

**National Referral Laboratory**  
**ICAR-National Research Centre for Grapes, Manjari farm, Pune 412 307**

**TARGET LIST OF ANALYTES (PT ID: NRL / PT-FV /2025/Apple-1)**

| SR.NO. | NAME OF CHEMICALS/ PESTICIDES                                                                    | PT RANGE (mg/kg) |
|--------|--------------------------------------------------------------------------------------------------|------------------|
| 1.     | 4-Bromo-2-chlorophenol                                                                           | 0.02-0.250       |
| 2.     | 4-Chloro-3-methylphenol                                                                          | 0.02-0.250       |
| 3.     | Abamectin                                                                                        | 0.02-0.250       |
| 4.     | Acephate                                                                                         | 0.02-0.250       |
| 5.     | Acetamiprid                                                                                      | 0.02-0.250       |
| 6.     | Afidopyropen                                                                                     | 0.02-0.250       |
| 7.     | Alachlor                                                                                         | 0.02-0.250       |
| 8.     | Aldicarb                                                                                         | 0.02-0.250       |
| 9.     | Aldrin (only parent Aldrin)                                                                      | 0.02-0.250       |
| 10.    | Dieldrin                                                                                         | 0.02-0.250       |
| 11.    | Allethrin and Bioallethrin                                                                       | 0.02-0.250       |
| 12.    | Ametoctradin                                                                                     | 0.02-0.250       |
| 13.    | Ametryn                                                                                          | 0.02-0.250       |
| 14.    | Amisulbrom                                                                                       | 0.02-0.250       |
| 15.    | Anilofos                                                                                         | 0.02-0.250       |
| 16.    | Atrazine                                                                                         | 0.02-0.250       |
| 17.    | Azimsulfuron                                                                                     | 0.02-0.250       |
| 18.    | Azoxystrobin                                                                                     | 0.02-0.250       |
| 19.    | Benalaxyl including other mixtures of constituent isomers including Benalaxyl-M (sum of isomers) | 0.02-0.250       |
| 20.    | Bendiocarb                                                                                       | 0.02-0.250       |
| 21.    | Benomyl (see carbendazim)                                                                        | 0.02-0.250       |
| 22.    | Bensulfuron-methyl                                                                               | 0.02-0.250       |
| 23.    | Bifenazate (only parent Bifenazate)                                                              | 0.02-0.250       |
| 24.    | Bifenazate-diazene                                                                               | 0.02-0.250       |
| 25.    | Bifenthrin (sum of isomers)                                                                      | 0.02-0.250       |
| 26.    | Bispyribac                                                                                       | 0.02-0.250       |
| 27.    | Bitertanol (sum of isomers)                                                                      | 0.02-0.250       |
| 28.    | Boscalid                                                                                         | 0.02-0.250       |
| 29.    | Bupirimate                                                                                       | 0.02-0.250       |
| 30.    | Buprofezin                                                                                       | 0.02-0.250       |
| 31.    | Butachlor                                                                                        | 0.02-0.250       |
| 32.    | Captafol                                                                                         | 0.02-0.250       |
| 33.    | Captan (only parent Captan)                                                                      | 0.02-0.250       |
| 34.    | Tetrahydrophthalimide                                                                            | 0.02-0.250       |
| 35.    | Carbaryl                                                                                         | 0.02-0.250       |
| 36.    | Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)                | 0.02-0.250       |
| 37.    | Carbofuran (only parent Carbofuran)                                                              | 0.02-0.250       |
| 38.    | Carbosulfan                                                                                      | 0.02-0.250       |
| 39.    | Furathiocarb                                                                                     | 0.02-0.250       |
| 40.    | Benfuracarb                                                                                      | 0.02-0.250       |
| 41.    | 3-hydroxy carbofuran                                                                             | 0.02-0.250       |
| 42.    | Carboxin (only parent Carboxin)                                                                  | 0.02-0.250       |
| 43.    | Carboxin sulfoxide                                                                               | 0.02-0.250       |

