |
| Dimoxystrobin | 327 | 205 | 12.6 | 115 | 5 | Positive |
| Dimoxystrobin | 327 | 116 | 12.6 | 115 | 22 | Positive |
| Diniconazole | 326 | 159 | 13.5 | 110 | 28 | Positive |
| Diniconazole | 326 | 70 | 13.5 | 110 | 24 | Positive |
| Dinotefuran | 203 | 129 | 4.6 | 183 | 8 | Positive |
| Dinotefuran | 203 | 114 | 4.6 | 183 | 12 | Positive |
| Dioxacarb | 224 | 167 | 6.4 | 83 | 12 | Positive |
| Dioxacarb | 224 | 123 | 6.4 | 83 | 12 | Positive |
| Disulfoton | 275 | 89 | 14.3 | 140 | 5 | Positive |
| Disulfoton | 275 | 61 | 14.3 | 140 | 37 | Positive |
| Diuron | 235 | 72 | 10 | 110 | 22 | Positive |
| Diuron | 233 | 72 | 10 | 110 | 22 | Positive |
| DON | 297 | 249 | 5 | 110 | 4 | Positive |
| DON | 297 | 203 | 5 | 110 | 12 | Positive |
| DON- ¹³ C15 | 312 | 263 | 5 | 110 | 4 | Positive |
| Epoxyconazol | 330 | 121 | 12.1 | 110 | 22 | Positive |
| Epoxyconazol | 330 | 101 | 12.1 | 110 | 45 | Positive |
| Ergocornine | 562.4 | 305 | 12 | 147 | 24 | Positive |
| Ergocornine | 562.4 | 277 | 12 | 147 | 24 | Positive |
| Ergocornine | 562.4 | 223 | 12 | 147 | 36 | Positive |
| Ergocorninine | 562.4 | 305 | 13.3 | 147 | 24 | Positive |
| Ergocorninine | 562.4 | 277 | 13.3 | 147 | 24 | Positive |
| Ergocorninine | 562.4 | 223 | 13.3 | 147 | 36 | Positive |
| Ergocristine | 610.4 | 305 | 12.7 | 172 | 24 | Positive |
| Ergocristine | 610.4 | 268 | 12.7 | 172 | 24 | Positive |
| Ergocristine | 610.4 | 223 | 12.7 | 172 | 36 | Positive |
| Ergocristinine | 610.4 | 305 | 14 | 162 | 28 | Positive |
| Ergocristinine | 610.4 | 268 | 14 | 162 | 24 | Positive |
| Ergocristinine | 610.4 | 223 | 14 | 162 | 36 | Positive |
| Ergocryptine | 576.4 | 305 | 12.6 | 152 | 24 | Positive |
| Ergocryptine | 576.4 | 291 | 12.6 | 152 | 24 | Positive |

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|----------------|-------|-------|------|-----|----|----------|
| Ergocryptine | 576.4 | 223 | 12.6 | 152 | 36 | Positive |
| Ergocryptinine | 576.4 | 305 | 13.8 | 201 | 28 | Positive |
| Ergocryptinine | 576.4 | 291 | 13.8 | 201 | 24 | Positive |
| Ergocryptinine | 576.4 | 223 | 13.8 | 201 | 36 | Positive |
| Ergometrine | 326 | 223 | 7.1 | 147 | 22 | Positive |
| Ergometrine | 326 | 208 | 7.1 | 147 | 36 | Positive |
| Ergometrine | 326 | 197 | 7.1 | 147 | 22 | Positive |
| Ergometrinine | 326 | 265 | 8.5 | 152 | 16 | Positive |
| Ergometrinine | 326 | 223 | 8.5 | 152 | 24 | Positive |
| Ergometrinine | 326 | 208 | 8.5 | 152 | 28 | Positive |
| Ergosine | 548.4 | 530 | 11.5 | 152 | 12 | Positive |
| Ergosine | 548.4 | 223 | 11.5 | 152 | 28 | Positive |
| Ergosine | 548.4 | 208 | 11.5 | 152 | 50 | Positive |
| Ergosinine | 548.4 | 530 | 12.7 | 196 | 12 | Positive |
| Ergosinine | 548.4 | 223 | 12.7 | 196 | 32 | Positive |
| Ergosinine | 548.4 | 208 | 12.7 | 196 | 50 | Positive |
| Ergotamine | 582.4 | 277 | 11.9 | 167 | 24 | Positive |
| Ergotamine | 582.4 | 223 | 11.9 | 167 | 32 | Positive |
| Ergotamine | 582.4 | 208 | 11.9 | 167 | 50 | Positive |
| Ergotaminine | 582.4 | 277 | 13.2 | 167 | 24 | Positive |
| Ergotaminine | 582.4 | 223 | 13.2 | 167 | 36 | Positive |
| Ergotaminine | 582.4 | 208 | 13.2 | 167 | 50 | Positive |
| Ethidimuron | 265 | 207.9 | 6.1 | 120 | 12 | Positive |
| Ethidimuron | 265 | 57 | 6.1 | 120 | 32 | Positive |
| Ethion | 385 | 199 | 14.7 | 95 | 4 | Positive |
| Ethion | 385 | 143 | 14.7 | 95 | 22 | Positive |
| Ethirimol | 210 | 140 | 10 | 145 | 22 | Positive |
| Ethirimol | 210 | 98 | 10 | 145 | 24 | Positive |
| Ethofumesat | 287 | 259 | 10.9 | 83 | 0 | Positive |
| Ethofumesat | 287 | 121 | 10.9 | 83 | 12 | Positive |
