

Report ID	Report Date: 17/7/2023 Sample Code : 26520.230705/1920 Pages: 6
Client ID	Company: BIO-SOLEA Address: 58 Athalassas Avenue Danae Court, 1st Floor CY - 2023 Nicosia, Cyprus PO.Box: 24511. CY-2063 Phone number: +357 99227123 Fax: Email: info@biosolea.com , demos.metaxas@biosolea.com
Sample ID	Product: Honey Labeling from client: 2. VIOLOGIKI SOLEA SAMPLE 2 2/6/2023 Sampling: By client Quantity: 300g Sample preservation: Ambient temperature Date of sample receipt: 5/7/2023 Dates of tests performance: 7-14/7/2023

	Parameter	Result	RL	Legislation Limit	Method's Code	Method
1	Moisture (%w/w)	16,9	--	$\leq 20^{(1)}$	M01/F1Y13/OS	IHC / 1. Moisture, refractometry
2	Conductivity 20°C (mS/cm)	0,390	--	--	M02/F1Y13/OS	IHC 2002/ 2. Electrical conductivity
3	Diastase Number (DN)	26,9	3,0	$\geq 8^{(1)}$	M06/F1Y13/AM	IHC / 6.2 Determination of diastase activity with Phadebas
4	Hydroxymethylfurfural (HMF) (mg/kg)	<2,0	2,0	$\leq 40^{(1)}$	M05/F1Y13/AM	IHC / 5.2 Determination of HMF after White
5	pH (20°C)	4,1	--	--	M03/F1Y13/OS	IHC / 4. pH
6	Free acidity (meq acid/kg)	32	--	$< 50^{(1)}$	M04/F1Y13/OS	IHC / 4. Free acidity
7	Glucose (% w/w)	30,8	0,2	≥ 45 as reducing sugars (sum)	M08/F1Y13/OS	IHC 2002/ 7.2 HPLC-RI
	Fructose (% w/w)	36,8	0,2			
	Maltose (% w/w)	0,8	0,2	--		
	Sucrose (% w/w)	0,6	0,2	≤ 5		
8	Pesticides Residue (mg/kg)	<RL see Table 2	--	--	M15/F1Y13/OS	GC/ECD/FPD/NPD
9	Antibiotics Residue (µg/kg)	<RL see Table 3	--	nd ⁽³⁾	M26/F1Y13/OS	HPLC/MS-MS
10	% Dominant pollen in nectariferous pollen	Fabaceae -leguminosae 66,7% See table 1	--	--	M07/F1Y13/OS	In house Method based on IHC [Apidologie 35 (Suppl.1) (2004)]

11	% Secondary pollen in nectariferous pollen	Ericaceae 10,6% See Table 1	--	--	M07/F1Y13/OS	In house Method based on IHC [Apidologie 35 (Suppl.1) (2004)]
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RL: Reference Limit of method. Methods that are accredited (ISO17025:2017) are described with “/AM” at the end of the method’s code. Methods out of the scope of accreditation are described with “/OS” at the end of the method’s code. Tests performed by subcontractors are identified by the symbol *. The accreditation number of the subcontractor is referred at the end of this report. All tests are performed in HELLASCHEM facilities, unless differently mentioned in the certificate of analysis.

Notes:

- (1) Greek Code of Food & Drinks, articles 67 & 67a, Directive (EC) 110/2001
- (2) HARMONISED METHODS OF THE INTERNATIONAL HONEY COMMISSION
- (3) Regulation 37/2010/EC and its amendments
- (4) Regulation 1881/2006/EC and its amendments
- (5) HELLASCHEM laboratories decision rules of declaration of compliance for a level of confidence 95% (as referred below), where U = expanded uncertainty for a level of confidence 95%, u=typical uncertainty, k=coefficient for one tail test & k=1,645, LL = lower limit value and Lu upper limit value as referred in legislation

Parameter	Decision rule	Expanded uncertainty U	Values where U is applied	Compliance with decision rules when values:
Diastase number DN	$x > L_L + k \cdot u$	1,3	<8	$\geq 8,5$
	$L_L = 8$	1,1	8-12	$\geq 8,5$
		1,6	>12	$\geq 8,7$
HMF	$x > L_U - k \cdot u$	4,9	<10	$\leq 36,0$
	$L_U = 40$	4,2	10-30	$\leq 36,5$
		3,9	>30	$\leq 36,8$

According to HELLASCHEM decision rule for the declaration of compliance with legislation, the honey is compliant with the limits for HMF and diastase number.

