# Hellenic Accreditation System

Annex F1/A29 to the Certificate No **1079**-6

## SCOPE of ACCREDITATION

of the

**Analytical Laboratory**

of

**ANALYSIS Single-Member Societe Anonyme for Laboratory Testing of Food, Beverages and Water**

in Ioannina

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| **Chemical Testing** | | |
| 1. Food of Plant and Animal Origin<br><br>Commodity groups:<br>Fruits and vegetables with high water content, olives, oils and other fruits and vegetables with high fat content, legumes, cereals and their products, honey, jams, dried fruits with high sugar content, products of animal origin (eggs, milk, meat, seafood, etc.) | Determination in **flexible scope** of pesticide residues of the categories:<br><br>organophosphates, organochlorines, pyrethroids, triazines, triazoles, dinitroanilines, amides, bendimidazoles, carbamates, aryloxy-alcanoic acids, benzoyl-ureas, sulfonyl-ureas, phenylureas, strobylurines, neonicotinoids, etc<br><br>As thoroughly described in the Accredited Substances List of the Pesticide Residues Flexible Scope (Document E-25.01.01):<br><br>http://analysis-laboratories.gr/flexible/ | In house methods based on doc. SANTE/12682/2019 using LC-MS/MS and GC-MS/MS techniques<br><br>Lab code: ΔΠ-25.01 |
| 2.Fruits and vegetables | Determination of nitrates | In house method UV-VIS<br><br>Lab code : XI-01 |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| | Determination of residues of bromide pesticides | In house methods based on EN ISO 13191-02 using GC-MS<br><br>Lab code: XI-02 |
| | Determination of residues of dithiocarbamate pesticides | In house method UV-VIS<br><br>Lab code: XI-03 |
| 3. Fruits and Vegetables with high water content, oily fruits and products with high oil content and intermediate water content as defined by SANTE/12682/2019 | Determination of Dithiocarbamate Residues in Foods of Plant Origin involving Cleavage into Carbon Disulfide, Partitioning into Isooctane and Analysis by GC-MS | In house GC-MS method based on *Analysis of Dithiocarbamate residue in Foods of Plant Origin involving Cleavvage into Carbon Disulfide, Partitioning in isooctane and Determinative Analysis by GC-ECD, (Version 2), Single residual Methods, EURL-SRM, CVUA Stuttgart* και SANTE/12682/2019<br><br>Lab-code: XI-90 |
| 4. Fruits and Vegetables with high water content (according to SANCO/12571/2013) | Determination of *Fosetyl-Al* and *Phosphonic Acid* residues | In house LC-MS/MS method based on QuPPE 8.1 and SANTE/11945/2015<br><br>Lab-code: XI-66 |
| 5. Fruits and Vegetables with high water content (according to SANCO/12571/2013) | Determination of *Chlormequat* residues | In house LC-MS/MS method based on QuPPE 8.1 and SANTE/11945/2015<br><br>Lab-code: XI-68 |
| 6. Fruits and Vegetables with high water content (according to SANTE/12682/2019) | Determination of *Chlorate* and *Perchlorate* | In house LC-MS/MS method based on QuPPE 11 και SANTE/12682/2019<br><br>Lab-code: XI-86 |
| 7. Fruits and Vegetables with high water content (according to SANTE/12682/2019) | Determination of *ethephon* residues | In house LC-MS/MS method based on QuPPE 11 και SANTE/12682/2019<br><br>Lab-code: XI-84 |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| 8. Fruits and Vegetables with high water content (according to SANTE lat. ed.) | Determination of *Glyphosate* | In house LC-MS/MS method based on QuPPE 12.1 and SANTE lat. Ed.<br><br>Lab-code: XI-88 |
