

## Supplementary material 1. List of analyzed pesticides

Acrinathrin (2 isomer), Alachlor Aldrin, Ametoctradin, Anilofos, Azaconazole, Benfuresate, BHC(alpha, beta, delta), BifenoX, Bifenthrin, Bromobutide, Bromopropylate, Butachlor, Butafenacil, Carbophenothion, Chlorantraniliprole, Chlordane (2 isomer), Chlorfenapyr, Chlorfenvinphos (2 isomer), Chlorfluazuron, Chlorobenzilate, Chlorpropham, Chlorpyrifos-methyl, Cyfluthrin (4 isomers), Cyhalothrin 1, Cypermethrin (4 isomers), Cyprodinil, Deltamethrin (tralomethrin), Diclofop-methyl, Dicloran, Dicofol, Dieldrin, Difenoconazole (2 isomer), Dimethoate, Dimethylvinphos, Diphenylamine, Disulfoton, Endosulfan(alpha), Endosulfan(beta), Endosulfan-sulfate, Endrin, EPN, Epoxiconazole, Ethalfuralin, Ethion, Etridiazole, Fenclorim, Fenitrothion, Fenothiocarb, Fenoxanil, Fenpropathrin, Fenthion, Fenvalerate (2 isomer), Fipronil, Flucythrinate (2 isomer), Flumioxazine, Fluopyram, Fonofos, Fthalide, Halfenprox, Heptachlor, Heptachlor-epoxide, Imibenconazole, Indanofan, Indoxacarb, Iprodione, Isazofos, Isofenphos, Mecarbam, Methidathion, Metolachlor, Metribuzin, Lindane(gamma-BHC), Oxyfluorfen, o,p-DDT, p,p-DDD, P,P-DDE, p,p-DDT, Parathion-ethyl, Parathion-methyl, Pendimethalin, Penthiopyrad, Permethrin (2 isomer), Phenothrin (2 isomer), Phorate, Phosalone, Picoxystrobin, Piperonyl butoxide, Pirimiphos-ethyl, Pretilachlor, Prochloraz, Procymidone, Promecarb, Prometryn, Propachlor, Propazine, Propiconazole (2 isomer), Propisochlor, Propyzamide, Prothiofos, Pyridalyl, Quintozene, Silafluofen, Simazine, Simeconazole, Simetryn, Spiromesifen, Tebupirimfos, Tefluthrin, Terbufos, Terbutryn, Tetradifon, Thifluzamide, Tolclofos-methyl (TPP), Triadimenol, Tri-allate, Trifluralin, Vinclozolin, Zoxamide, Abamectin BI, Acephate, Acetamiprid, Aldicarb, Amisulbrom, Azimsulfuron, Azinphos-methyl, Azoxystrobin, Bendiocarb, Bensulfuron-methyl, Benthiavalicarb-isopropyl, Benzobicyclon, Benzoximate, Bitertanol, Boscalid, Bromacil, Buprofezin, Cadusafos, Cafenstrole, Carbaryl, Carbendazim, Carbofuran, Carboxin, Carfentrazone-ethyl, Carpropamide, Chlorpyrifos, Chlorsulfuron, Chromafenozide, Clethodim, Clofentezine, Clomazone, Clothianidin, Cyazofamid, Cyclosulfamuron, Cyflufenamid, Cyhalofop-butyl, Cymoxanil, Cyproconazole(I, II), Dichlovos(DDVP), Demeton-S-Methyl, Diazinon, Diethofencarb, Diflubenzuron, Dimepiperate, Dimethametryn, Dimethenamid, Dimethomorph(E, Z), Diniconazole, Dinotefuran, Diphenamid, Dithiopyr, Diuron, Daimuron, Edifenphos, Esprocarb, Ethaboxam, Ethiofencarb, Etofenprox, Ethoprophos, Ethoxysulfuron, Etoxazole, Etrimfos, Famoxadone, Fenamiphos, Fenarimol, Fenazaquin, Fenbuconazole, Fenhexamid, Fenobucarb, Fenoxaprop-ethyl, Fenoxycarb, Fenpyroximate, Fentrazamide, Ferimzone(E, Z), Flonicamid, Fluacrypyrim, Flubendiamide, Flucetosulfuron, Fludioxonil, Flufenacet, Flufenoxuron, Fluopicolide, Fluxapyroxad, Fluquinconazole, Flusilazole, Flutolanil, Forchlorfenuron, Fosthiazate, Furathiocarb, Gibberellic acid, Halosulfuron-methyl, Haloxyfop, Hexaconazole, Hexaflumuron, Hexazinone, Hexythiazox, Imazalil, Imazosulfuron, Imicyafos, Imidacloprid, Inabentfide, Iprobenfos, Iprovalicarb, Isoprocarb, Isoprothiolane, Isopyrazam, Kresoxim-methyl, Linuron, Lufenuron, Malathion, Mandipropamid, Mefenacet, Mepanipyrim, Mepanipyrim, Mepronil, Metalaxyl, Metamifop, Metazosulfuron, Metconazole, Methabenzthiazuron, Methiocarb, Methomyl, Methoxyfenozide, Metobromuron, Metolcarb, Metrafenone, Mevinphos, Milbemectin A3, Milbemectin A4, Molinate, Monocrotophos, Myclobutanil, Napropamide, Nicosulfuron, Novaluron, Nuarimol, Ofurace, Omethoate, Oxadiazon, Oxadixyl, Oxamyl, Oxaziclomefone, Paclobutrazole, Penconazole, Pencycuron, Penoxsulam, Pentoxazone, Phenthoate, Phosphamidone, Phoxim, Piperophos, Pirimicarb, Pirimiphos-methyl, Probenazole, Profenofos, Propamocarb, Propanil, Propaquizafop, Propoxur, Pyraclofos, Pyraclostrobin, Pyrazolate, Pyrazophos, Pyribenzoxim, Pyributicarb, Pyrida ben, Pyridaphenthion, Pyrifluquinazon, Pyriftalid, Pyrimethanil, Pyrimidifen, Pyriminobac-methyl(E), Pyriminobac-methyl(Z), Pyrimisulfan, Pyriproxyfen, Pyroquilon, Quinalphos, Quinmerac, Quinoclamine, Quizalofop-ethyl, Saflufenacil, Sethoxydim, Spinetoram(j), Spinetoram(L), Spirodiclofen, Spirotetramat, Sulfoxaflo, Tebuconazole, Tebufenozide, Tebufenpyrad, Teflubenzuron, Terbutylazine, Tetraconazole, Thenylchlor, Thiabendazole, Thiacloprid, Thiamethoxam, Thiazopyr, Thidiazuron, Thifensulfuron-methyl, Thiobencarb, Thiodicarb, Tiadinil, Triadimefon, Triazophos, Tricyclazole, Trifloxystrobin, Triflumizole, Triflumuron, Uniconazole, Vamidothion