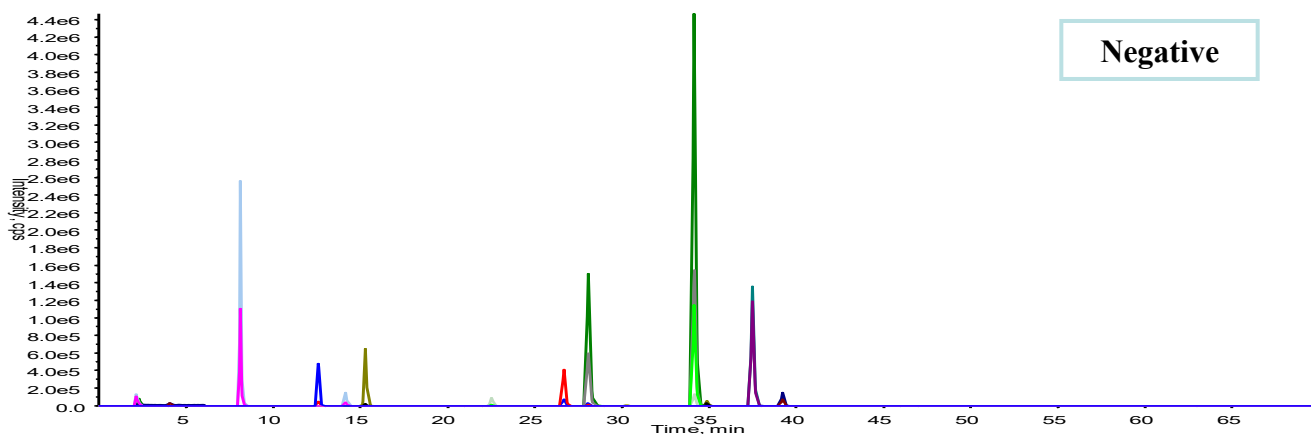
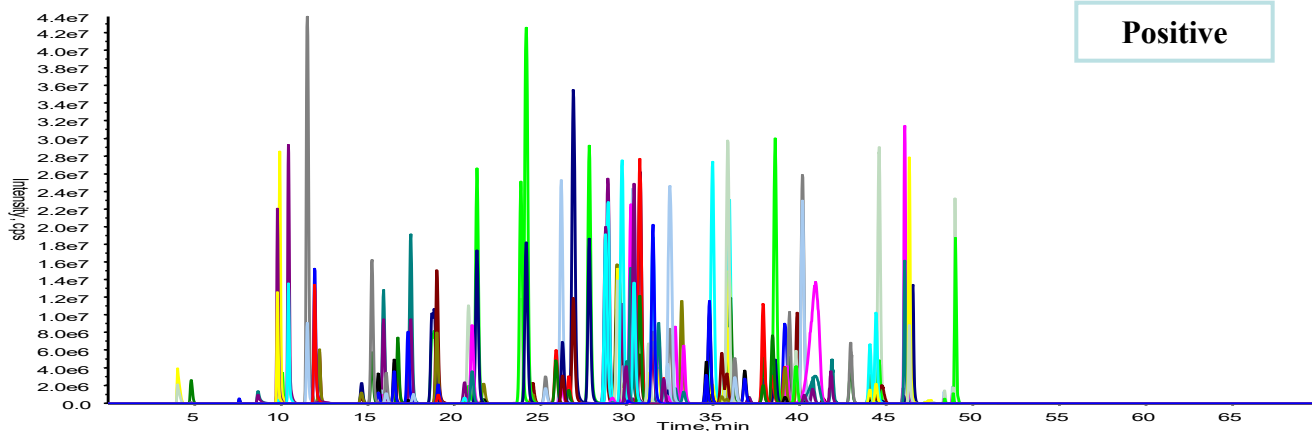


Analysis of 130 Pesticides



Conditions

System :ExionLC AD system
Qtrap 6500+

Gard Column :Gard Column for UHPLC InertSustain C18 (3µm, 10 x 2.1 mm I.D.)

