

	PETROS ANDROULAKIS & ASSOCIATES		 Testing Ref. No of Certificate 878
	14° Km of N.R. Thessaloniki-Polygyros, Tel. 00302310902187, info@petrosandroulakis.gr		
	E-308/08	FOOD SAMPLE CHEMICAL ANALYSIS REPORT	
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FOOD SAMPLE CHEMICAL ANALYSIS REPORT

SAMPLE INFORMATION

Company name	LAZARI IOANNA	Sample description	BITTER HONEY FROM SAMOTHRACE (LI001/23)
Address & Tel. number	SAMOTHRACE 68002	Sample data	400g
Sampling responsibility	CUSTOMER	Sampling date	13.05.24/08.00
Transportation method	ENVIRONMENT	Receipt date & time	13.05.24/11.30
Sample at receipt	GOOD	Examination period	13.05.24 - 14.05.24
Temperature at receipt (°C)	17.2	Relevant document	WFP
Sample units	1	Report date	24.05.24
Product category	II	Protocol Number	X24051372

Tests	Results per test unit	Expression	Reference standard	Remarks
	A			
Hydroxymethylfurfural- HMF	1.05	mg/kg	Spectrophotometric method White "Harmonised methods of the European Honey Commission"	
Diastase activity	17.23	Shade Scale	Spectrophotometric method Shade, "Harmonised methods of the European Honey Commission"	
Conductivity	0.716	mS/cm	In house method	
Humidity	17.0	%	In house method	
Antibiotics	<0.05	mg/kg	LC-MS/MS	
**Determination of Antibiotic Residues	<0.1	mg/kg	LC-MS/MS	

*Sulfonamides, tetracyclines, penicillin G, penicillin V, chloramphenicol, trimethoprim, natamycin, flumequine, fumagilline, carbadox

** Methamidophos, Acephate, Aminocarb, Omethoate, Propamocarb, Pymetrozine, Dinotefuran, Oxamyl, Nitenpyram, Methomy, Flonicamid, Carbendazim, Monocrotophos, Thiabendazole, Imidacloprid, Ethidimuron, Fuberidazole, Flumetsulam, Fenuron, Mexacarbate, MevinphosI, Metamitron, Dioxacarb, Cymiazole, Dimethoate, Acetamidiprid, Quinmerac, Chloridazon, Cymoxanil, Thiachloprid, MevinphosII, Cyazofamid, Tricyclazole, Butocarbaxim, Ethirimol, Aldicarb, Pirimicarb, PhosphamidonI, Oxadixyl, PhosphamidonII, Quinoclamine, Azamethiphos, Oxasulfuron, Dichlorvos, Propoxur, Metribuzin, Triasulfuron, Thifensulfuron-methyl, Carbofuran, Nicosulfuron, Malaaxon, Metsulfuron-methyl, Pyracarbolid, Thidiazuron, Tebuthiuron, Carboxin, Secbumeton, Prometon, Sulfentrazone, Carbaryl, Chlorsulfuron, Thiofanox, Amidosulfuron, Fosthiazate, Fluometuron, Imazalil, Vamidothion, Foramsulfuron, Flumethrin, Chlorotoluron, Metobromuron, Methabenzthiazuron, Ethoxyquin, Deet, Metazachlor, Lenacil, Flutriafol, Tribenuron-methyl, Methoprotiryne, 2,3,5-Trimethacarb, Metalaxyl, Cycluron, Isoxaflutole, Diuron, Azaconazole, Pyrimethanil, Isocarbofos, Dimethachlor, Forchlorfenuron, Methidathion, Fenpropidin, Methacrifos, Clomazone, Desmedipham, Guthion, Phosmet, Flumioxazin, Phenmedipham, Flazasulfuron, Fenobucarb, Linuron, SpiroxamineI, Diethofencarb, Furalaxyl, Ethofumesate, SpiroxamineII, Methiocarb, Thiodicarb, Azoxystrobin, Fenamidone, Halofenozide, DimethomorphI, Promecarb, Fludioxonil, Boscalid, Molinate, Pronamide, Paclbutrazol, Fluopicolide, Bispyribac-sodium, Isoprothiolane, Isoxaben, Malathion, Diflubenzuron, Mandipropamid, CyproconazoleI, Triadimefon, Propham, DimethomorphII, Methoxyfenozide, BromuconazoleI, Propetamphos, Trietazine, Mepanipyrim, Bupirimate, Chloroxuron, CyproconazoleII, Iprovalicarb, Triazophos, Bifenazate, Cyprodinil, Triadimenol, Fluquinconazole, Ethoprop, Fenhexamid, Azinphos-ethyl, Fenarimol, Tolyfluanid, Mecarbam, Flufenacet, Spirotetramat, Fluoxastrobil, Triticonazole, Metolachlor, Procymidone, Tetraconazole, Epoxiconazole, Uniconazole, Fenbuconazole, Fenamiphos, Rotenone, Flusilazole, Silthiofam, BromuconazoleII, Quinalphos, Tebufenozide, Picoxystrobin, Fenoxycarb, Fipronil, Dimoxystrobin, Phenthoate, Kresoxim-methyl, Penconazole, Carfentrazone-ethyl, Isofenphos-methyl, Beflubutamid, Tebuconazole, Diazinon, Flubendiamide, Alanycarb, Benalaxyl, Propiconazole, Prochloraz, Zoxamide, Coumaphos, Chlorfenvinphos, Pirimiphos-methyl, Hexaconazole, Phoxim, Clofentezine, Metconazole, Tolclofos-methyl, Famoxadone, Pyraclostrobin, Phosalone, SpinosadA, Benzoximate, Bitertanol, Disulfoton, Triflumuron, Cycloate, Metrafenone, Diniconazole, Chlorpyrifos-methyl,