| Ethoprophos | 243 | 131 | 12.1 | 100 | 17 | Positive |
| Ethoprophos | 243 | 97 | 12.1 | 100 | 28 | Positive |
| Ethoxyquin | 218 | 174 | 12.2 | 120 | 28 | Positive |
| Ethoxyquin | 218 | 160 | 12.2 | 120 | 35 | Positive |
| Etofenprox | 394 | 177 | 16.5 | 110 | 12 | Positive |
| Etofenprox | 394 | 107 | 16.5 | 110 | 45 | Positive |
| Etrimphos | 293 | 265 | 12.9 | 120 | 22 | Positive |
| Etrimphos | 293 | 125 | 12.9 | 120 | 35 | Positive |
| Famoxadone | 392 | 331 | 13.1 | 85 | 0 | Positive |
| Famoxadone | 392 | 238 | 13.1 | 85 | 12 | Positive |
| FB1 | 722.4 | 352.3 | 8.3 | 183 | 45 | Positive |

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|------------------------|-------|-------|-------|-----|----|----------|
| FB1 | 722.4 | 334.3 | 8.3 | 183 | 45 | Positive |
| FB1- ¹³ C34 | 756.5 | 356.4 | 8.3 | 183 | 45 | Positive |
| FB2 | 706.5 | 336.3 | 10.9 | 183 | 45 | Positive |
| FB2 | 706.5 | 318.3 | 10.9 | 183 | 45 | Positive |
| FB2- ¹³ C34 | 740.5 | 358.3 | 10.9 | 183 | 45 | Positive |
| FB3 | 706.5 | 336.3 | 9.8 | 183 | 45 | Positive |
| FB3 | 706.5 | 318.3 | 9.8 | 183 | 45 | Positive |
| FB3- ¹³ C34 | 740.5 | 358.3 | 9.8 | 183 | 45 | Positive |
| Fenamidon | 312 | 236 | 11.1 | 110 | 12 | Positive |
| Fenamidon | 312 | 92 | 11.1 | 110 | 24 | Positive |
| Fenamiphos | 304 | 217 | 12.4 | 110 | 22 | Positive |
| Fenamiphos | 304 | 202 | 12.4 | 110 | 35 | Positive |
| Fenarimol | 331 | 268 | 12 | 140 | 22 | Positive |
| Fenarimol | 331 | 81 | 12 | 140 | 28 | Positive |
| Fenazaquin | 307 | 161 | 15.8 | 105 | 12 | Positive |
| Fenazaquin | 307 | 57 | 15.8 | 105 | 24 | Positive |
| Fenbuconazole | 337 | 125 | 12.3 | 145 | 35 | Positive |
| Fenbuconazole | 337 | 70 | 12.3 | 145 | 17 | Positive |
| Fenhexamid | 302 | 97 | 11.9 | 140 | 22 | Positive |
| Fenhexamid | 302 | 55 | 11.9 | 140 | 37 | Positive |
| Fenobucarb | 208 | 152 | 10.7 | 65 | 5 | Positive |
| Fenobucarb | 208 | 95 | 10.7 | 65 | 12 | Positive |
| Fenoxycarb | 302 | 116 | 12.5 | 100 | 5 | Positive |
| Fenoxycarb | 302 | 88 | 12.5 | 100 | 17 | Positive |
| Fenpropidin | 274 | 147 | 14.1 | 120 | 28 | Positive |
| Fenpropidin | 274 | 86 | 14.1 | 120 | 24 | Positive |
| Fenpyroximat | 422 | 366 | 15.3 | 135 | 17 | Positive |
| Fenpyroximat | 422 | 135 | 15.3 | 135 | 28 | Positive |
| Fenuron | 165 | 76.9 | 6.2 | 183 | 32 | Positive |
| Fenuron | 165 | 72 | 6.2 | 183 | 16 | Positive |
| Fipronil | 435 | 330 | 12.5 | 65 | 12 | Negative |
| Fipronil | 435 | 250 | 12.5 | 65 | 28 | Negative |
| Flazasulfuron | 408 | 182 | 6.4 | 120 | 17 | Positive |
| Flazasulfuron | 408 | 139 | 6.4 | 120 | 37 | Positive |
| Flonicamid | 230 | 203 | 5.1 | 110 | 17 | Positive |
| Flonicamid | 230 | 174 | 5.1 | 110 | 17 | Positive |
| Fluazinam | 463 | 416 | 13.76 | 115 | 13 | Negative |
| Fluazinam | 463 | 398 | 13.76 | 115 | 9 | Negative |
| Flubendiamide | 681 | 273.7 | 12.7 | 120 | 12 | Negative |
| Flubendiamide | 681 | 254 | 12.7 | 120 | 24 | Negative |
| Fludioxonil | 247 | 169 | 11.1 | 95 | 32 | Negative |

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|---------------------|-------|------|------|-----|----|----------|
| Fludioxonil | 247 | 126 | 11.1 | 95 | 32 | Negative |
| Flufenacet | 364 | 194 | 12.1 | 100 | 5 | Positive |
| Flufenacet | 364 | 152 | 12.1 | 100 | 17 | Positive |
| Flufenoxuron | 489 | 158 | 15.1 | 110 | 17 | Positive |
| Flufenoxuron | 489 | 141 | 15.1 | 110 | 45 | Positive |
| Flumetsulam | 326 | 262 | 5.3 | 135 | 17 | Positive |
| Flumetsulam | 326 | 129 | 5.3 | 135 | 22 | Positive |
| Flumioxazin | 355 | 327 | 10.4 | 110 | 22 | Positive |