Table 1: Pollen analysis

Number of pollen (per 10g of honey)	43200	
Nectariferous pollen species (%)	Nectariferous pollen	%
	Asteraceae	6,1
	Ericaceae	10,6
	Fabaceae -leguminosae	66,7
	Liliaceae	4,5
	Myrtaceae	3,0
	Rosaceae	9,1

Table 2: Pesticides Residue - Results

	Pesticides	RL		Pesticides	RL
1	Acephate	<0,010ppm	36	Climbazol	<0,010ppm
2	Acetochlor	<0,010ppm	37	Clothianidine	<0,010ppm
3	Acrinanthrin	<0,010ppm	38	Coumaphos	<0,010ppm
4	Alachlor	<0,010ppm	39	Crimidine	<0,010ppm
5	Aldicarb sulfone	<0,010ppm	40	Cyanazine	<0,010ppm
6	Aldicarb sulfoxide	<0,010ppm	41	Crimidine	<0,010ppm
7	Aldrin	<0,010ppm	42	Cyanazine	<0,010ppm
8	Ametryn	<0,010ppm	43	Cymoxanil	<0,010ppm
9	Amitraz & its metabolites	<0,010ppm	44	Cyfluthrin	<0,010ppm
10	Atrazine	<0,010ppm	45	Cyhalothrin -λ	<0,010ppm
11	Azinphos ethyl	<0,010ppm	46	Cymiazol	<0,010ppm
12	Azinphos methyl	<0,010ppm	47	Cypermethrin	<0,010ppm
13	Benfularin	<0,010ppm	48	DDD - op	<0,010ppm
14	Benfuracarb	<0,010ppm	49	DDD - pp	<0,010ppm
15	Benomyl	<0,010ppm	50	DDE - op	<0,010ppm
16	Bifenox	<0,010ppm	51	DDE - pp	<0,010ppm
17	Bifenthrin	<0,010ppm	52	DDT - o,p	<0,010ppm
18	Bromophos ethyl	<0,010ppm	53	DDT - p,p	<0,010ppm
19	Bromophos methyl	<0,010ppm	54	Deltamethrin	<0,010ppm
20	Bromopropylate	<0,010ppm	55	Demeton S methyl	<0,010ppm
21	Cadusaphos	<0,010ppm	56	Desmedipham	<0,010ppm
22	Captafol	<0,010ppm	57	Desmetryn	<0,010ppm
23	Captan	<0,010ppm	58	Diazinon	<0,010ppm
24	Carbaryl	<0,010ppm	59	Dichlorvos	<0,010ppm
25	Carbendazim	<0,010ppm	60	Dicrotophos	<0,010ppm
26	Carbofuran	<0,010ppm	61	Dieldrin	<0,010ppm
27	Chlordan - cis	<0,010ppm	62	Dimethoate	<0,010ppm
28	Chlordan - trans	<0,010ppm	63	Dimoxystrobin	<0,010ppm
29	Chlordinafop	<0,010ppm	64	Diniconazole	<0,010ppm
30	Chlorfenapyr	<0,010ppm	65	Dinitramine	<0,010ppm
31	Chlorfenvinphos	<0,010ppm	66	Dinocap	<0,010ppm
32	Chlorobezilate	<0,010ppm	67	Ditalimfos	<0,010ppm
33	Chlorothalonil	<0,010ppm	68	Ditalimfos	<0,010ppm
34	Chlorpyrifos	<0,010ppm	69	Endosulfan- a	<0,010ppm
35	Chlorpyrifos methyl	<0,010ppm	70	Endosulfan- b	<0,010ppm

	Pesticides	RL
71	Endosulfan sulfate	<0,010ppm
72	Endrin	<0,010ppm
73	Esfenvalerate	<0,010ppm
74	Etaconazole	<0,010ppm
75	Ethalfuralin	<0,010ppm
76	Ethion	<0,010ppm
77	Ethionfencarb	<0,010ppm
78	Ethoprophos	<0,010ppm
79	Etoxazol	<0,010ppm
80	Fenbuconazole	<0,010ppm
77	Ethionfencarb	<0,010ppm
78	Ethoprophos	<0,010ppm
79	Etoxazol	<0,010ppm
80	Fenbuconazole	<0,010ppm
81	Fenhexamid	<0,010ppm
82	Fenamiphos	<0,010ppm
83	Fenamiphos sulfone	<0,010ppm
84	Fenarimol	<0,010ppm
85	Fenitrothion	<0,010ppm
86	Fenphos sulfoxide	<0,010ppm
87	Fensulfothion	<0,010ppm
88	Fenthion	<0,010ppm
89	Fenthion sulfone	<0,010ppm
90	Fenthion sulfoxide	<0,010ppm
91	Fenvalerate	<0,010ppm
92	Fluazinam	<0,010ppm
93	Flucythrinate	<0,010ppm
94	Fludioxonil	<0,010ppm
95	Flumethrin	<0,010ppm
96	Fluopicolide	<0,010ppm
97	Fonofos	<0,010ppm
98	Formothion	<0,010ppm
99	Haloxypop	<0,010ppm
100	HCH - a	<0,010ppm
101	HCH - b	<0,010ppm
102	HCH - d	<0,010ppm
103	HCH - e	<0,010ppm
104	Heptachlor	<0,010ppm
105	Heptachlor cis epoxide	<0,010ppm
106	Heptachlor trans epoxide	<0,010ppm
107	Hexachlorobenzene	<0,010ppm
108	Hexaflumuron	<0,010ppm
109	Iprodione	<0,010ppm
110	Isodrin	<0,010ppm
111	Isoproturon	<0,010ppm
112	Isoxaflutole	<0,010ppm
113	Kresoxim methyl	<0,010ppm
114	Lenacil	<0,010ppm

