

September 03, 2019

Lingonberry Farm of Alaska  
P.O. Box 51  
Healy, AK 99743

Anresco No. 820190275

## Sample Information

Product      Lingonberry Farm Wildflower Honey from Kobe Lot No. 2019 Harvest, Collected 8/15/2019  
Sampling      Received from Client.  
Received      August 19, 2019.

## Analytical Results

Analysis      USDA NOP MRA  
Method      QuEChERS, Journal of Agricultural and Food Chemistry, 2010, 58, 5959-5972  
                 Pesticides Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate  
Analysis Date      August 21, 2019 to September 03, 2019  
Analyst      Hing-man Mang, Ulises Molina Vega and Eric Tam

## Results:

	<u>Compound Name</u>	<u>Findings (ppm)</u>	<u>Estimated LOD (ppm)</u>
1	2,4'-Methoxychlor	None Detected	0.010 to 0.10
2	2-Phenylphenol	None Detected	0.010 to 0.10
3	3-Hydroxycarbofuran	None Detected	0.010 to 0.050
4	4,4'-Methoxychlor olefin	None Detected	0.010 to 0.10
5	Abamectin	None Detected	0.010 to 0.050
6	Acephate	None Detected	0.010 to 0.050
7	Acequinocyl	None Detected	0.010 to 0.050
8	Acetamiprid	None Detected	0.010 to 0.050
9	Acetochlor	None Detected	0.010 to 0.10
10	Acrinathrin	None Detected	0.010 to 0.10
11	Alachlor	None Detected	0.010 to 0.10
12	Aldicarb	None Detected	0.010 to 0.050
13	Aldicarb Sulfone	None Detected	0.010 to 0.050
14	Aldicarb Sulfoxide	None Detected	0.010 to 0.050
15	Aldrin	None Detected	0.010 to 0.10
16	Allethrin	None Detected	0.010 to 0.10
17	Allidochlor (1)	None Detected	0.010 to 0.10
18	Anthraquinone	None Detected	0.010 to 0.10
19	Atrazine	None Detected	0.010 to 0.10
20	Azinphos methyl (1)	None Detected	0.010 to 0.10
21	Azinphos-ethyl (1)	None Detected	0.010 to 0.10
22	Azoxystrobin	None Detected	0.010 to 0.050
23	Bendiocarb	None Detected	0.010 to 0.10
24	Bendiocarb	None Detected	0.010 to 0.050
25	Benfluralin	None Detected	0.010 to 0.10

26	Bensulide	None Detected	0.010 to 0.10
27	BHC alpha	None Detected	0.010 to 0.10
28	BHC beta	None Detected	0.010 to 0.10
29	Bifenazate	None Detected	0.010 to 0.050
30	Bifenthrin	None Detected	0.010 to 0.10
31	Bioallethrin	None Detected	0.010 to 0.10
32	Biphenyl	None Detected	0.010 to 0.10
33	Bitertanol	None Detected	0.010 to 0.10
34	Boscalid	None Detected	0.010 to 0.050
35	Bromfenvinphos	None Detected	0.010 to 0.10
36	Bromfenvinphos-methyl	None Detected	0.010 to 0.10
37	Bromophos-ethyl	None Detected	0.010 to 0.10
38	Bromophos-methyl	None Detected	0.010 to 0.10
39	Bromopropylate	None Detected	0.010 to 0.10
40	Bupirimate	None Detected	0.010 to 0.10
41	Buprofezin	None Detected	0.010 to 0.10
42	Captafol (1)	None Detected	0.010 to 0.10
43	Captan/THPI	None Detected	0.010 to 0.10
44	Carbaryl	None Detected	0.010 to 0.050
45	Carbendazim	None Detected	0.010 to 0.050
46	Carbofuran	None Detected	0.010 to 0.050
47	Carbophenothion	None Detected	0.010 to 0.10
48	Carfentrazone ethyl	None Detected	0.010 to 0.10
49	Chlorantranilprole	None Detected	0.010 to 0.050
50	Chlorbenside	None Detected	0.010 to 0.10
51	Chlordane cis	None Detected	0.010 to 0.10
52	Chlordane trans	None Detected	0.010 to 0.10
53	Chlorfenapyr	None Detected	0.010 to 0.10
54	Chlorfenson	None Detected	0.010 to 0.10
55	Chlorfenvinphos	None Detected	0.010 to 0.10
56	Chlorobenzilate	None Detected	0.010 to 0.10
57	Chloroneb	None Detected	0.010 to 0.10
58	Chlorothalonil (1)	None Detected	0.010 to 0.10
59	Chlorotoluron	None Detected	0.010 to 0.050
60	Chlorpropham	None Detected	0.010 to 0.10
61	Chlorpyrifos	None Detected	0.010 to 0.10
62	Chlorpyrifos methyl	None Detected	0.010 to 0.10
63	Chlorthiophos	None Detected	0.010 to 0.10
64	Chlothianidin	None Detected	0.010 to 0.10
65	Chlozolate	None Detected	0.010 to 0.10
66	Cis-Permethrin	None Detected	0.010 to 0.10
67	Clethodim	None Detected	0.010 to 0.050
68	Clofentezine	None Detected	0.010 to 0.050
69	Clomazone	None Detected	0.010 to 0.10
70	Clopyralid	None Detected	0.010 to 0.10
71	Clothianidin	None Detected	0.010 to 0.050
72	Coumaphos	None Detected	0.010 to 0.10
73	Cyazofamid	None Detected	0.010 to 0.050
74	Cycloate	None Detected	0.010 to 0.10
75	Cyfluthrin-1	None Detected	0.010 to 0.10
76	Cyfluthrin-2	None Detected	0.010 to 0.10