| Flumioxazin | 355 | 299 | 10.4 | 110 | 28 | Positive |
| Fluometuron | 233 | 72 | 9.3 | 105 | 17 | Positive |
| Fluometuron | 233 | 46 | 9.3 | 105 | 17 | Positive |
| Fluometuron2 | 233 | 72 | 10 | 105 | 17 | Positive |
| Fluometuron2 | 233 | 46 | 10 | 105 | 17 | Positive |
| Fluopicolide | 383 | 173 | 11.4 | 110 | 24 | Positive |
| Fluopicolide | 383 | 145 | 11.4 | 110 | 45 | Positive |
| Fluoxastrobin | 459 | 427 | 11.9 | 140 | 17 | Positive |
| Fluoxastrobin | 459 | 188 | 11.9 | 140 | 37 | Positive |
| Fluquinconazole | 376 | 349 | 11.9 | 120 | 16 | Positive |
| Fluquinconazole | 376 | 307 | 11.9 | 120 | 24 | Positive |
| Flusilazole | 316 | 247 | 12.4 | 120 | 17 | Positive |
| Flusilazole | 316 | 165 | 12.4 | 120 | 24 | Positive |
| Flutriafol | 302 | 123 | 9.7 | 100 | 28 | Positive |
| Flutriafol | 302 | 70 | 9.7 | 100 | 17 | Positive |
| Fonofos | 247 | 137 | 13 | 120 | 17 | Positive |
| Fonofos | 247 | 109 | 13 | 120 | 35 | Positive |
| Foramsulfuron | 453 | 182 | 6.15 | 120 | 22 | Positive |
| Foramsulfuron | 453 | 139 | 6.15 | 120 | 45 | Positive |
| Forchlorfenuron | 248 | 129 | 10 | 110 | 16 | Positive |
| Forchlorfenuron | 248 | 93 | 10 | 110 | 37 | Positive |
| Fosthiazate | 284 | 228 | 9.3 | 100 | 5 | Positive |
| Fosthiazate | 284 | 104 | 9.3 | 100 | 22 | Positive |
| Fuberidazol | 185 | 157 | 8 | 145 | 22 | Positive |
| Fuberidazol | 185 | 156 | 8 | 145 | 28 | Positive |
| Furalaxyl | 302 | 242 | 10.8 | 110 | 12 | Positive |
| Furalaxyl | 302 | 95 | 10.8 | 110 | 27 | Positive |
| Furathiocarb | 383 | 252 | 14.3 | 110 | 5 | Positive |
| Furathiocarb | 383 | 195 | 14.3 | 110 | 17 | Positive |
| Halofenozide | 329 | 121 | 11 | 105 | 16 | Negative |
| Halofenozide | 329 | 76.9 | 11 | 105 | 36 | Negative |
| Halosulfuron-methyl | 434.7 | 182 | 7.5 | 110 | 17 | Positive |

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|-------------------------|-------|-------|------|-----|----|----------|
| Halosulfuron-methyl | 434.7 | 139 | 7.5 | 110 | 45 | Positive |
| Hexaconazole | 314 | 159 | 13.2 | 95 | 28 | Positive |
| Hexaconazole | 314 | 70 | 13.2 | 95 | 17 | Positive |
| Hexaflumuron | 461 | 158 | 13.9 | 120 | 17 | Positive |
| Hexaflumuron | 461 | 141 | 13.9 | 120 | 45 | Positive |
| Hexythiazox | 353 | 228 | 14.8 | 100 | 12 | Positive |
| Hexythiazox | 353 | 168 | 14.8 | 100 | 24 | Positive |
| HT-2 | 442 | 263 | 9.9 | 110 | 12 | Positive |
| HT-2 | 442 | 215 | 9.9 | 110 | 12 | Positive |
| HT-2- ¹³ C22 | 464 | 278 | 9.9 | 110 | 12 | Positive |
| Hydramethylnon | 495 | 323 | 14.3 | 200 | 36 | Positive |
| Hydramethylnon | 495 | 170.9 | 14.3 | 200 | 48 | Positive |
| Imazalil | 297 | 201 | 10.1 | 115 | 17 | Positive |
| Imazalil | 297 | 159 | 10.1 | 115 | 22 | Positive |
| Imidacloprid | 256 | 209 | 6 | 83 | 12 | Positive |
| Imidacloprid | 256 | 175 | 6 | 83 | 17 | Positive |
| Indoxacarb | 528 | 203 | 13.7 | 110 | 45 | Positive |
| Indoxacarb | 528 | 150 | 13.7 | 110 | 22 | Positive |
| Ipconazole | 334 | 125 | 13.9 | 115 | 45 | Positive |
| Ipconazole | 334 | 70 | 13.9 | 115 | 24 | Positive |
| Iprovalicarb | 321 | 203 | 11.9 | 83 | 0 | Positive |
| Iprovalicarb | 321 | 119 | 11.9 | 83 | 22 | Positive |
| Isocarbophos | 231 | 121 | 10 | 110 | 22 | Positive |
| Isocarbophos | 231 | 65 | 10 | 110 | 37 | Positive |
| Isofenphos-methyl | 332 | 231 | 12.8 | 145 | 12 | Positive |
| Isofenphos-methyl | 332 | 121 | 12.8 | 145 | 37 | Positive |
| Isoprothiolane | 291 | 231 | 11.4 | 83 | 8 | Positive |
| Isoprothiolane | 291 | 188.8 | 11.4 | 83 | 22 | Positive |
| Isoxaben | 333 | 165 | 11.3 | 110 | 16 | Positive |