| 9. Fruits and Vegetables with high water content (according to SANTE/12682/2019) | Analysis of Acidic Pesticides Entailing Conjugates and/or Esters in their Residue Definition (2,4-D, Dichlorprop, Fluazifop, Haloxyfop**,** MCPA, MCPB, Quizalofop) | In house LC-MS/MS method based on *Analysis of Acidic Pesticides Entailing Conjugates and/or Esters in their Residue Definitions, Version 1, Single residual Methods, EURL-SRM, CVUA Stuttgart* και SANTE/12682/2019<br><br>Lab-code: XI-85 |
| 10. Honey | Acaricides (Amitraz and its metabolites, Coumaphos, tau-Fluvalinate (sum of isomers), Cymiazole) | In house LC-MS/MS method<br><br>Lab-code: XI-87 |
| 11. Bee wax | Acaricides (Amitraz and its metabolites, Coumaphos, tau-Fluvalinate (sum of isomers), Cymiazole) | In house LC-MS/MS and GC-MS/MS method<br><br>Lab-code: XI-93 |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| 12. Olive Leaves | Determination of 126 pesticides residues:<br><br>Acephate, Acetamiprid, Aldicarb sulfoxide, Atrazin, Azoxystrobine, Benalaxyl, Bitertanol, Boscalid, Bupirimate, Buprofezin, Cadusafos, Carbaryl, Carbendazim, Carbofuran, Carboxim, Chinomethionate, Chlorfenviphos, Chlorpropham, Chlorpyriphos methyl, Clothianidin, Coumaphos, Cyproconazole, Cyprodinil, Demeton-S-methyl sulfon, Demeton-S-methyl, Diazinon, Dichlorvos, Dimethoate, Dimethomorph, Diniconazol, Diphenylamin, Dithiofencarb, Diuron, Emamectin, Epoxiconazole, Ethiofencarb, Ethion, Ethoprophos, Etrimphos, Fenamidone, Fenamiphos, Fenarimol, Fenbuconazole, Fenhexamid, Fenoxaprop-P-ethyl, Fenoxycarb, Fluaziphos-P-butyl, Flufenacet, Fluometuron, Fluquinconazole, Flusilazole, Flutriafol, Forchlorfenuron, Formetanate, Heptenophos, Hexaconazole, Imazalil, Imidacloprid, Indoxacarb, Iprovalicarb, Isofenphos, Lenacil, Linuron, Malaoxon, Malathion, Mandipropamid, Mecarbam, Mepanipyrim, Mepronil, Metalaxyl + M, Metazachlor, Methidathion, Methomyl, Metolachlor, Metrafenone, Metribuzine, Mevinphos, Monocrotophos, Monolinuron, Monuron, Myclobutanil, Nicosulfuron, Nuarimol, Omethoate, Oxamyl, Oxydemeton-methyl, Paclobutrazole, Penconazole, Pencycuron, Phenmedipham, Phenthoate, Phosphamidon, Piperonyl butoxide, Pirimicarb, Pirimiphos Ethyl, Pirimiphos methyl, Prochloraz, Profenofos, Propachlor, Propamocarb, Propiconazole, Propoxur, Propyzamid, Prosulfocarb, Pymetrozine, Pyraclostrobin, Pyriproxyfen, Quinalphos, Quinoxyfen, Simazin, Spiridiclofen, Spiroxamin, Tebuconazole, Tebufenpyrad, Temephos, Terbumeton, Terbuthylazine, Tetraconazole, Tolclofos methyl, Tolyfluanid, Triadimefon, Triadimenol, Triazophos, Trifloxystrobin, Zoxamid | In house method by liquid chromatography LC-MS/MS<br><br>Lab-code: XI-09 |
| 13. Cotton (fibres of untreated cotton) | Determination of residues of 22 pesticide residues:<br><br>Carfentrazone-ethyl, Chlorpyriphos, Chlorpyrifos-methyl, Clofentezine, Cyfluthrin, Cypermethrin-alpha, Deltamethrin, Esfenvalerate, Etoxazole, Fluazifop-P-butyl, tau-Fluvalinate, lamda-Cyhalothrin, Metalaxyl, Oxyfluorfen, Pendimethalin, Pirimicarb, Propyzamide, Pyriproxyfen, Quizalofop-ethyl, Tefluthrin, Tolclofos-methyl | In house residue method employing gas chromatography GC-MS/MS<br><br>Lab-code: XI-39 |