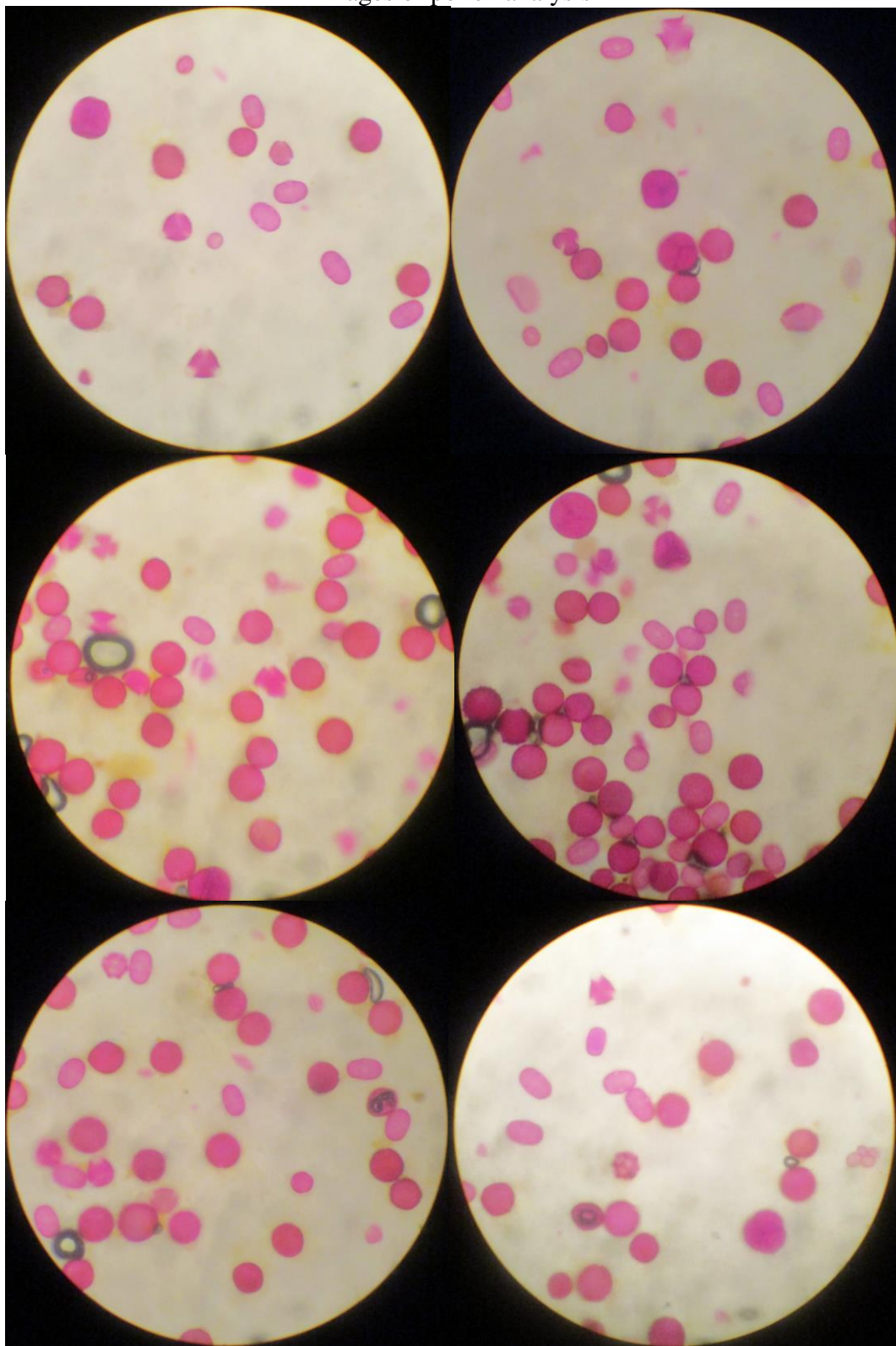
	Pesticides	RL
115	Lindane (ghch)	<0,010ppm
116	Malathion	<0,010ppm
117	Methidathion	<0,010ppm
118	Mecarbam	<0,010ppm
119	Mecarbam	<0,010ppm
120	Mepronil	<0,010ppm
121	Meptyldinocap	<0,010ppm
122	Metamitron	<0,010ppm
123	Metazachlor	<0,010ppm
124	Methacrifos	<0,010ppm
125	Methamidophos	<0,010ppm
126	Methoxychlor	<0,010ppm
127	Metribuzin	<0,010ppm
128	Mirex	<0,010ppm
129	Monocritophos	<0,010ppm
130	Nitrofen	<0,010ppm
131	Nuarimol	<0,010ppm
132	Ofurace	<0,010ppm
133	Omethoate	<0,010ppm
134	Oxyfluorfen	<0,010ppm
135	Paclobutrazole	<0,010ppm
136	Parathion	<0,010ppm
137	Parathion methyl	<0,010ppm
138	Penconazole	<0,010ppm
139	Pendimethalin	<0,010ppm
140	Permethrin	<0,010ppm
141	Phenmedipham	<0,010ppm
142	Phorate	<0,010ppm
143	Phosmet	<0,010ppm
144	Phosphamidon	<0,010ppm
145	Picolinafen	<0,010ppm
146	Picoxystrobin	<0,010ppm
147	Piperonyl butoxide	<0,010ppm
148	Pirimicarb	<0,010ppm
149	Pirimiphos methyl	<0,010ppm
150	Procymidone	<0,010ppm
151	Profoxydim	<0,010ppm
152	Prometon	<0,010ppm
153	Prometryn	<0,010ppm
154	Propaquizafop	<0,010ppm
155	Propargyl	<0,010ppm
156	Propazine	<0,010ppm
157	Propham	<0,010ppm
158	Propiconazol	<0,010ppm
159	Proquinazid	<0,010ppm
160	Pyrethrins	<0,010ppm
161	Pyridaben	<0,010ppm
162	Pyrifenoxy	<0,010ppm