| Isoxaben | 333 | 150 | 11.3 | 110 | 48 | Positive |
| Isoxaflutole | 359.8 | 250.9 | 7.5 | 95 | 22 | Positive |
| Isoxaflutole | 359.8 | 220 | 7.5 | 95 | 35 | Positive |
| Isoxaflutole2 | 359.8 | 250.9 | 9.9 | 95 | 22 | Positive |
| Isoxaflutole2 | 359.8 | 220 | 9.9 | 95 | 35 | Positive |
| Ivermectin B1a | 892.5 | 551.3 | 16.8 | 120 | 16 | Positive |
| Ivermectin B1a | 892.5 | 307 | 16.8 | 120 | 28 | Positive |
| Ivermectin B1b | 861.5 | 495.8 | 14.1 | 120 | 12 | Positive |
| Ivermectin B1b | 861.5 | 323 | 14.1 | 120 | 60 | Positive |
| Kresoxim-methyl | 314 | 267 | 12.7 | 85 | 0 | Positive |
| Kresoxim-methyl | 314 | 222 | 12.7 | 85 | 12 | Positive |

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|---------------------|--------|-------|------|-----|----|----------|
| Lenacil | 235 | 153 | 9.7 | 85 | 17 | Positive |
| Lenacil | 235 | 136 | 9.7 | 85 | 35 | Positive |
| Linuron | 249 | 182 | 10.8 | 110 | 12 | Positive |
| Linuron | 249 | 160 | 10.8 | 110 | 17 | Positive |
| Lufenuron | 510.9 | 158 | 14.6 | 138 | 22 | Positive |
| Lufenuron | 510.9 | 141 | 14.6 | 138 | 45 | Positive |
| Malaoxon | 315.07 | 127 | 8.6 | 85 | 4 | Positive |
| Malaoxon | 315.07 | 99 | 8.6 | 85 | 22 | Positive |
| Malathion | 331 | 126.9 | 11.4 | 83 | 5 | Positive |
| Malathion | 331 | 99 | 11.4 | 83 | 12 | Positive |
| Mandipropamid | 411.9 | 356 | 11.3 | 110 | 5 | Positive |
| Mandipropamid | 411.9 | 328 | 11.3 | 110 | 12 | Positive |
| Mecarbam | 330 | 227 | 12 | 65 | 0 | Positive |
| Mecarbam | 330 | 97 | 12 | 65 | 45 | Positive |
| Mepanipyrim | 224 | 209 | 11.9 | 140 | 16 | Positive |
| Mepanipyrim | 224 | 106 | 11.9 | 140 | 24 | Positive |
| Mesosulfuron-methyl | 504 | 182 | 6.5 | 125 | 24 | Positive |
| Mesosulfuron-methyl | 504 | 139 | 6.5 | 125 | 45 | Positive |
| Metaflumizone | 507 | 287 | 14.4 | 140 | 22 | Positive |
| Metaflumizone | 507 | 178 | 14.4 | 140 | 22 | Positive |
| Metalaxyl | 280 | 220 | 9.9 | 95 | 12 | Positive |
| Metalaxyl | 280 | 160 | 9.9 | 95 | 22 | Positive |
| Metamitron | 203 | 175 | 6.3 | 110 | 17 | Positive |
| Metamitron | 203 | 104 | 6.3 | 110 | 22 | Positive |
| Metazachlor | 278 | 210 | 9.7 | 65 | 0 | Positive |
| Metazachlor | 278 | 134 | 9.7 | 65 | 17 | Positive |
| Metconazole | 320 | 125 | 13.2 | 140 | 37 | Positive |
| Metconazole | 320 | 70 | 13.2 | 140 | 22 | Positive |
| Methabenzthiazuron | 222 | 165 | 9.6 | 100 | 17 | Positive |
| Methabenzthiazuron | 222 | 150 | 9.6 | 100 | 35 | Positive |
| Methacrifos | 241 | 209 | 10.3 | 55 | 0 | Positive |
| Methacrifos | 241 | 125 | 10.3 | 55 | 28 | Positive |
| Methamidophos | 141.9 | 125 | 2 | 85 | 12 | Positive |
| Methamidophos | 141.9 | 94 | 2 | 85 | 12 | Positive |
| Methidathion | 302.9 | 145 | 10.2 | 55 | 0 | Positive |
| Methidathion | 302.9 | 85 | 10.2 | 55 | 17 | Positive |
| Methiocarb | 226 | 169 | 11 | 65 | 0 | Positive |
| Methiocarb | 226 | 121 | 11 | 65 | 17 | Positive |
| Methomyl | 162.9 | 106 | 5.1 | 50 | 5 | Positive |

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|------------------------|-------|-------|------|-----|----|----------|
| Methomyl | 162.9 | 88 | 5.1 | 50 | 0 | Positive |
| Methoprotetryne | 272 | 198 | 10.8 | 140 | 24 | Positive |
| Methoprotetryne | 272 | 169.9 | 10.8 | 140 | 28 | Positive |
| Methoxyfenozide | 369 | 313 | 11.5 | 85 | 0 | Positive |
| Methoxyfenozide | 369 | 149 | 11.5 | 85 | 12 | Positive |
| Metobromuron | 259 | 170 | 9.5 | 120 | 17 | Positive |
| Metobromuron | 259 | 148 | 9.5 | 120 | 12 | Positive |
| Metolachlor | 284 | 252 | 12.2 | 110 | 12 | Positive |