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Pencycuron, Difenoconazole, Triflumizole, SpinosadD, Trifloxystrobin, Hydramethylnon, Diflufenican, Prosulfocarb, Indoxacarb, Ipconazole, Clethodim, Profenophos, Hexaflumuron, Buprofezin, Benfuracarb, Novaluron, Furathiocarb, Terbufos, Tebufenpyrad, Propaquizafop, Picolinafen, Oxadiazon, Teflubenzuron, Quinoxiphen, Pyriproxyfen, Ethion, Temephos, Metaflumizone, Chlorpyrifos, Tralkoxydim, Pendimethalin, Hexythiazox, Lufenuron, Trichlorfon, Spiromesifen, Propargite, Flufenoxuron, Fenpyroximate, Proquinazid, Spirodiclofen, Myclobutanil, Fenazaquin, Pyridaben, Thiamethoxam, t-fluvalinate, Pyridate, Carbosulfan, Mesosulfuron-methyl, Etofenprox, Bifenthrin, Moxidectin, Ivermectine B1a, Amitraz.

GYROSCOPIC ANALYSIS

Tests	Results per sample unit	Expression	Reference standard*
Melissopalynological analysis	Number of pollen grains of each plant species (total number of pollen grains >800/sample)	Percentage of pollen grains of each species (total and without non-nectariferous plants)	Standard Methods of Melissopalynology and Harmonized Methods of Melissopalynology

*Louveaux et al, 1978; Von der Ohe et al, 2004 – International Honey Commission

Main results

Species	Percentage on total pollen grains	Percentage on nectariferous pollen grains
<i>Fraxinus spp.</i> – Ash tree	21.83%	21.83%
<i>Erica arborea</i> - Tree heather	20.59%	20.59%