77	Cyfluthrin-3	None Detected	0.010 to 0.10
78	Cyfluthrin-4	None Detected	0.010 to 0.10
79	Cyhalothrin-L	None Detected	0.010 to 0.10
80	Cymoxanil	None Detected	0.010 to 0.050
81	Cypermethrin-1	None Detected	0.010 to 0.10
82	Cypermethrin-2	None Detected	0.010 to 0.10
83	Cypermethrin-3	None Detected	0.010 to 0.10
84	Cypermethrin-4	None Detected	0.010 to 0.10
85	Cyproconazole	None Detected	0.010 to 0.050
86	Cyprodinil	None Detected	0.010 to 0.050
87	Cyromazine	None Detected	0.010 to 0.050
88	DCPA (Dacthal)	None Detected	0.010 to 0.10
89	DDD o,p'	None Detected	0.010 to 0.10
90	DDD p,p'	None Detected	0.010 to 0.10
91	DDE o,p'	None Detected	0.010 to 0.10
92	DDE p,p'	None Detected	0.010 to 0.10
93	DDT o,p'	None Detected	0.010 to 0.10
94	DDT p,p'	None Detected	0.010 to 0.10
95	Deltamethrin (1)	None Detected	0.010 to 0.10
96	Diallate	None Detected	0.010 to 0.10
97	Diazinon	None Detected	0.010 to 0.10
98	Dichlofluanid	None Detected	0.010 to 0.10
99	Dichloroaniline, 3,4'- (1)	None Detected	0.010 to 0.10
100	Dichlorobenzophenone, 4,4'-	None Detected	0.010 to 0.10
101	Dichlorvos (1)	None Detected	0.010 to 0.10
102	Diclobenil	None Detected	0.010 to 0.10
103	Dicloran (1)	None Detected	0.010 to 0.10
104	Dieldrin	None Detected	0.010 to 0.10
105	Difenoconazole	None Detected	0.010 to 0.050
106	Diffubenzuron	None Detected	0.010 to 0.050
107	Dimethachlor	None Detected	0.010 to 0.10
108	Dimethoate	None Detected	0.010 to 0.050
109	Dimethomorph	None Detected	0.010 to 0.050
110	Diniconazole	None Detected	0.010 to 0.050
111	Dinotefuran	None Detected	0.010 to 0.050
112	Diphenamid	None Detected	0.010 to 0.10
113	Diphenylamine (DPA)	None Detected	0.010 to 0.10
114	Disulfoton	None Detected	0.010 to 0.10
115	Diuron	None Detected	0.010 to 0.050
116	Edifenphos	None Detected	0.010 to 0.10
117	Emamectin B1a	None Detected	0.010 to 0.050
118	Endosulfan ether	None Detected	0.010 to 0.10
119	Endosulfan I	None Detected	0.010 to 0.10
120	Endosulfan II	None Detected	0.010 to 0.10
121	Endosulfan sulfate (1)	None Detected	0.010 to 0.10
122	Endrin	None Detected	0.010 to 0.10
123	Endrin aldehyde	None Detected	0.010 to 0.10
124	Endrin ketone	None Detected	0.010 to 0.10
125	EPN	None Detected	0.010 to 0.10
126	Epoxiconazole	None Detected	0.010 to 0.050
127	Esfenvalerate	None Detected	0.010 to 0.10
128	Ethalfuralin	None Detected	0.010 to 0.10