| Metolachlor | 284 | 176 | 12.2 | 110 | 22 | Positive |
| Metrafenon | 409 | 226.9 | 13.4 | 110 | 24 | Positive |
| Metrafenon | 409 | 209 | 13.4 | 110 | 12 | Positive |
| Metribuzin | 215 | 187 | 8.3 | 120 | 17 | Positive |
| Metribuzin | 215 | 84 | 8.3 | 120 | 22 | Positive |
| Metsulfuron-methyl | 382 | 199 | 5.9 | 100 | 22 | Positive |
| Metsulfuron-methyl | 382 | 167 | 5.9 | 100 | 17 | Positive |
| Mevinphos1 | 225 | 193 | 6.4 | 65 | 0 | Positive |
| Mevinphos1 | 225 | 127 | 6.4 | 65 | 12 | Positive |
| Mevinphos2 | 225 | 193 | 7 | 65 | 0 | Positive |
| Mevinphos2 | 225 | 127 | 7 | 65 | 12 | Positive |
| Mexacarbate | 223 | 166 | 11.5 | 110 | 12 | Positive |
| Mexacarbate | 223 | 151 | 11.5 | 110 | 24 | Positive |
| Molinate | 188 | 126 | 11.5 | 100 | 12 | Positive |
| Molinate | 188 | 83 | 11.5 | 100 | 17 | Positive |
| Monocrotophos | 224 | 193 | 5.5 | 65 | 0 | Positive |
| Monocrotophos | 224 | 127 | 5.5 | 65 | 12 | Positive |
| Moxidectin | 640.4 | 622 | 16.5 | 148 | 12 | Positive |
| Moxidectin | 640.4 | 528 | 16.5 | 148 | 4 | Positive |
| Myclobutanil | 289 | 125 | 11.6 | 110 | 35 | Positive |
| Myclobutanil | 289 | 70 | 11.6 | 110 | 17 | Positive |
| Nicosulfuron | 4111 | 213 | 5.6 | 102 | 12 | Positive |
| Nicosulfuron | 4111 | 182 | 5.6 | 105 | 16 | Positive |
| Nitenpyram | 271 | 225 | 4.9 | 95 | 3 | Positive |
| Nitenpyram | 271 | 56 | 4.9 | 95 | 28 | Positive |
| Novaluron | 493 | 158 | 14 | 100 | 22 | Positive |
| Novaluron | 493 | 141 | 14 | 100 | 45 | Positive |
| Omethoat | 214 | 125 | 4 | 83 | 22 | Positive |
| Omethoat | 214 | 109 | 4 | 83 | 24 | Positive |
| OTA | 404 | 358 | 9.6 | 120 | 12 | Positive |
| OTA | 404 | 239 | 9.6 | 120 | 24 | Positive |
| OTA | 404 | 221 | 9.6 | 120 | 37 | Positive |
| OTA- ¹³ C20 | 424 | 250 | 9.6 | 120 | 24 | Positive |

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| Oxadiazon | 345 | 303 | 14.6 | 100 | 12 | Positive |
| Oxadiazon | 345 | 220 | 14.6 | 100 | 17 | Positive |
| Oxadixyl | 279 | 219 | 7.7 | 65 | 5 | Positive |
| Oxadixyl | 279 | 132 | 7.7 | 65 | 35 | Positive |
| Oxamyl | 237 | 90 | 4.9 | 60 | 0 | Positive |
| Oxamyl | 237 | 72 | 4.9 | 60 | 17 | Positive |
| Oxasulfuron | 407 | 150 | 6.2 | 120 | 17 | Positive |
| Oxasulfuron | 407 | 107 | 6.2 | 120 | 45 | Positive |
| Paclobutrazol | 294 | 125 | 11.4 | 115 | 37 | Positive |
| Paclobutrazol | 294 | 70 | 11.4 | 115 | 22 | Positive |
| Penconazole | 284 | 159 | 12.7 | 65 | 28 | Positive |
| Penconazole | 284 | 70 | 12.7 | 65 | 17 | Positive |
| Pencycuron | 329 | 218 | 13.5 | 120 | 12 | Positive |
| Pencycuron | 329 | 125 | 13.5 | 120 | 24 | Positive |
| Pendimethalin | 282 | 212 | 14.9 | 85 | 5 | Positive |
| Pendimethalin | 282 | 194 | 14.9 | 85 | 17 | Positive |
| Permethrin | 391 | 355 | 10 | 120 | 6 | Positive |
| Permethrin | 391 | 183 | 10 | 120 | 12 | Positive |
| Phenmedipham | 318 | 168 | 10.4 | 100 | 4 | Positive |
| Phenmedipham | 318 | 136 | 10.4 | 100 | 22 | Positive |
| Phenthoate | 321 | 247 | 12.6 | 75 | 4 | Positive |
| Phenthoate | 321 | 79 | 12.6 | 75 | 48 | Positive |
| Phosalone | 368 | 182 | 13.3 | 65 | 12 | Positive |
| Phosalone | 368 | 111 | 13.3 | 65 | 45 | Positive |
| Phosmet | 317.9 | 160 | 10.5 | 65 | 12 | Positive |
| Phosmet | 317.9 | 133 | 10.5 | 65 | 37 | Positive |
| Phosphamidon | 300 | 174 | 7.8 | 110 | 8 | Positive |
| Phosphamidon | 300 | 127 | 7.8 | 110 | 16 | Positive |
| Phoxim | 299 | 129 | 13.2 | 65 | 4 | Positive |
| Phoxim | 299 | 77 | 13.2 | 65 | 24 | Positive |
| Picolinafen | 377 | 359 | 14.4 | 120 | 24 | Positive |
| Picolinafen | 377 | 238 | 14.4 | 120 | 32 | Positive |
