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Sean Collinsworth
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Dear Sean,

I have completed the pollen study of the recent honey sample you submitted for analysis. Specific details about the extraction and analysis procedures I used for these samples are identical to the ones I used on y o u r previous samples.

ANALYSIS

Sample 1 and 2 (KBH & Skyterra Wellness)

Both of these samples are good examples of Wildflower Honey because neither one is dominated by any single pollen or nectar type. As noted in Table 1 below, some of the main contributors to both samples include holly, tupelo, tulip tree, and magnolia. There are other minor pollen and nectar contributors as well as noted below.

In **Sample #1,** because tupelo, magnolia and tulip tree are underrepresented, the **true probable** nectar percentage in this sample is 5% tulip tree, 16% magnolia, 16% tupelo, and all the rest make up the other 63% of the nectar.

In **Sample # 2** there are many of the same pollen and nectar types found in Sample #1. Like the previous sample, we can use pollen coefficient values to correct for underrepresented types. Thus in **Sample # 2,** the **true probably** nectar percentages are tulip tree 13%, magnolia 32%, tupelo 35%, and all the rest make up the remaining 20%.

Both Sample #1 and Sample #2 have pollen concentration values that are within the expected range for typical wildflower honey.

Sample 3 (Panthertown)

The Panthertown honey sample is a good example of a Unifloral Clover Honey because the sample is dominated by clover pollen in a percentage of 55.5%. The percentages of pollen in Sample # 3 are fairly close to the actual amount of nectar from each source. There are no under or overrepresented pollen types noted in this sample.

The pollen concentration value for Sample 3 is at the low end for typical clover honey that often ranges from about 20,000 up to around 100,000 depending on the clover type that is dominant in the sample.

Relative Pollen Counts of the 2019 Honey Samples
Table 1

Collinsworth Honey 2017

Pollen Taxa	KBH	%	Skyterra	%	Panthertown	%
Acer (maple)	0	0.0%	4	1.9%	0	0.0%
AMARANTHACEAE (amaranth & goosefoot)	0	0.0%	0	0.0%	2	0.9%
ASTERACEAE (dandelion-type)	0	0.0%	0	0.0%	0	0.0%
ASTERACEAE (sunflower-type)	0	0.0%	5	2.3%	3	1.3%
Betula (birch)	3	1.5%	0	0.0%	0	0.0%
BRASSICACEAE (mustard family)	12	6.0%	0	0.0%	0	0.0%
Carya (pecan, hickory)	0	0.0%	1	0.5%	0	0.0%
Cephalanthus (buttonbush)	3	1.5%	0	0.0%	45	19.7%
Chenopodium (goosefoot)	0	0.0%	0	0.0%	0	0.0%
Cornus (dogwood)	0	0.0%	0	0.0%	0	0.0%
CYPERACEAE (sedge)	0	0.0%	0	0.0%	0	0.0%
Diospyros (persimmon)	0	0.0%	0	0.0%	1	0.4%
Elaeagnus (autumn olive)	1	0.5%	0	0.0%	0	0.0%
Gleditsia (honey locust)	0	0.0%	0	0.0%	0	0.0%
LAMIACEAE (cf. Salvia sage)	0	0.0%	0	0.0%	1	0.4%
Ilex (holly, yaupon)	38	18.9%	11	5.2%	0	0.0%
Impatiens (touch-me-not)	0	0.0%	0	0.0%	0	0.0%
Liriodendron (tulip tree)	5	2.5%	21	9.9%	0	0.0%
Lonicera (honeysuckle)	0	0.0%	0	0.0%	0	0.0%
Magnolia (magnolia)	15	7.5%	54	25.4%	0	0.0%
Melilotus (clover)	0	0.0%	0	0.0%	0	0.0%
Mimosa (various species)	0	0.0%	0	0.0%	0	0.0%
Nyssa (tupelo)	15	7.5%	58	27.2%	0	0.0%
ONAGRACEAE	0	0.0%	0	0.0%	0	0.0%
Oxydendrum arboreum (sourwood)	0	0.0%	0	0.0%	0	0.0%
Parthenocissus (Virginia creeper)	0	0.0%	0	0.0%	0	0.0%
Phacelia (phacelia)	53	26.4%	2	0.9%	0	0.0%
Plantago (plantain)	0	0.0%	0	0.0%	1	0.4%
POACEAE (grass family)	0	0.0%	1	0.5%	1	0.4%
Prunus (plum, peach, cherry)	0	0.0%	2	0.9%	0	0.0%
Quercus (oak)	10	5.0%	16	7.5%	0	0.0%
RANUNCULACEAE (buttercups)	0	0.0%	8	3.8%	0	0.0%

RHAMNACEAE (buckthorn)	0	0.0%	0	0.0%	27	11.8%
Rhododendron/Kalmia (laurel)	0	0.0%	4	1.9%	0	0.0%
Rhus /Toxicodendron (sumac, poison ivy)	5	2.5%	6	2.8%	12	5.2%
Robinia (locust)	3	1.5%	1	0.5%	0	0.0%
ROSACEAE (rose family)	10	5.0%	21	9.9%	5	2.2%
Rubus (blackberry, dewberry)	20	10.0%	0	0.0%	0	0.0%
Salix (willow)	0	0.0%	0	0.0%	0	0.0%
Tilia (basswood)	0	0.0%	0	0.0%	0	0.0%
Trifolium/Melilotus (clover)	5	2.5%	0	0.0%	127	55.5%
Viburnum (arrow-wood)	0	0.0%	0	0.0%	3	1.3%
Vitis (grape)	3	1.5%	0	0.0%	3	1.3%
Zanthoxylum (prickly ash)	0	0.0%	0	0.0%	0	0.0%
Zea mays (maize)	0	0.0%	0	0.0%	0	0.0%
All other nectar sources combined						
Unknown pollen	0	0.0%	2	0.9%	0	0.0%
Totals	201	100.0%	213	100.0%	229	100.0%
Lycopodium spores counted	47		66		148	
Pollen concentration per 10 grams of honey		82,675		62,389		29,912

Honey Pollen Categories

A= >45%   predominant pollen type
 B=   16-45% secondary pollen type
 C=   3-15% important minor pollen type
 D= <3%   minor pollen type

Honey Pollen Concentration Categories

Category I   0-20,000/10 g
Category II   20,000-100,000/10 g
Category III   100,000-500,000/10 g
Category IV   500,000-1,000,000/10 g
Category V   over 1,000,000/10 g

Should you desire additional clarification of this report please let me know. If we can assist you in the future, please let us know. We did receive your check, thank you.

Sincerely,

Vaughn M. Bryant, Jr.
Regents Professor and Director