Gard Column Cat. No. :5020-20374

Column :InertSustain C18 HP (3µm, 150 x 2.1 mm I.D.)

Column Cat. No. :5020-14415

Eluent :A) 5 mmol CH₃COONH₄ in CH₃OH
B) 5 mmol CH₃COONH₄ in H₂O
A/B = 10/90 -7 min - 45/55 - 35 min 80/20 - 4 min 100/0 (5 min hold) - 4 min 10/90 (10 min hold), v/v

Flow rate :0.2 mL/min

Col. Temp. :40 °C

Detection :LC/MS/MS (Qtrap 6500+ ESI, Postive, MRM)

| CUR | CAD | IS | TEM | GS1 | GS2 |
|-----|-----|------|-----|-----|-----|
| 25 | 10 | 4500 | 400 | 70 | 70 |

Detection :LC/MS/MS (Qtrap 6500+ ESI, Negative, MRM)

| CUR | CAD | IS | TEM | GS1 | GS2 |
|-----|-----|-------|-----|-----|-----|
| 25 | 10 | -4500 | 400 | 70 | 70 |

Injection Vol. :30 µL

Sample :Pesticides (10 µg/L)

Positive

| No. | Compound | R.T.(min) | Transition | No. | Compound | R.T.(min) | Transition | No. | Compound | R.T.(min) | Transition | |
|-----|---------------------|-----------|------------|-------|----------------------------|-----------|------------|-------|------------------------|-----------|------------|-------|
| 1 | Metamidophos | 4.1 | 141.9 -> | 94 | 40 Trichlophos Methyl Oxon | 26.26 | 285.1 -> | 109 | 79 Pyraclofos | 37.91 | 361.1 -> | 138.1 |
| 2 | Acefate | 4.82 | 184.1 -> | 142.9 | 41 Azoxystrobin | 26.89 | 404.3 -> | 344 | 80MPP | 37.92 | 279 -> | 247 |
| 3 | Methomyl | 7.58 | 163.4 -> | 88.1 | 42 Isoxathione Oxon | 27.81 | 298.2 -> | 270 | 81 Phosalone | 38.48 | 368.2 -> | 111 |
| 4 | Tefuriltrion | 9.79 | 460.1 -> | 340.9 | 43 Mepronil | 28.77 | 270.2 -> | 228.1 | 82 Pencycuron | 38.55 | 329.1 -> | 218 |
| 5 | MPP Oxon Sulfoxide | 9.86 | 279.1 -> | 264 | 44 Daimuron | 28.78 | 269.2 -> | 91.1 | 83 Butamifos | 39.17 | 333.1 -> | 180 |
| 6 | Flazasulfron | 9.92 | 408.2 -> | 182 | 45 Flatnyl | 28.89 | 324.1 -> | 242.1 | 84 Thiobencarb | 39.18 | 258.2 -> | 89 |
| 7 | Trichlorfon | 9.94 | 259.1 -> | 109 | 46 Molinate | 29.16 | 188.2 -> | 126.1 | 85 Isofenphos | 39.27 | 346.2 -> | 287 |
| 8 | Dimethoate | 10.08 | 230.3 -> | 124.9 | 47 Isoprothiolane | 29.47 | 291.2 -> | 230.9 | 86 Cadusafos | 39.4 | 271 -> | 158.9 |
| 9 | MPP Oxon Sulfone | 10.43 | 312.2 -> | 294.9 | 48 Butamifos Oxon | 29.49 | 317.2 -> | 243.9 | 87 Terbutcarb | 39.79 | 295.2 -> | 222.1 |
| 10 | MBC | 11.52 | 191.9 -> | 132 | 49 Oryastrobin | 29.71 | 392.2 -> | 116 | 88 Isoxation | 39.91 | 314.2 -> | 104.9 |
| 11 | Tricyclazole | 11.95 | 190 -> | 136 | 50 Cafenstrole | 29.72 | 351.1 -> | 72.1 | 89 Befenox | 40.08 | 359.2 -> | 310 |
| 12 | Halosulfuron-methyl | 12.22 | 435.2 -> | 182.1 | 51 Z-Dimethylvinphos | 29.95 | 333 -> | 127 | 90 Piperophos | 40.2 | 354.2 -> | 255 |
| 13 | Quinoclamine | 14.65 | 208.1 -> | 105 | 52 Malathion | 30.05 | 348.2 -> | 98.8 | 91 Tolchlofos-methyl | 40.26 | 301 -> | 269 |
| 14 | Pyroquilon | 14.66 | 174.2 -> | 117 | 53 Mefenacet | 30.23 | 299.1 -> | 148 | 92 Disulfoton | 40.57 | 275.1 -> | 89 |
| 15 | Thiophanate-methyl | 15.25 | 343.1 -> | 311 | 54 Isofenphos Oxon | 30.33 | 330.2 -> | 229 | 93 Dimepiperate | 40.73 | 264.2 -> | 146.1 |