129	Ethiofencarb	None Detected	0.010 to 0.050
130	Ethion	None Detected	0.010 to 0.10
131	Ethoprop	None Detected	0.010 to 0.10
132	Ethoxyquin	None Detected	0.010 to 0.10
133	Ethylan	None Detected	0.010 to 0.10
134	Etofenprox	None Detected	0.010 to 0.10
135	Etofenprox	None Detected	0.010 to 0.050
136	Etoxazole	None Detected	0.010 to 0.050
137	Etridazole (1)	None Detected	0.010 to 0.10
138	Fenamiphos	None Detected	0.010 to 0.10
139	Fenbuconazole	None Detected	0.010 to 0.050
140	Fenchlorphos	None Detected	0.010 to 0.10
141	Fenhexamid	None Detected	0.010 to 0.050
142	Fenitrothion	None Detected	0.010 to 0.10
143	Fenpropathrin	None Detected	0.010 to 0.10
144	Fenpropimorph	None Detected	0.010 to 0.050
145	Fenpyroximate	None Detected	0.010 to 0.050
146	Fenson	None Detected	0.010 to 0.10
147	Fenthion	None Detected	0.010 to 0.10
148	Fenvalerate	None Detected	0.010 to 0.10
149	Fipronil	None Detected	0.010 to 0.10
150	Flonicamid	None Detected	0.010 to 0.050
151	Fluazifop-P-butyl	None Detected	0.010 to 0.10
152	Flubendiamide	None Detected	0.010 to 0.050
153	Fluchloralin	None Detected	0.010 to 0.10
154	Flucythrinate	None Detected	0.010 to 0.10
155	Fludioxonil	None Detected	0.010 to 0.10
156	Fluoxastrobin	None Detected	0.010 to 0.050
157	Fluquinconazole	None Detected	0.010 to 0.10
158	Fluridone	None Detected	0.010 to 0.10
159	Flusilazole	None Detected	0.010 to 0.10
160	Flutolanil	None Detected	0.010 to 0.050
161	Flutriafol	None Detected	0.010 to 0.050
162	Folpet	None Detected	0.010 to 0.10
163	Fonofos	None Detected	0.010 to 0.10
164	Formetanate HCl	None Detected	0.010 to 0.050
165	Heptachlor	None Detected	0.010 to 0.10
166	Heptachlor epoxide	None Detected	0.010 to 0.10
167	Hexachlorobenzene	None Detected	0.010 to 0.10
168	Hexaconazole	None Detected	0.010 to 0.050
169	Hexazinone	None Detected	0.010 to 0.10
170	Hexythiazox	None Detected	0.010 to 0.050
171	Imazalil	None Detected	0.010 to 0.050
172	Imidacloprid	None Detected	0.010 to 0.050
173	Indoxacarb	None Detected	0.010 to 0.050
174	Iodofenfos	None Detected	0.010 to 0.10
175	Iprodione (1)	None Detected	0.010 to 0.10
176	Isazophos	None Detected	0.010 to 0.10
177	Isodrin	None Detected	0.010 to 0.10
178	Isopropalin	None Detected	0.010 to 0.10
179	Isoproturon	None Detected	0.010 to 0.050
180	Kresoxim Methyl	None Detected	0.010 to 0.050