| 14.Wine | Determination of residues of 35 pesticide residues:<br><br>Acetamiprid, Alachlor, Aldicarb, Buprofezin, Carbaryl, Carbofuran, Carboxim, Cyproconazole, Diphenylamine, Dithiofencarb, Dodine, Ethiofencarb, Ethoprophos, Fenoxycarb, Fenpropimorph, Fenhexamide, Fluometuron, Imazalil, Imidacloprid, Linuron, Methiocarb, Metolachlor, Monolinuron, Monuron, Myclobutanil, Oxadixyl, Paclobutrazole, Penconazole, Propachlor, Propyzamid, Pyrimethanil, Spiroxamine, Terbuthylazine, Thiacloprid, Triadimenol | In house residue method by liquid chromatography LC-MS/MS<br><br>Lab-code: XI-18 |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| 15. Animal feed – products with high starch content and low water content - hay, dried alfalfa, straw, vetch | Determination of 80 pesticide residues:<br><br>Aldicarb, Acetochlor, Alachlor, Benfluralin, beta-BHC, Boscalid, Bromacil, Bromophos, Bromopropylate, Butafenacil, Chlorbenside, Chlorfenson, Chlorobenzilate, Chlorpropham, Chlorpyrifos, Chlorpyrifos-methyl, Cinidon-ethyl, cis-Chlorden, Clomazone, Cyfluthrin, Cyhalofop-butyl, Cyprodinil, Deltamethrin, Diazinon, Dichlofenthion, Diclobutrazol, Diclofop-methyl, Dicofol, Diflufenican, Epoxiconazole, Esfenvalerate, Ethalfluralin, Ethion, Ethofumesate, Ethoprophos, Etrimfos, Fenarimol, Fenchlorphos, Fenitrothion, Fluopyram, Fluquinconazole, Flutolanil, Fluvalinate, gamma-BHC (Lindane), Heptachlor, Hexachlorobenzene, Isofenphos-methyl, Jodfenphos, Kresoxim-methyl, Metalaxyl, Methacrifos, Metolachlor, o,p'-DDD, o,p'-DDT, Oxadiazon, p,p'-DDD, p,p'-DDE, p,p'-DDT, Pendimethalin, Pentachloroaniline, Phenthoate, Pirimicarb, Procymidone, Profenofos, Propachlor, Prothiofos, Pyridaben, Quinoxyfen, Spirodiclofen, Sulfotep, Tebufenpyrad, Terbutryn, Tetrachlorvinphos, Tetradifon, Tolylfluanid, trans-Chlordane, Tri-allate, Trifluralin, Vinclozolin, Zoxamide. | In house residue method by air chromatography GC-MS/MS PESTICIDES<br><br>Lab-code: XI-82-6 |
| 16. Soil | Determination of pesticide residues:<br><br>Acetamiprid, Alachlor, Azoxystrobin, Carbaryl, Carbofuran, Chloridazon, Cycloxydim, Cyproconazole, Dimethomorph, Fenoxaprop-P-ethyl, Fipronil, Fenoxycarb, Fluaziphos-P-butyl, Flufenacet, Flufenoxuron, Fluometuron, Imidacloprid, Indoxacarb, Isoxaflutole, Linuron, Lufenuron, Metalaxyl +M, Methiocarb, Metolachlor, Monolinuron, Myclobutanil, Propachlor, Quizalofop-ethyl, Propyzamid, Tebufenozide, Terbuthylazine, Thiodicarb, Thiophanate-methyl, Triadimenol, Trifloxystrobin | In house residue method by liquid chromatography LC-MS/MS<br><br>Lab-code: XI-19 |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| 17. Baby food | Determination of 169 pesticide residues:<br><br>Acephate, Acetamiprid, Aclonifen, Alachlor, Aldicarb sulfoxide, Aldicarb, Atrazin, Azimsulfuron, Azinphos-Ethyl, Azinphos-methyl, Azoxystrobine, Benalaxyl, Benthiavalicarb, Bitertanol, Boscalid, Bromacil, Bromuconazole, Bupirimate, Buprofezin, Cadusafos, Carbaryl, Carbendazim, Carbofuran, Carbosulfan, Carboxim, Chinomethionate, Chlorfenviphos, Chloridazon, Chlorpropham, Chlorpyriphos-Ethyl, Chlorpyriphos-Methyl, Clethodim, Clofentezin, Clothianidin, Coumaphos, Cyazofamid, Cycloxidim, Cyhalofop-butyl, Cymoxanil, Cyproconazole, Cyprodinil, Demeton-S-methyl