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|--------|------------------------------------------------------------------------------------------------------|------------------|
| 44.    | Oxycarboxin (carboxin sulfone)                                                                       | 0.02-0.250       |
| 45.    | Carfentrazone-ethyl (sum of carfentrazone-ethyl and carfentrazone, expressed as carfentrazone-ethyl) | 0.02-0.250       |
| 46.    | Carpropamid                                                                                          | 0.02-0.250       |
| 47.    | Cartap hydrochloride                                                                                 | 0.02-0.250       |
| 48.    | Chlorantraniliprole                                                                                  | 0.02-0.250       |
| 49.    | Chlordane (cis)                                                                                      | 0.02-0.250       |
| 50.    | Chlordane (trans)                                                                                    | 0.02-0.250       |
| 51.    | Chlorfenapyr                                                                                         | 0.02-0.250       |
| 52.    | Chlorfenvinphos                                                                                      | 0.02-0.250       |
| 53.    | Chlorfluazuron                                                                                       | 0.02-0.250       |
| 54.    | Chlorimuron-ethyl                                                                                    | 0.02-0.250       |
| 55.    | Chlorothalonil                                                                                       | 0.02-0.250       |
| 56.    | Chlorpropham                                                                                         | 0.02-0.250       |
| 57.    | Chlorpyrifos                                                                                         | 0.02-0.250       |
| 58.    | Chlorpyrifos-methyl                                                                                  | 0.02-0.250       |
| 59.    | Chromafenozide                                                                                       | 0.02-0.250       |
| 60.    | Cinmethylen                                                                                          | 0.02-0.250       |
| 61.    | Clethodim (only parent Clethodim)                                                                    | 0.02-0.250       |
| 62.    | Sethoxydim                                                                                           | 0.02-0.250       |
| 63.    | Clofentezine                                                                                         | 0.02-0.250       |
| 64.    | Clomazone                                                                                            | 0.02-0.250       |
| 65.    | Clothianidin                                                                                         | 0.02-0.250       |
| 66.    | Coumachlor                                                                                           | 0.02-0.250       |
| 67.    | Coumatetralyl                                                                                        | 0.02-0.250       |
| 68.    | Cyantraniliprole                                                                                     | 0.02-0.250       |
| 69.    | Cyazofamid                                                                                           | 0.02-0.250       |
| 70.    | Cyenopyrofen                                                                                         | 0.02-0.250       |
| 71.    | Cyflufenamid (sum of cyflufenamid (Z-isomer) and its E-isomer, expressed as cyflufenamid)            | 0.02-0.250       |
| 72.    | Cyflumetofen                                                                                         | 0.02-0.250       |
| 73.    | Cyfluthrin (including other mixtures of constituent isomers sum of isomers)                          | 0.02-0.250       |
| 74.    | Cyhalofop-butyl                                                                                      | 0.02-0.250       |
| 75.    | Cymoxanil                                                                                            | 0.02-0.250       |
| 76.    | Cypermethrin (cypermethrin including other mixtures of constituent isomers (sum of isomers))         | 0.02-0.250       |
| 77.    | Cyproconazole                                                                                        | 0.02-0.250       |
| 78.    | Cyprodinil                                                                                           | 0.02-0.250       |
| 79.    | p,p'-DDT                                                                                             | 0.02-0.250       |
| 80.    | o,p'-DDT                                                                                             | 0.02-0.250       |
| 81.    | p,p'-DDE                                                                                             | 0.02-0.250       |
| 82.    | p,p'-TDE (DDD)                                                                                       | 0.02-0.250       |
| 83.    | Deltamethrin (cis-deltamethrin)                                                                      | 0.02-0.250       |
| 84.    | Diafenthiuron                                                                                        | 0.02-0.250       |
| 85.    | Diazinon                                                                                             | 0.02-0.250       |