| 16 | Propoxur | 15.62 | 210 -> | 111 | 55 Pyridaphention | 30.41 | 341.1 -> | 189 | 94 Pterilachlor | 40.93 | 312.2 -> | 252 |
| 17 | Dichlorvos | 15.81 | 221.1 -> | 109 | 56 Methylidaimuron | 30.75 | 269.1 -> | 134 | 95 Chlorpyrifos methyl | 41.41 | 322.1 -> | 124.9 |
| 18 | Carbofuran | 15.92 | 222.2 -> | 165.1 | 57 Paclobutrazol | 31.25 | 294.2 -> | 69.9 | 96 ENP | 41.84 | 324.1 -> | 295.9 |
| 19 | Simazine | 16.07 | 202.3 -> | 124.1 | 58 Fenitrothion | 31.47 | 278.4 -> | 125 | 97 Benfuracarb | 42.95 | 411.2 -> | 252.1 |
| 20 | MalaOxon | 16.54 | 315.2 -> | 127 | 59 Bromobutide | 31.8 | 314.1 -> | 196 | 98 Cinmethylin | 44.02 | 292.3 -> | 105 |
| 21 | Fenitrothione Oxon | 16.75 | 262 -> | 216 | 60 Napropamide | 31.82 | 272.3 -> | 129.1 | 99 Dithiopyr | 44.05 | 402.2 -> | 354.1 |
| 22 | MPP Sulfoxide | 17.33 | 295.1 -> | 108.9 | 61 E-Dimethylvinphos | 32.11 | 333 -> | 127 | 100 Esprocarb | 44.09 | 266.2 -> | 91 |
| 23 | Bensulfuron-methyl | 17.48 | 411.2 -> | 182 | 62 Uniconazole P | 32.34 | 292.2 -> | 70 | 101 Torfenpyrade | 44.39 | 384.2 -> | 197 |
| 24 | NAC | 17.64 | 202.2 -> | 127 | 63 Thenylchlor | 32.35 | 324.1 -> | 127 | 102 Buprofezine | 44.57 | 306.2 -> | 57.1 |
| 25 | Fosthiazate | 18.8 | 284.2 -> | 228 | 64 Metolachlor | 32.47 | 284.2 -> | 176.1 | 103 Butachlor | 44.7 | 312.2 -> | 57.1 |
| 26 | MPP Sulfone | 19.01 | 328.2 -> | 311 | 65 Fenoxanylin | 32.9 | 329.2 -> | 302 | 104 Alachlor | 44.75 | 270.1 -> | 238 |
| 27 | Thiodicarb | 19.09 | 355.3 -> | 163 | 66 Chlorpyrifos Oxon | 33.15 | 336.2 -> | 279.8 | 105 Dichlofenthion | 45.96 | 315 -> | 258.8 |
| 28 | Isoprocarb | 20.62 | 194.1 -> | 94.9 | 67 SAP | 34.59 | 398.2 -> | 313.8 | 106 Pyributicarb | 46.05 | 331.2 -> | 181 |
| 29 | Atrazine | 20.84 | 216.2 -> | 174 | 68 Iprobenfos | 34.75 | 289.1 -> | 204.9 | 107 Pyriprocyfen | 46.31 | 322.2 -> | 78 |
| 30 | Simetryn | 21.05 | 214.2 -> | 124.1 | 69 Etridiazol | 34.75 | 247 -> | 205 | 108 Chlorpyrifos | 46.38 | 352 -> | 200 |
| 31 | Metaraxyl | 21.33 | 280.2 -> | 192 | 70 Dimethametryn | 34.94 | 256.3 -> | 186.1 | 109 Pendimethalin | 46.56 | 282.2 -> | 212.1 |
| 32 | DCMU | 21.72 | 233.2 -> | 72 | 71 Propiconazole | 35.51 | 342.2 -> | 159 | 110 Propargite | 46.57 | 368.2 -> | 231.2 |
| 33 | Benfuresate | 23.45 | 274 -> | 163 | 72 Carpdpamid | 35.71 | 334.2 -> | 139 | 111 Benfluralin | 46.8 | 336.2 -> | 236.1 |
| 34 | Daiazinon Oxon | 23.86 | 289.2 -> | 153.1 | 73 Propaphos | 35.85 | 305.2 -> | 221 | 112 Trifluralin | 46.81 | 336.3 -> | 236 |
| 35 | MPP Oxon | 24.17 | 263.2 -> | 231 | 74 Anilofos | 35.92 | 368.1 -> | 198.9 | 113 Cypermetryn | 47.51 | 433.1 -> | 416.1 |
| 36 | Methidathion | 24.55 | 320.2 -> | 145 | 75 Edifenphos | 36.03 | 311.1 -> | 282.9 | 114 cis-Permetryn | 48.37 | 408 -> | 355 |
| 37 | Fenobucarb | 25.28 | 208.2 -> | 94.9 | 76 Pyrazoxyfen | 36.24 | 403.1 -> | 91.1 | 115 trans-Permetryn | 48.86 | 408 -> | 355 |
| 38 | Siduron | 25.89 | 233 -> | 137 | 77 Phenthoate | 36.79 | 321.1 -> | 247 | 116 Ethofenprox | 49.03 | 394.3 -> | 177.1 |
| 39 | ENP Oxon | 26.2 | 308.1 -> | 93.9 | 78 Diazinon | 37.91 | 305.2 -> | 169.1 | | | | |