| Picoxystrobin | 368 | 205 | 12.5 | 65 | 0 | Positive |
| Picoxystrobin | 368 | 145 | 12.5 | 65 | 22 | Positive |
| Piperonylbutoxide | 356 | 177 | 14.6 | 120 | 13 | Positive |
| Piperonylbutoxide | 356 | 119 | 14.6 | 120 | 47 | Positive |
| Pirimicarb | 239 | 182 | 9.4 | 110 | 12 | Positive |
| Pirimicarb | 239 | 72 | 9.4 | 110 | 22 | Positive |
| Pirimiphos-ethyl | 334 | 198 | 14.6 | 120 | 38 | Positive |
| Pirimiphos-ethyl | 334 | 182 | 14.6 | 120 | 42 | Positive |
| Pirimiphos-methyl | 306 | 164 | 13.4 | 140 | 22 | Positive |

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| Pirimiphos-methyl | 306 | 108 | 13.4 | 140 | 28 | Positive |
| Prochloraz | 376 | 308 | 13.3 | 65 | 5 | Positive |
| Prochloraz | 376 | 266 | 13.3 | 65 | 12 | Positive |
| Procymidon | 301 | 284 | 12 | 65 | 8 | Positive |
| Procymidon | 301 | 256 | 12 | 65 | 24 | Positive |
| Procymidon | 284 | 255.8 | 12 | 110 | 12 | Positive |
| Procymidon | 284 | 67 | 12 | 110 | 28 | Positive |
| Profenofos | 374.9 | 347 | 14.2 | 120 | 5 | Positive |
| Profenofos | 374.9 | 304.9 | 14.2 | 120 | 17 | Positive |
| Promecarb | 208 | 151 | 11.2 | 83 | 0 | Positive |
| Promecarb | 208 | 109 | 11.2 | 83 | 12 | Positive |
| Prometon | 226 | 184 | 8.9 | 110 | 16 | Positive |
| Prometon | 226 | 142 | 8.9 | 110 | 24 | Positive |
| Propamocarb | 189 | 144 | 4.4 | 100 | 5 | Positive |
| Propamocarb | 189 | 102 | 4.4 | 100 | 17 | Positive |
| Propaquizafop | 444 | 371 | 14.5 | 125 | 12 | Positive |
| Propaquizafop | 444 | 100 | 14.5 | 125 | 17 | Positive |
| Propargit | 368 | 231 | 15.1 | 83 | 5 | Positive |
| Propargit | 368 | 175 | 15.1 | 83 | 12 | Positive |
| Propetamophos | 282 | 156 | 11.6 | 125 | 12 | Positive |
| Propetamophos | 282 | 138 | 11.6 | 125 | 17 | Positive |
| Propham | 180 | 138 | 9.6 | 60 | 4 | Positive |
| Propham | 180 | 120 | 9.6 | 60 | 12 | Positive |
| Propiconazole | 342 | 158.9 | 13 | 115 | 28 | Positive |
| Propiconazole | 342 | 69 | 13 | 115 | 17 | Positive |
| Propoxur | 210 | 168 | 8.3 | 55 | 0 | Positive |
| Propoxur | 210 | 111 | 8.3 | 55 | 12 | Positive |
| Propyzamid | 256 | 190 | 11.4 | 105 | 12 | Positive |
| Propyzamid | 256 | 173 | 11.4 | 105 | 22 | Positive |
| Proquinazid | 373 | 331 | 15.6 | 120 | 5 | Positive |
| Proquinazid | 373 | 289 | 15.6 | 120 | 22 | Positive |
| Prosulfocarb | 252 | 128 | 14 | 100 | 5 | Positive |
| Prosulfocarb | 252 | 91 | 14 | 100 | 22 | Positive |
| Pymetrozin | 218 | 105 | 5.4 | 110 | 22 | Positive |
| Pymetrozin | 218 | 78 | 5.4 | 110 | 45 | Positive |
| Pyracarbolid | 218 | 125 | 8.6 | 115 | 16 | Positive |
| Pyracarbolid | 218 | 96.9 | 8.6 | 115 | 28 | Positive |
| Pyraclostrobin | 388 | 194 | 13.2 | 95 | 5 | Positive |
| Pyraclostrobin | 388 | 163 | 13.2 | 95 | 22 | Positive |
| Pyridaben | 365 | 309 | 15.7 | 83 | 12 | Positive |
| Pyridaben | 365 | 147 | 15.7 | 83 | 24 | Positive |

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| Pyridat | 379 | 350.8 | 16.1 | 110 | 4 | Positive |
| Pyridat | 379 | 207 | 16.1 | 110 | 12 | Positive |
| Pyrimethanil | 200 | 107 | 11 | 120 | 22 | Positive |
| Pyrimethanil | 200 | 82 | 11 | 120 | 24 | Positive |
| Pyriproxyfen | 322 | 185 | 14.8 | 110 | 22 | Positive |
| Pyriproxyfen | 322 | 96 | 14.8 | 110 | 12 | Positive |
| Quinalphos | 299 | 163 | 12.6 | 100 | 22 | Positive |
| Quinalphos | 299 | 147 | 12.6 | 100 | 22 | Positive |
| Quinmerac | 222 | 204 | 5.3 | 100 | 17 | Positive |
| Quinmerac | 222 | 141 | 5.3 | 100 | 35 | Positive |
| Quinoclamín | 208 | 88.9 | 8 | 125 | 44 | Positive |
| Quinoclamín | 208 | 76.9 | 8 | 125 | 44 | Positive |