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|--------|----------------------------------------------------------------------------------------------------------------------|------------------|
| 86.    | Dichlorvos                                                                                                           | 0.02-0.250       |
| 87.    | Diclofop (sum diclofop-methyl and diclofop acid expressed as diclofop-methyl                                         | 0.02-0.250       |
| 88.    | Diclosulam                                                                                                           | 0.02-0.250       |
| 89.    | Dicofol (p,p)                                                                                                        | 0.02-0.250       |
| 90.    | Dicofol (o,p)                                                                                                        | 0.02-0.250       |
| 91.    | Dieldrin (only Dieldrin)                                                                                             | 0.02-0.250       |
| 92.    | Difenoconazole                                                                                                       | 0.02-0.250       |
| 93.    | Diiflubenzuron                                                                                                       | 0.02-0.250       |
| 94.    | Dimethoate                                                                                                           | 0.02-0.250       |
| 95.    | Dimethomorph (sum of isomers)                                                                                        | 0.02-0.250       |
| 96.    | Dinocap                                                                                                              | 0.02-0.250       |
| 97.    | Dinotefuran                                                                                                          | 0.02-0.250       |
| 98.    | Dithianon                                                                                                            | 0.02-0.250       |
| 99.    | Diuron                                                                                                               | 0.02-0.250       |
| 100.   | Edifenphos                                                                                                           | 0.02-0.250       |
| 101.   | Emamectin benzoate                                                                                                   | 0.02-0.250       |
| 102.   | Endosulphan alpha                                                                                                    | 0.02-0.250       |
| 103.   | Endosulphan beta                                                                                                     | 0.02-0.250       |
| 104.   | Endosulphan sulphate                                                                                                 | 0.02-0.250       |
| 105.   | Endrin                                                                                                               | 0.02-0.250       |
| 106.   | Epoxiconazole                                                                                                        | 0.02-0.250       |
| 107.   | Ethion                                                                                                               | 0.02-0.250       |
| 108.   | Ethiprole                                                                                                            | 0.02-0.250       |
| 109.   | Ethofenprox (Etofenprox)                                                                                             | 0.02-0.250       |
| 110.   | Ethoxysulfuron                                                                                                       | 0.02-0.250       |
| 111.   | Etoxazole                                                                                                            | 0.02-0.250       |
| 112.   | Etrimfos                                                                                                             | 0.02-0.250       |
| 113.   | Famoxadone                                                                                                           | 0.02-0.250       |
| 114.   | Fenamidone                                                                                                           | 0.02-0.250       |
| 115.   | Fenarimol                                                                                                            | 0.02-0.250       |
| 116.   | Fenazaquin                                                                                                           | 0.02-0.250       |
| 117.   | Fenhexamid                                                                                                           | 0.02-0.250       |
| 118.   | Fenitrothion                                                                                                         | 0.02-0.250       |
| 119.   | Fenobucarb                                                                                                           | 0.02-0.250       |
| 120.   | Fenoxaprop-p                                                                                                         | 0.02-0.250       |
| 121.   | Fenpropathrin                                                                                                        | 0.02-0.250       |
| 122.   | Fenpyroximate                                                                                                        | 0.02-0.250       |
| 123.   | Fenthion (fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent)                        | 0.02-0.250       |
| 124.   | Fenvalerate                                                                                                          | 0.02-0.250       |
| 125.   | Fipronil (Sum of fipronil+ sulfone metabolite expressed as fipronil)                                                 | 0.02-0.250       |
| 126.   | Flonicamid (Sum of Flonicamd, TNFG and TNFA expressed as a Flonicamid)                                               | 0.02-0.250       |
| 127.   | Fluazifop-P (sum of all the constituent isomers of fluazifop, its esters and its conjugates, expressed as fluazifop) | 0.02-0.250       |

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|--------|------------------------------------------------------------------|------------------|
| 128.   | Flubendiamide                                                    | 0.02-0.250       |
| 129.   | Flucetosulfuron                                                  | 0.02-0.250       |
| 130.   | Fluchloralin                                                     | 0.02-0.250       |
| 131.   | Fluensulfone                                                     | 0.02-0.250       |
| 132.   | Flufenacet                                                       | 0.02-0.250       |
| 133.   | Flufenoxuron                                                     | 0.02-0.250       |
| 134.   | Flufenzin                                                        | 0.02-0.250       |
| 135.   | Flumioxazine                                                     | 0.02-0.250       |
| 136.   | Fluopicolide                                                     | 0.02-0.250       |
| 137.   | Fluopyram                                                        | 0.02-0.250       |
| 138.   | Flupyradifurone                                                  | 0.02-0.250       |
| 139.   | Flusilazole                                                      | 0.02-0.250       |
| 140.   | Fluthiacet-methyl                                                | 0.02-0.250       |
| 141.   | Fluxapyroxad                                                     | 0.02-0.250       |
| 142.   | Fomesafen                                                        | 0.02-0.250       |
| 143.   | Forchlorfenuron (CPPU)                                           | 0.02-0.250       |
| 144.   | Halosulfuron methyl                                              | 0.02-0.250       |
| 145.   | Haloxyfop                                                        | 0.02-0.250       |
| 146.   | Heptachlor (only parent Heptachlor)                              | 0.02-0.250       |
| 147.   | Heptachlor epoxide                                               | 0.02-0.250       |
| 148.   | Hexachlorocyclohexane (HCH), alpha-isomer                        | 0.02-0.250       |
| 149.   | Hexachlorocyclohexane (HCH), beta-isomer                         | 0.02-0.250       |
| 150.   | Hexaconazole                                                     | 0.02-0.250       |
| 151.   | Hexazinone                                                       | 0.02-0.250       |
| 152.   | Hexythiazox                                                      | 0.02-0.250       |
| 153.   | Imazamox                                                         | 0.02-0.250       |
| 154.   | Imazethapyr                                                      | 0.02-0.250       |
| 155.   | Imidacloprid                                                     | 0.02-0.250       |
| 156.   | Indaziflam                                                       | 0.02-0.250       |
| 157.   | Indoxacarb (sum of indoxacarb and its R enantiomer)              | 0.02-0.250       |
| 158.   | Iodosulfuron-methyl                                              | 0.02-0.250       |
| 159.   | Iprobenphos                                                      | 0.02-0.250       |
| 160.   | Iprodione                                                        | 0.02-0.250       |
| 161.   | Iprovalicarb                                                     | 0.02-0.250       |
| 162.   | Isoprothiolane                                                   | 0.02-0.250       |
| 163.   | Isoproturon                                                      | 0.02-0.250       |
| 164.   | Ivermectin                                                       | 0.02-0.250       |
| 165.   | Kresoxim methyl                                                  | 0.02-0.250       |
| 166.   | Lambda-cyhalothrin                                               | 0.02-0.250       |
| 167.   | Lindane (Gamma-isomer of hexachlorocyclohexane (HCH))            | 0.02-0.250       |
| 168.   | Linuron                                                          | 0.02-0.250       |
| 169.   | Lufenuron                                                        | 0.02-0.250       |
| 170.   | Malathion (sum of malathion and malaoxon expressed as malathion) | 0.02-0.250       |
| 171.   | Mandipropamid                                                    | 0.02-0.250       |

