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Sean Collinsworth
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Lake Toxaway, NC 28747-0047

Dear Sean,

First of all I want to apologize for the long delay. You sent me samples in early September and under normal circumstances I try to get these done fairly quickly and return the results to the beekeeper. However, shortly after you samples arrived I was diagnosed with Acute Myeloid Leukemia, which is the most fatal type. The doctors told me that I would die in a month unless I was willing to go into isolation and get treatment in a germ-free environment. So, by Mid-September I was admitted to the Leukemia Ward of MD Anderson and I am still here. Fortunately, they allowed me to have my microscope after a few weeks so I could try and catch up on the backlog of samples, including yours. So I write to you from my hospital room with your analysis, which I was finally able to complete.

We have completed the pollen study of the recent t w o honey samples 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

This year your two samples are even better than the two you submitted last year. As you can see in the table below, both samples have a very high percentage of sourwood nectar and both samples have very low pollen concentration values per 10 grams of honey.

As you may remember from last year, if we use pollen coefficient values to determine the true nectar value (TNV) in your samples, it reveals that both are very good sourwood samples (Table 1). In addition, as you may remember, the lower the pollen concentration value the better the purity of the sourwood honey because sourwood pollen is much underrepresented in honey. For good sourwood honey, the expected pollen concentration value should be close to, or below 10,000 pollen grains/10 grams of honey; the lower the better. Sample 1 has a low pollen concentration value of just over 3,000 pollen grains per 10 grams of honey and Sample 2 has a pollen concentration value just over 2,000 pollen grains per 10 grams of honey. Thus, Sample 2 is slightly better than Sample 1.

The True Nectar Value (TNV) for both samples is over 90% meaning that both are exceptional examples of excellent sourwood honey.

Relative Pollen Counts of the 2017 Honey Samples
Table 1

Collinsworth Honey 2017

Pollen Taxa	1	%	TNV	2	%	TNV
Acer (maple)	0	0.0%		0	0.0%	
AMARANTHACEAE (amaranth & goosefoot)	0	0.0%		0	0.0%	
ASTERACEAE (dandelion-type)	2	1.6%		5	3.9%	
ASTERACEAE (sunflower-type)	5	3.9%		9	7.1%	
BRASSICACEAE (mustard family)	0	0.0%		0	0.0%	
Castanea (chestnut, chinquapin)	0	0.0%		0	0.0%	
Cephalanthus (buttonbush)	0	0.0%		0	0.0%	
Chenopodium (goosefoot)	0	0.0%		0	0.0%	
Cornus (dogwood)	0	0.0%		0	0.0%	
CYPERACEAE (sedge)	0	0.0%		0	0.0%	
Gleditsia (honey locust)	0	0.0%		0	0.0%	
Ilex (holly, yaupon)	0	0.0%		0	0.0%	
Lagerstroemia (crepe myrtle)	0	0.0%		0	0.0%	
Liriodendron (tulip tree)	0	0.0%		0	0.0%	
Lonicera (honeysuckle)	0	0.0%		0	0.0%	
Magnolia (magnolia)	4	3.1%		0	0.0%	
Melilotus (clover)	0	0.0%		0	0.0%	
Mimosa (various species)	0	0.0%		0	0.0%	
Nyssa (tupelo)	4	3.1%		0	0.0%	
ONAGRACEAE	0	0.0%		0	0.0%	
Oxydendrum arboreum (sourwood)	22	17.3%	91.0%	27	21.3%	93.0%
Parthenocissus (Virginia creeper)	0	0.0%		6	4.7%	
Pinus (pine)	0	0.0%		0	0.0%	
Plantago (plantain)	26	20.5%		21	16.5%	
POACEAE (grass family)	0	0.0%		1	0.8%	
Prunus (plum, peach, cherry)	0	0.0%		0	0.0%	
Quercus (oak)	0	0.0%		0	0.0%	
RANUNCULACEAE (buttercups)	0	0.0%		0	0.0%	
Rhododendron/Kalmia (laurel)	21	16.5%		15	11.8%	
Rhus /Toxicodendron (sumac, poison ivy)	5	3.9%		6	4.7%	
ROSACEAE (rose family)	9	7.1%		7	5.5%	
Rubus (blackberry, dewberry)	1	0.8%		3	2.4%	

Rumex (dock)	0	0.0%		0	0.0%	
Salix (willow)	0	0.0%		1	0.8%	
Tilia (basswood)	0	0.0%		6	4.7%	
Trifolium (clover)	28	22.0%	2.0%	15	11.8%	1.00%
Vicia (vetch)	0	0.0%		0	0.0%	
Vitis (grape)	0	0.0%		5	3.9%	
Zanthoxylum (prickly ash)	0	0.0%		0	0.0%	
Zea mays (maize)	0	0.0%		0	0.0%	
All other nectar sources combined			7.0%	0		6.00%
Unknown pollen	0	0.0%		0	0.0%	
Totals	127	100.0%	100.0%	127	100.0%	100%
Lycopodium spores counted	821			981		
Pollen concentration per 10 grams of honey		3,224			2,698	

Honey Pollen Categories	Honey Pollen Concentration Categories	
A= >45% predominant pollen type		
B= 16-45% secondary pollen type	Category I	0-20,000/10 g
C= 3-15% important minor pollen type	Category II	20,000-100,000/10 g
D= <3% minor pollen type	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.
Professor and Director