Negative

| No. | Compound | R.T.(min) | Transition | |
|-----|-------------------|-----------|------------|-------|
| 1 | Fosetyl | 2.17 | 109 -> | 81 |
| 2 | Asulam | 2.32 | 228.9 -> | 132.9 |
| 3 | Darapon | 4.11 | 140.8 -> | 96.7 |
| 4 | Bentazon | 8.13 | 238.9 -> | 131.9 |
| 5 | 2,4-D | 12.6 | 218.9 -> | 161 |
| 6 | Triclopyr | 14.15 | 253.9 -> | 195.9 |
| 7 | MCP | 15.28 | 213 -> | 140.9 |
| 8 | Cyanophos | 22.55 | 227.8 -> | 117.8 |
| 9 | Etyprol | 26.7 | 394.9 -> | 329.7 |
| 10 | Propyzamide | 28.1 | 253.8 -> | 227.8 |
| 11 | Procymidone | 28.11 | 316 -> | 255.6 |
| 12 | Chlorothalonil | 28.64 | 244.8 -> | 174.7 |
| 13 | Fthalide | 30.29 | 270.8 -> | 243 |
| 14 | Fipronil | 34.16 | 434.9 -> | 329.8 |
| 15 | Benzoepin sulfate | 37.52 | 420.8 -> | 96.6 |