Other results

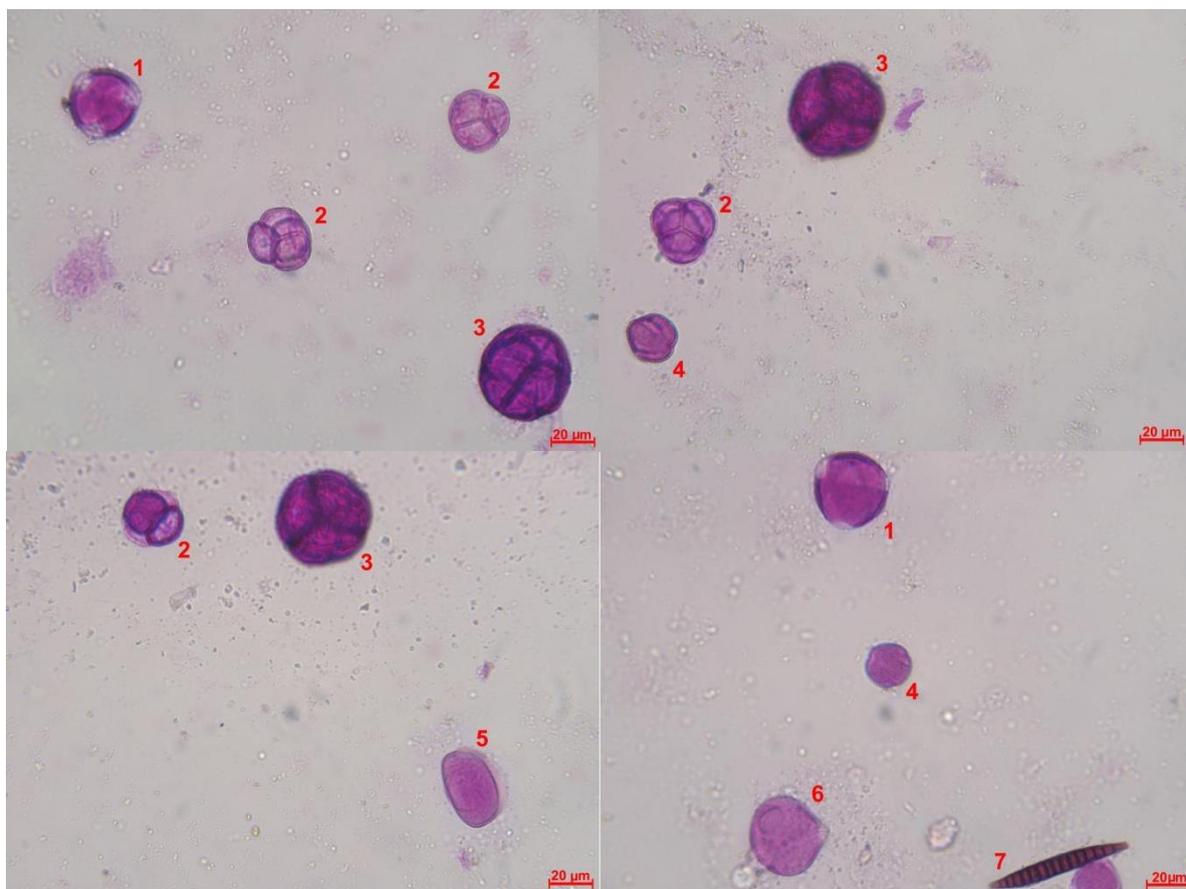
Species	Percentage on total pollen grains	Percentage on nectariferous pollen grains
<i>Acer spp.</i> - Maple	6.20%	6.20%
<i>Arbutus andrachne</i> - Greek strawberry tree	4.71%	4.71%
<i>Quercus ilex</i> – Oak tree	3.72%	3.72%
HDE - Honeydew elements	3.22%	3.22%
<i>Trifolium spp</i> - Clover	1.98%	1.98%
Anemophilous - Non-nectarogenic species	-	-

REMARKS

Based on its physicochemical characteristics, the sample **LI001/23** is characterized as flower honey. The range of pollen grains comes from spring plants that characterize the beekeeping flora of Samothrace, without any of the approximately 20 plant species identified, dominating the rest. The main pollen grains traced derive from the plants *Fraxinus spp.* – Ash tree, *Erica arborea* – Tree heather, *Acer spp.* – Maple, *Arbutus andrachne*- Wild arbutus and *Quercus ilex* – Oak tree. The pollen grains from these five plants cumulatively exceed 57%. The electrical conductivity is 0.693 mS/cm. All the natural chemical characteristics prove that this honey is a typical sample of spring "bitter honey" from Samothrace. The prices of HMF and Diastase activity are within market limits and characterized as excellent. Both the analysis for chemical residues reported inside the hive and the analysis for pesticide residues showed undetectable values, which proves zero contamination from the beekeeper and the environment during honey collection.

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APPENDIX– Samples of microscopic observation of honey LI001/24



Pollen grains: 1. *Acer spp.* - Maple, 2. *Erica arborea* - Tree heather, 3. *Arbutus adrachne* - Wild arbutus, 4. *Fraxinus spp.* – Ash tree, 5 *Muscari communitum* - Grape hyacinth, 6. *Vicia spp.* – Vicia cracca, HDE - Honeydew elements

END OF TEST REPORT

Results valid for the examined sample only. Partial reproduction is not allowed without the written Laboratory's consent.

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The Director



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It is hereby certified that, to the best of the signer's knowledge and beliefs, this is a true and accurate translation of the attached Greek document into English.

The Translator
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13/06/2025