sulfon, Demeton-S-methyl sulfoxide, Demeton-S-methyl, Diazinon, Difenoconazole, Dimethomorph, Diniconazol, Diphenylamin, Disulfoton, Dithiofencarb, Diuron, Emamectin, Epoxiconazole, Ethiofencarb, Ethion, Ethoprophos, Ethoxyquin, Etoxazole, Etridiazole, Etrimphos, Fenamidone, Fenamiphos, Fenarimol, Fenbuconazole, Fenhexamid, Fenoxaprop-P-ethyl, Fenoxycarb, Fenpyroximate, Fipronil, Fluaziphop-P-butyl, Flucytrinate, Flufenacet, Flufenoxuron, Fluometuron, Fluquinconazole, Flusilazole, Flutriafol, Forchlorfenuron, Formetanate, Fosthiazate, Haloxyfop-methyl, Heptenophos, Hexaconazole, Hexythiazox, Imazalil, Imidacloprid, Indoxacarb, Iprovalicarb, Isofenphos, Isofenphos-methyl, Isoxaflutole, Lenacil, Linuron, Lufenuron, Malaoxon, Malathion, Mandipropamid, Mecarbam Mepanipyrim Mepronil Metalaxyl+M, Metazachlor, Methidathion, Methiocarb, Methomyl, Methoxyfenozide, Metolachlor, Metrafenone, Metribuzine, Mevinphos, Molinate, Monocrotophos, Monolinuron, Monuron, Myclobutanil, Nuarimol, Omethoate, Oxadixyl, Oxamyl, Oxydemeton methyl, Paclobutrazole, Penconazole, Pencycuron, Pendimethaline, Penoxsulam, Phenmedipham, Phenthoate, Phosalone, Phosphamidon, Piperonyl butoxide, Pirimicarb, Pirimiphos Ethyl, Pirimiphos Methyl, Prochloraz, Procymidon, Profenofos, Propachlor, Propamocarb, Propaquazaphop, Propargite, Propiconazole, Propoxur, Propyzamid, Proquinazid, Prosulfocarb, Pyraclostrobin, Pyrazophos, Pyridaben, Pyriproxyfen, Quinalphos, Quinoxyfen, Quizalofos ethyl, Rotenone, Sethoxydim, Simazin, Spiridiclofen, Spiromesifen, Tebuconazole, Tebufenozid, Tebufenpyrad, Temephos, Terbufos, Terbumeton, Terbuthylazine, Tetraconazole, Tetramethrine, Thiabendazole, Thiacloprid, Thiamethoxam, Thiodicarb, Thiophanate-methyl, Tolclofos methyl, Tolyfluanid, Triadimefon, Triadimenol, Triazophos, Trichlorfon, Tricyclazole, Trifloxystrobin, Triflumizol, Zoxamid | In house residue method by liquid chromatography LC-MS/MS<br><br>Lab-code: XI-12 |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| 18. Tobacco | Determination of 117 pesticide residues:<br><br>Alachlor, Aldrin, alpha-BHC, Benfluralin, Bifenox, Bixafen , Boscalid, Bromocyclen, Bromophos, Bromophos-ethyl, Bromopropylate, Butafenacil, Butralin, Carbophenothion, Carbosulfan, Chlorantraniliprole, Chlorbenside, Chlorobenzilate, Chlorpyrifos, Chlorpyrifos-methyl, Chlorthal-dimethyl, Coumaphos, Cyclanilide, Cyflufenamid, Cyprodinil, Demeton-S-methyl, Diazinon, Dichlofenthion, Diclobutrazol, Diclofop-methyl, Dicofol, Dieldrin, Diethofencarb, Diflufenican, Dimoxystrobin , Diniconazole, Dinoseb, Dioxathion, Disulfoton, Disulfoton sulfone, Disulfotone sulfoxide, Ditalimfos, Dodine, Emamectin B1a, Endosulfan sulfate, Endrin, Endrin keto, Epoxiconazole, Ethametsulfuron, Etofenprox, Etridiazole, Fenamiphos, Fenarimol, Fenbuconazole, Fenchlorphos, Fenitrothion, Fenpropidin, Fenpyramazine, Fipronil, Fluazifop-P-butyl, Fluchloralin, Fludioxonil, Flufenacet, Fluotrimazole, Fluquinconazole, Flutriafol, Folpet, Furathiocarb, Heptachlor, Indoxacarb, Jodfenphos, Kresoxim-methyl, Mecarbam, Meptyldinocap, Metazachlor, Metolachlor, Myclobutanil, Nitrothal-isopropyl, o,p'-DDD, p,p'-DDD, p,p'-DDE, Parathion, Parathion-methyl, Penconazole, Pentachloroaniline, Phenthoate, Picolinafen, Pirimiphos