181	Lenacil	None Detected	0.010 to 0.10
182	Leptophos	None Detected	0.010 to 0.10
183	Lindane	None Detected	0.010 to 0.10
184	Linuron	None Detected	0.010 to 0.050
185	Malathion	None Detected	0.010 to 0.10
186	Mandipropamid	None Detected	0.010 to 0.050
187	Metalaxyl	None Detected	0.010 to 0.050
188	Metazachlor	None Detected	0.010 to 0.10
189	Methacrifos	None Detected	0.010 to 0.10
190	Methamidophos	None Detected	0.010 to 0.050
191	Methiocarb	None Detected	0.010 to 0.050
192	Methomyl	None Detected	0.010 to 0.050
193	Methoxychlor	None Detected	0.010 to 0.10
194	Methoxyfenozide	None Detected	0.010 to 0.050
195	Metolachlor	None Detected	0.010 to 0.10
196	Metribuzin	None Detected	0.010 to 0.050
197	Mevinphos	None Detected	0.010 to 0.050
198	MGK 264	None Detected	0.010 to 0.050
199	Mirex	None Detected	0.010 to 0.10
200	Myclobutanil	None Detected	0.010 to 0.050
201	N-(2;4-Dimethylphenyl)formamide	None Detected	0.010 to 0.10
202	Naled (1)	None Detected	0.010 to 0.10
203	Nitralin	None Detected	0.010 to 0.10
204	Nitrofen	None Detected	0.010 to 0.10
205	Nonachlor, cis-	None Detected	0.010 to 0.10
206	Nonachlor, trans	None Detected	0.010 to 0.10
207	Norflurazon	None Detected	0.010 to 0.10
208	Novaluron	None Detected	0.010 to 0.050
209	Omethoate	None Detected	0.010 to 0.050
210	Oxadiazon	None Detected	0.010 to 0.10
211	Oxamyl	None Detected	0.010 to 0.050
212	Oxyflourfen	None Detected	0.010 to 0.10
213	Paclobutrazol	None Detected	0.010 to 0.10
214	Paclobutrazole	None Detected	0.010 to 0.050
215	Paration Methyl	None Detected	0.010 to 0.10
216	Pebulate	None Detected	0.010 to 0.10
217	Penconazole	None Detected	0.010 to 0.10
218	Pendimethalin	None Detected	0.010 to 0.10
219	Pentachloroaniline	None Detected	0.010 to 0.10
220	Pentachloroanisole	None Detected	0.010 to 0.10
221	Pentachlorobenzene	None Detected	0.010 to 0.10
222	Pentachlorobenzonitrile	None Detected	0.010 to 0.10
223	Pentachlorothioanisole	None Detected	0.010 to 0.10
224	Phenothrin-1	None Detected	0.010 to 0.10
225	Phenothrin-2	None Detected	0.010 to 0.10
226	Phorate	None Detected	0.010 to 0.10
227	Phosalone	None Detected	0.010 to 0.10
228	Phosmet	None Detected	0.010 to 0.10
229	Piperonyl Butoxide	None Detected	0.010 to 0.050
230	Pirimicarb	None Detected	0.010 to 0.050