163	Quinalphos	<0,010ppm	172	Tetradifon	<0,010ppm
164	Quinoxifen	<0,010ppm	173	Triadimefon	<0,010ppm
165	Quintozene	<0,010ppm	174	Triazophos	<0,010ppm
166	Sethoxydim	<0,010ppm	175	Triflumizole	<0,010ppm
167	Simazine	<0,010ppm	176	Trifluralin	<0,010ppm
168	Spirodiclofen	<0,010ppm	177	Triticonazol	<0,010ppm
169	Spirodiclofen	<0,010ppm	178	Vamidotion	<0,010ppm
170	Tau - fluvalinate	<0,010ppm	179	Vinchlozoline	<0,010ppm
171	Tebuconazole	<0,010ppm	180	Zoxamide	<0,010ppm

Table 3: Antibiotics Residue – Results

	Antibiotics	Result	RL
1	Oxytetracycline dehydrate (µg/kg)	<10	10
2	Tetracycline hydrochloride (µg/kg)	<10	10
3	Chlorotetracycline.HCl (µg/kg)	<10	10
4	Doxycycline hydrochloride (µg/kg)	<10	10
5	Sulfadiazine (µg/kg)	<10	10
6	Sulfabenzamide (µg/kg)	<10	10
7	Sulfacetamide (µg/kg)	<10	10
8	Sulfachloropyridazine (µg/kg)	<10	10
9	Sulfaclozine (µg/kg)	<10	10
10	Sulfadimethoxine (µg/kg)	<10	10
11	Sulfadoxine (µg/kg)	<10	10
12	Sulfaguanidine (µg/kg)	<10	10
13	Sulfamerazine (µg/kg)	<10	10
14	Sulfameter (µg/kg)	<10	10
15	Sulfamethazine (µg/kg)	<10	10
16	Sulfamethizole (µg/kg)	<10	10
17	Sulfamethoxazole (µg/kg)	<10	10
18	Sulfamethoxypyridazine (µg/kg)	<10	10
19	Sulfamonomethoxine (µg/kg)	<10	10
20	Sulfanitran (µg/kg)	<10	10
21	Sulfapyridine (µg/kg)	<10	10
22	Sulfaquinoxaline (µg/kg)	<10	10
23	Sulfathiazole (µg/kg)	<10	10
24	Sulfisoxazole (µg/kg)	<10	10
25	Chloramphenicol (µg/kg)	<10	10
26	Fumagillin (µg/kg)	<25	25
27	Flumequine (µg/kg)	<10	10
28	Trimethoprim (µg/kg)	<10	10
29	Penicillin G (µg/kg)	<4	4
30	Penicillin V (µg/kg)	<4	4
31	Natamycin (µg/kg)	<25	25

Images of pollen analysis



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