Ethyl, Pirimiphos-methyl, Profenofos, Prometryn, Propaquizafop, Propaquizafop, Propiconazole, Pyrazophos, Pyrimethanil, Pyrifenox, Quinoxyfen, Quintozene, Spirodiclofen, Spirotetramate, Sulfotep, Tebuconazole, Tebufenpyrad, Teflubenzuron, Terbutryn, Tetrachlorvinphos, Tetradifon, Tolclofos-methyl, trans-Chlordane, Tri-allate, Triazophos, Trifloxystrobin, Triflumizole, Trifluralin, Vinclozolin, Zoxamide. | In house residue method by air and liquid chromatography GC-MS/MS and LC-MS/MS PESTICIDES according to CORESTA<br><br>Lab-code: XI-82-5 |
| 19. Cereals and Dried Fruits (grape, figs etc) | Ochratoxin A | In house method HPLC-RF<br><br>Lab-code: XI-22 |
| 20. Foods and feeds | Determination of zearalenone (ZON) | In house method LC-MS/MS<br><br>Lab-code: XI-24 |
| 22. cereals, cereal based feed | Determination of aflatoxins B1, B2, G1, G2 | In house method LC-MS/MS<br><br>Lab code: XI-27 |
| 23. Milk and Dairy products | Determination of Aflatoxin M1 | In house method LC-MS/MS<br><br>Lab code: XI-28 |
| 24. Honey | Determination of HMF (HydroxyMethylFurfural) | In house method UV-VIS<br><br>Lab code: XT-21 |
| | Determination of diastase index and diastase activity (according to Schade) | In house method UV-VIS<br><br>Lab code: XT-54 |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| | Determination of sugars | In house method HPLC-RID<br><br>Lab code: XI-32 |
| | Determination of moisture | In house method Refractometric<br><br>Lab code: XI-94 |
| | Determination of conductivity | In house method<br><br>Lab code: XI-95 |
| | Determination of pH and acidity | In house method<br><br>Lab code: XI-96 |
| 25. Food (wines, meat products, jams, etc) | Determination of synthetic dyes:<br><br>E 102. Tartrazine (19140)<br>E 110. Sunset Yellow (15985)<br>E 122. Azorubine/Carmoisin (14720)<br>E 123. Amaranth (16185)<br>E 124. Ponseau 4R (16255)<br>E 127. Erythrosine B (45430).<br>E 128. Red 2G (18050)<br>E 129. Allura Red AC (16035) | In house HPLC/DAD method<br><br>Lab-code: XI-71 |
| 26.Potable, underground and Surface water | Determination of PCBs and PCTs:<br><br>PCB #28 (2,4,4- trichlorobiphenyl)<br>PCB #52 (2,2,5,5-tetrachlorobiphenyl)<br>PCB #10 (2,2,4,5,5-pentachlorobiphenyl)<br>PCB #138 (2,2,3,4,4,5-hexachlorobiphenyl)<br>PCB #153 (2,2,4,4,5,5, -hexachlorobiphenyl)<br>PCB #180 (2,2,3,4,4,5,5-heptachlorobiphenyl)<br>PCT 02 (3.4,4”-trichloro-m-terphenyl)<br>PCT03 (3,3”,5,5”-tetrachloro-p-terphenyl) | In house method GC-MS/MS<br><br>Lab code: XI-41 |
| 27.Potable, underground and Surface water | Determination of acrylamide in water | In house method LC-MS/MS<br><br>Lab code: XI-42* |
| 28. Potable, underground and Surface water | Determination Benzo(a)pyrene in water | In house method HPLC-RF<br><br>Lab code: XI-46* |
| | Determination of PAHs in water:<br><br>- benzo(b)fluoranthene<br>- benzo(k)fluoranthene<br>- benzo(ghi)perylene<br>- indeno(1,2,3-cd) pyrene | In house method HPLC-RF<br><br>Lab code: XI-46 * |