231	Pirimicarb (2)	None Detected	0.010 to 0.10
232	Pirimiphos methyl	None Detected	0.010 to 0.10
233	Pirimiphos-ethyl	None Detected	0.010 to 0.10
234	Prallethrin (1)	None Detected	0.010 to 0.10
235	Pretilachlor	None Detected	0.010 to 0.10
236	Prochloraz	None Detected	0.010 to 0.050
237	Procymidone	None Detected	0.010 to 0.10
238	Prodiamine	None Detected	0.010 to 0.10
239	Profenofos	None Detected	0.010 to 0.10
240	Profluralin	None Detected	0.010 to 0.10
241	Prometryne	None Detected	0.010 to 0.10
242	Pronamide	None Detected	0.010 to 0.10
243	Propachlor	None Detected	0.010 to 0.10
244	Propamocarb	None Detected	0.010 to 0.050
245	Propanil	None Detected	0.010 to 0.10
246	Propargite*	None Detected	0.010 to 0.10
247	Propiconazole	None Detected	0.010 to 0.050
248	Propisochlor	None Detected	0.010 to 0.10
249	Propoxur	None Detected	0.010 to 0.050
250	Propyzamide	None Detected	0.010 to 0.10
251	Prothiofos	None Detected	0.010 to 0.10
252	Pymetrozine	None Detected	0.010 to 0.050
253	Pymetrozine (2)	None Detected	0.010 to 0.10
254	Pyraclufos	None Detected	0.010 to 0.10
255	Pyraclostrobin	None Detected	0.010 to 0.050
256	Pyrazophos	None Detected	0.010 to 0.10
257	Pyridaben	None Detected	0.010 to 0.10
258	Pyridaphenthion	None Detected	0.010 to 0.10
259	Pyrimethanil	None Detected	0.010 to 0.10
260	Pyriproxyfen	None Detected	0.010 to 0.050
261	Quinalphos	None Detected	0.010 to 0.10
262	Quintozene	None Detected	0.010 to 0.10
263	Resmethrin-1	None Detected	0.010 to 0.10
264	Resmethrin-2	None Detected	0.010 to 0.10
265	Spinetoram	None Detected	0.010 to 0.050
266	Spinosad	None Detected	0.010 to 0.050
267	Spiromesifen	None Detected	0.010 to 0.050
268	Spirotetramat	None Detected	0.010 to 0.050
269	Sulfentrazone	None Detected	0.010 to 0.050
270	Sulfotep	None Detected	0.010 to 0.10
271	Sulprofos	None Detected	0.010 to 0.10
272	Tau-Fluavinate-1	None Detected	0.010 to 0.10
273	Tau-Fluavinate-2	None Detected	0.010 to 0.10
274	Tebuconazole	None Detected	0.010 to 0.050
275	Tebufenozide	None Detected	0.010 to 0.050
276	Tebufenpyrad	None Detected	0.010 to 0.10
277	Tecnazene	None Detected	0.010 to 0.10
278	Tefluthrin	None Detected	0.010 to 0.10
279	Terbacil	None Detected	0.010 to 0.10

280	Terbufos	None Detected	0.010 to 0.10
281	Terbutylazine	None Detected	0.010 to 0.10
282	Tetrachloroaniline, 2,3,5,6-	None Detected	0.010 to 0.10
283	Tetrachlorvinphos	None Detected	0.010 to 0.10
284	Tetradifon	None Detected	0.010 to 0.10
285	Tetramethrin-1	None Detected	0.010 to 0.10
286	Tetramethrin-2	None Detected	0.010 to 0.10
287	Thiabendazole	None Detected	0.010 to 0.050
288	Thiacloprid	None Detected	0.010 to 0.050
289	Thiamethoxam	None Detected	0.010 to 0.050
290	Thiobencarb	None Detected	0.010 to 0.050
291	Tolclofos-methyl	None Detected	0.010 to 0.10
292	Tolyfluanid	None Detected	0.010 to 0.10
293	Transfluthrin	None Detected	0.010 to 0.10
294	Trans-Permethrin	None Detected	0.010 to 0.10
295	Triadimefon	None Detected	0.010 to 0.050
296	Triadimefon (2)	None Detected	0.010 to 0.10
297	Triadimenol	None Detected	0.010 to 0.050
298	Triadimenol (2)	None Detected	0.010 to 0.10
299	Triallate	None Detected	0.010 to 0.10
300	Triazophos	None Detected	0.010 to 0.10
301	Tricyclazole	None Detected	0.010 to 0.050
302	Trifloxystrobin	None Detected	0.010 to 0.050
303	Triflumizole	None Detected	0.010 to 0.050
304	Trifluralin	None Detected	0.010 to 0.10
305	Vamidothion	None Detected	0.010 to 0.050
306	Vinclozolin	None Detected	0.010 to 0.10

Instruments:

LC-MS/MS: Agilent 6470, Restek Raptor ARC-18, 100mm x 2.1mm x 2.7 micron. Column temp: 40 degree C. MP: water and methanol with gradient program. Flow at 0.300mL/min.

GC-MS/MS: Agilent 7010B QQQ, Rxi-5ms 30m x 0.25mm ID x 0.25um DF, Oven temperature 90 degree C for 1 minutes then 9.5 degree C/min to 160 degree C then 8.5 degree C to 330 degree C and hold for 5 minutes.

Reported by  
**Anresco, Inc.**




Hingman Mang  
Senior Chemist




Eric Tam  
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