| Quinoxifen | 308 | 197 | 14.8 | 115 | 35 | Positive |
| Quinoxifen | 308 | 162 | 14.8 | 115 | 45 | Positive |
| Rimsulfuron | 432 | 325 | 5.9 | 110 | 12 | Positive |
| Rimsulfuron | 432 | 182 | 5.9 | 110 | 22 | Positive |
| Rotenone | 395 | 213 | 12.4 | 145 | 22 | Positive |
| Rotenone | 395 | 192 | 12.4 | 145 | 22 | Positive |
| Scopolamine | 304 | 156 | 7.2 | 120 | 17 | Positive |
| Scopolamine | 304 | 137.9 | 7.2 | 120 | 23 | Positive |
| Scopolamine- ¹³ C1-d3 | 308 | 160 | 7.2 | 120 | 17 | Positive |
| Scopolamine- ¹³ C1-d3 | 308 | 142 | 7.2 | 120 | 23 | Positive |
| Sebumeton | 226 | 170 | 10.5 | 110 | 16 | Positive |
| Sebumeton | 226 | 67.9 | 10.5 | 110 | 50 | Positive |
| Silthiopham | 268 | 252 | 12.6 | 135 | 5 | Positive |
| Silthiopham | 268 | 139 | 12.6 | 135 | 17 | Positive |
| Spinosyn A | 732.4 | 142 | 16.3 | 155 | 28 | Positive |
| Spinosyn A | 732.4 | 98 | 16.3 | 155 | 45 | Positive |
| Spinosyn D | 746.5 | 142 | 16.7 | 145 | 35 | Positive |
| Spinosyn D | 746.5 | 98 | 16.7 | 145 | 55 | Positive |
| Spirodiclofen | 411 | 313 | 15.4 | 110 | 5 | Positive |
| Spirodiclofen | 411 | 71 | 15.4 | 110 | 17 | Positive |
| Spiromesifen | 388 | 273 | 15 | 110 | 12 | Positive |
| Spiromesifen | 388 | 255 | 15 | 110 | 24 | Positive |
| Spirotetramat | 374 | 330.3 | 11.9 | 120 | 12 | Positive |
| Spirotetramat | 374 | 302 | 11.9 | 120 | 12 | Positive |
| Spiroxamine | 298 | 144 | 14.9 | 125 | 17 | Positive |
| Spiroxamine | 298 | 100 | 14.9 | 125 | 35 | Positive |
| Sulfentrazone | 404 | 306.9 | 8.3 | 110 | 28 | Positive |

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|------------------------------------|-------|-------|------|-----|----|----------|
| Sulfentrazone | 404 | 273 | 8.3 | 110 | 36 | Positive |
| Sulfotep | 323 | 115 | 12.8 | 120 | 31 | Positive |
| Sulfotep | 323 | 97 | 12.8 | 120 | 48 | Positive |
| T-2 | 484.3 | 305 | 10.8 | 110 | 12 | Positive |
| T-2 | 484.3 | 215 | 10.8 | 110 | 24 | Positive |
| T-2 | 484.3 | 185 | 10.8 | 110 | 22 | Positive |
| T-2- ¹³ C ₂₄ | 508.3 | 322 | 10.8 | 110 | 12 | Positive |
| TEA | 196 | 139 | 4.3 | 110 | 26 | Negative |
| TEA | 196 | 112 | 4.3 | 110 | 32 | Negative |
| TEA | 196 | 83 | 4.3 | 110 | 32 | Negative |
| TEA- ¹³ C ₂ | 198 | 141 | 4.3 | 110 | 26 | Negative |
| Tebuconazole | 308 | 125 | 12.9 | 110 | 37 | Positive |
| Tebuconazole | 308 | 70 | 12.9 | 110 | 22 | Positive |
| Tebufenozid | 353 | 297 | 12.5 | 95 | 0 | Positive |
| Tebufenozid | 353 | 133 | 12.5 | 95 | 17 | Positive |
| Tebufenpyrad | 334 | 145 | 14.4 | 145 | 24 | Positive |
| Tebufenpyrad | 334 | 117 | 14.4 | 145 | 37 | Positive |
| Tebuthiuron | 229 | 172 | 8.6 | 105 | 12 | Positive |
| Tebuthiuron | 229 | 116 | 8.6 | 105 | 24 | Positive |
| Teflubenzuron | 379 | 359 | 14.6 | 110 | 0 | Negative |
| Teflubenzuron | 379 | 339 | 14.6 | 110 | 4 | Negative |
| Temephos | 467 | 419 | 14.5 | 155 | 22 | Positive |
| Temephos | 467 | 124.9 | 14.5 | 155 | 44 | Positive |
| Tepraloxym1 | 342 | 250 | 6.45 | 140 | 12 | Positive |
| Tepraloxym1 | 342 | 166 | 6.45 | 140 | 22 | Positive |
| Tepraloxym2 | 342 | 250 | 7.5 | 140 | 12 | Positive |
| Tepraloxym2 | 342 | 166 | 7.5 | 140 | 22 | Positive |
| Terbufos | 289 | 232.9 | 14.5 | 110 | 0 | Positive |
| Terbufos | 289 | 57 | 14.5 | 110 | 16 | Positive |
| Tetrachlorvinphos | 367 | 206 | 12.6 | 120 | 39 | Positive |
| Tetrachlorvinphos | 367 | 127 | 12.6 | 120 | 48 | Positive |
| Tetraconazole | 372 | 159 | 12.1 | 140 | 28 | Positive |
| Tetraconazole | 372 | 70 | 12.1 | 140 | 22 | Positive |
| Tetrametrin | 349 | 164 | 14.2 | 120 | 35 | Positive |