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|--------|--------------------------------------------------------------------------------------------------|------------------|
| 172.   | Metaflumizone (sum of E- and Z-isomers)                                                          | 0.02-0.250       |
| 173.   | Metalaxyl (only parent Metalaxyl)                                                                | 0.02-0.250       |
| 174.   | Metamifop                                                                                        | 0.02-0.250       |
| 175.   | Metamitron                                                                                       | 0.02-0.250       |
| 176.   | Methabenzthiazuron                                                                               | 0.02-0.250       |
| 177.   | Methamidophos                                                                                    | 0.02-0.250       |
| 178.   | Methomyl                                                                                         | 0.02-0.250       |
| 179.   | Methoxyfenazide                                                                                  | 0.02-0.250       |
| 180.   | S-Metolachlor                                                                                    | 0.02-0.250       |
| 181.   | Metrafenone                                                                                      | 0.02-0.250       |
| 182.   | Metribuzin                                                                                       | 0.02-0.250       |
| 183.   | Monocrotophos                                                                                    | 0.02-0.250       |
| 184.   | Myclobutanil                                                                                     | 0.02-0.250       |
| 185.   | Nereistoxin                                                                                      | 0.02-0.250       |
| 186.   | Nitenpyram                                                                                       | 0.02-0.250       |
| 187.   | Novaluron                                                                                        | 0.02-0.250       |
| 188.   | Omethoate                                                                                        | 0.02-0.250       |
| 189.   | Orthosulfamuron                                                                                  | 0.02-0.250       |
| 190.   | Oxadiargyl                                                                                       | 0.02-0.250       |
| 191.   | Oxadiazon                                                                                        | 0.02-0.250       |
| 192.   | Oxathiapiprolin                                                                                  | 0.02-0.250       |
| 193.   | Oxycarboxin                                                                                      | 0.02-0.250       |
| 194.   | Oxydemeton- methyl                                                                               | 0.02-0.250       |
| 195.   | Oxyfluorfen                                                                                      | 0.02-0.250       |
| 196.   | Paclobutrazol                                                                                    | 0.02-0.250       |
| 197.   | Parathion - methyl (sum of Parathion-methyl and paraoxon- methyl expressed as Parathion -methyl) | 0.02-0.250       |
| 198.   | Parathion ethyl                                                                                  | 0.02-0.250       |
| 199.   | Penconazole                                                                                      | 0.02-0.250       |
| 200.   | Pencycuron                                                                                       | 0.02-0.250       |
| 201.   | Pendimethalin                                                                                    | 0.02-0.250       |
| 202.   | Penoxsulam                                                                                       | 0.02-0.250       |
| 203.   | Permethrin (sum of isomers)                                                                      | 0.02-0.250       |
| 204.   | Phenthoate                                                                                       | 0.02-0.250       |
| 205.   | Phorate (sum of phorate, its oxygen analogue and their sulfones expressed as phorate)            | 0.02-0.250       |
| 206.   | Phosalone                                                                                        | 0.02-0.250       |
| 207.   | Phosphamidon                                                                                     | 0.02-0.250       |
| 208.   | Picoxystrobin                                                                                    | 0.02-0.250       |
| 209.   | Pinoxaden                                                                                        | 0.02-0.250       |
| 210.   | Pirimiphos-methyl                                                                                | 0.02-0.250       |
| 211.   | Pretilachlor                                                                                     | 0.02-0.250       |
| 212.   | Profenophos                                                                                      | 0.02-0.250       |
| 213.   | Propamocarb                                                                                      | 0.02-0.250       |
| 214.   | Propanil                                                                                         | 0.02-0.250       |
| 215.   | Propargite                                                                                       | 0.02-0.250       |