| Tested materials/products | Types of test/Properties | Applied Methods/Techniques |
|---|---|---|
| 29. Potable, underground and Surface water | Determination of epichlorydrin | In house method LCMSMS<br><br>Lab code: XI-52* |
| 30. Potable, underground and Surface water | Determination of totan Cyanides | In house photometric method<br>Merck Spectroquant 1.09701<br><br>Lab code: XN-17* |
| Sensory Testing | | |
| 1. Potable, underground and Surface water | Sensory Odor Testing (TON) | In house method based on Apha Standard Methods, 22nd version 2160-2150/2170<br><br>Lab code: XN-43* |
| | Sensory Flavour Testing (FTN) | In house method based on Apha Standard Methods, 22nd version 2160-2150/2170<br><br>Lab code: XN-42* |
| Sampling | | |
| 1. Potable, surface, underground and sea-coast water | Water sampling for chemical and microbiological testing | ISO 19458:2006<br>ISO 5667-1:2006<br>ISO 5667-3:2012<br>ISO 5667-4:1987<br>ISO 5667-5:2006<br>ISO 5667-6:2014<br>ISO 5667-9:1992<br>ISO 5667-11:2009<br>ISO 5667-14:2016<br><br>Lab code: Δ-01 |

*(*) Methods marked with an asterisk have been assessed and conform to the performance criteria described in the Ministerial Decision αριθμ. Δ1(δ)/ΓΠ οικ.27829/2023 (ΦΕΚ 3525/Β` 25.5.2023) regarding the "quality of water for human consumption".*

Site of assessement: Permanent Laboratory premises, Asimakopoulou 69, Kato Neochoropoulo, Ioannina, Greece
Approved signatory: Eva Bazaka

This Scope of Accreditation replaces the previous one dated 01.09.2025.
The Accreditation Certificate No.**1079**-6, to ELOT EN ISO/IEC 17025:2017, is valid until 22.02.2030

Athens 30.01.2026

*Evangelos Apostolos Konstantinou*
*CEO of ESYD*