| Tetrametrin | 349 | 107 | 14.2 | 120 | 50 | Positive |
| Thiabendazol | 202 | 175 | 7.7 | 140 | 24 | Positive |
| Thiabendazol | 202 | 131 | 7.7 | 140 | 35 | Positive |
| Thiacloprid | 253 | 126 | 6.95 | 110 | 22 | Positive |
| Thiacloprid | 253 | 90 | 6.95 | 110 | 37 | Positive |
| Thiamethoxam | 292 | 211 | 5.3 | 85 | 5 | Positive |
| Thiamethoxam | 292 | 181 | 5.3 | 85 | 22 | Positive |

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| Thidiazuron | 221 | 101.9 | 8.4 | 107 | 16 | Positive |
| Thidiazuron | 221 | 77 | 8.4 | 107 | 50 | Positive |
| Thifensulfuron-methyl | 388 | 205 | 5.9 | 115 | 24 | Positive |
| Thifensulfuron-methyl | 388 | 167 | 5.9 | 115 | 12 | Positive |
| Thiodicarb | 355 | 108 | 9.2 | 82 | 12 | Positive |
| Thiodicarb | 355 | 88 | 9.2 | 82 | 12 | Positive |
| Thiofanox | 241 | 184 | 9.3 | 110 | 5 | Positive |
| Thiofanox | 241 | 57 | 9.3 | 110 | 17 | Positive |
| Tolclofos-methyl | 301 | 269 | 13.4 | 115 | 12 | Positive |
| Tolclofos-methyl | 301 | 125 | 13.4 | 115 | 17 | Positive |
| Tolylfluanide | 346.9 | 238 | 12 | 65 | 0 | Positive |
| Tolylfluanide | 346.9 | 137 | 12 | 65 | 24 | Positive |
| Tralkoxydim | 330 | 284 | 16.4 | 165 | 5 | Positive |
| Tralkoxydim | 330 | 138 | 16.4 | 165 | 17 | Positive |
| Tralkoxydim | 330 | 96 | 16.4 | 165 | 24 | Positive |
| Triadimefon | 294 | 197 | 11.5 | 100 | 12 | Positive |
| Triadimefon | 294 | 69 | 11.5 | 100 | 22 | Positive |
| Triadimenol | 296 | 99 | 11.85 | 65 | 12 | Positive |
| Triadimenol | 296 | 70 | 11.85 | 65 | 5 | Positive |
| Triasulfuron | 401.9 | 167 | 6.7 | 140 | 12 | Positive |
| Triasulfuron | 401.9 | 141 | 6.7 | 140 | 12 | Positive |
| Triazophos | 314 | 162 | 11.7 | 110 | 17 | Positive |
| Triazophos | 314 | 119 | 11.7 | 110 | 35 | Positive |
| Tribenuron-methyl | 396 | 181 | 6.4 | 110 | 17 | Positive |
| Tribenuron-methyl | 396 | 155 | 6.4 | 110 | 5 | Positive |
| Trichlorfon | 256.9 | 221 | 6.4 | 83 | 5 | Positive |
| Trichlorfon | 256.9 | 109 | 6.4 | 83 | 17 | Positive |
| Tricyclazol | 190 | 163 | 7.2 | 140 | 22 | Positive |
| Tricyclazol | 190 | 136 | 7.2 | 140 | 28 | Positive |
| Trietazin | 230 | 202 | 11.9 | 105 | 17 | Positive |
| Trietazin | 230 | 99 | 11.9 | 105 | 24 | Positive |
| Trifloxystrobin | 409 | 186 | 13.8 | 110 | 12 | Positive |
| Trifloxystrobin | 409 | 145 | 13.8 | 110 | 45 | Positive |
| Triflumizol | 346 | 278 | 13.9 | 85 | 5 | Positive |
| Triflumizol | 346 | 73 | 13.9 | 85 | 12 | Positive |
| Triflumuron | 359 | 156 | 13.3 | 100 | 12 | Positive |
| Triflumuron | 359 | 139 | 13.3 | 100 | 35 | Positive |
| Trimethacarb | 194 | 137 | 9.9 | 83 | 4 | Positive |
| Trimethacarb | 194 | 122 | 9.9 | 83 | 28 | Positive |

| | | | | | | |
|------------------------|-----|-------|------|-----|----|----------|
| Triticonazole | 318 | 125 | 12 | 100 | 37 | Positive |
| Triticonazole | 318 | 70 | 12 | 100 | 12 | Positive |
| Uniconazole-P | 292 | 125 | 12.4 | 135 | 36 | Positive |
| Uniconazole-P | 292 | 70 | 12.4 | 135 | 24 | Positive |
| Vamidothion | 288 | 146 | 6.4 | 95 | 8 | Positive |
| Vamidothion | 288 | 58 | 6.4 | 95 | 50 | Positive |
| ZON | 317 | 175 | 11.5 | 110 | 24 | Negative |
| ZON | 317 | 130.8 | 11.5 | 110 | 33 | Negative |
| ZON- ¹³ C18 | 335 | 185 | 11.5 | 110 | 24 | Negative |
| Zoxamide | 336 | 187 | 13 | 120 | 22 | Positive |
| Zoxamide | 336 | 159 | 13 | 120 | 45 | Positive |

AME: alternariol monomethyl ether, AOH: alternariol, DON: deoxynivalenol, FB1: fumonisin B1, FB2: fumonisin B2, FB3: fumonisin B3, OTA: ochratoxin A, TEA: tenuazonic acid, ZON: zearalenone