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|--------|----------------------------------------------------------------------------------|------------------|
| 216.   | Propetamphos                                                                     | 0.02-0.250       |
| 217.   | Propiconazole                                                                    | 0.02-0.250       |
| 218.   | Propoxur                                                                         | 0.02-0.250       |
| 219.   | Pymetrozine                                                                      | 0.02-0.250       |
| 220.   | Pyraclostrobin                                                                   | 0.02-0.250       |
| 221.   | Pyrazosulfuron-ethyl                                                             | 0.02-0.250       |
| 222.   | Pyridaben                                                                        | 0.02-0.250       |
| 223.   | Pyridalyl                                                                        | 0.02-0.250       |
| 224.   | Pyriproxyfen                                                                     | 0.02-0.250       |
| 225.   | Pyrithiobac-sodium                                                               | 0.02-0.250       |
| 226.   | Pyroxasulfone                                                                    | 0.02-0.250       |
| 227.   | Quinalphos                                                                       | 0.02-0.250       |
| 228.   | Quinoxifen                                                                       | 0.02-0.250       |
| 229.   | Simazine                                                                         | 0.02-0.250       |
| 230.   | Spinetoram                                                                       | 0.02-0.250       |
| 231.   | Spinosyn A                                                                       | 0.02-0.250       |
| 232.   | Spinosyn D                                                                       | 0.02-0.250       |
| 233.   | Spirodiclofen                                                                    | 0.02-0.250       |
| 234.   | Spiromesifen                                                                     | 0.02-0.250       |
| 235.   | Spirotetramat and spirotetramat-enol<br>(sum of), expressed as spirotetramat (R) | 0.02-0.250       |
| 236.   | Spirotetramat-enol                                                               | 0.02-0.250       |
| 237.   | Sulfentrazone                                                                    | 0.02-0.250       |
| 238.   | Sulfosulfuron                                                                    | 0.02-0.250       |
| 239.   | Sulfoxaflor (sum of isomers)                                                     | 0.02-0.250       |
| 240.   | tau-Fluvalinate                                                                  | 0.02-0.250       |
| 241.   | Tebuconazole                                                                     | 0.02-0.250       |
| 242.   | Tembotrione                                                                      | 0.02-0.250       |
| 243.   | Temephos                                                                         | 0.02-0.250       |
| 244.   | Tetraconazole                                                                    | 0.02-0.250       |
| 245.   | Thiabendazole                                                                    | 0.02-0.250       |
| 246.   | Thiacloprid                                                                      | 0.02-0.250       |
| 247.   | Thiamethoxam                                                                     | 0.02-0.250       |
| 248.   | Thifluzamide                                                                     | 0.02-0.250       |
| 249.   | Thiobencarb                                                                      | 0.02-0.250       |
| 250.   | Thiocyclam                                                                       | 0.02-0.250       |
| 251.   | Thiodicarb                                                                       | 0.02-0.250       |
| 252.   | Thiometon                                                                        | 0.02-0.250       |
| 253.   | Thiophanate-methyl                                                               | 0.02-0.250       |
| 254.   | Tolfenpyrad                                                                      | 0.02-0.250       |
| 255.   | Topramezone                                                                      | 0.02-0.250       |
| 256.   | Transfluthrin                                                                    | 0.02-0.250       |
| 257.   | Triadimefon                                                                      | 0.02-0.250       |
| 258.   | Triadimenol                                                                      | 0.02-0.250       |
| 259.   | Triafamone                                                                       | 0.02-0.250       |
| 260.   | Tri-allate                                                                       | 0.02-0.250       |
| 261.   | Triasulfuron                                                                     | 0.02-0.250       |
| 262.   | Triazophos                                                                       | 0.02-0.250       |
| 263.   | Trichlorfon                                                                      | 0.02-0.250       |

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|--------|-------------------------------|------------------|
| 264.   | Tricyclazole                  | 0.02-0.250       |
| 265.   | Tridemorph                    | 0.02-0.250       |
| 266.   | Trifloxystrobin               | 0.02-0.250       |
| 267.   | Triflumezopyrim               | 0.02-0.250       |
| 268.   | Triflumizole                  | 0.02-0.250       |
| 269.   | Trifluralin                   | 0.02-0.250       |
| 270.   | Validamycin                   | 0.02-0.250       |
| 271.   | Zoxamide                      | 0.02-0.250       |

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