

# Palynology Research Laboratory Department of Anthropology Texas A&M University College Station, TX 77843-4352 (979) 845-5242 FAX (979) 845-4070

August 25, 2016

Sean Collinsworth 828 Evens Ridge Rd. Lake Toxaway, NC 28747-0047

Dear Sean,

I have completed the pollen study of the one new honey sample you submitted for analysis. Specific details about the extraction and analysis procedures I used for this sample are identical as what I used on your previous samples. I can repeat them if you wish.

#### **ANALYSIS**

### Sample 1 Honey:

Your recent honey sample would be classified as a mixed floral or a wildflower honey because it contains a variety of pollen and nectar types but it is not dominated by any one major pollen or nectar type (Table 1). As you can see from the pollen count below this honey sample contained only one pollen grain of sourwood but it did have a much larger amount of pollen from tulip tree. When we correct for actual nectar types we find that both tulip tree and sourwood were underrepresented by their actual pollen counts and actually contributed more nectar to this honey (True Nectar Value) that is suggested by their pollen count. The other major pollen types include clover, blackberry, and several different members of the rose family.

The pollen concentration value of just over 42,000 per 10 grams of honey is quite normal for this type of honey.

# Relative Pollen Counts of the 2016 Honey Samples Table 1

# **Collinsworth Honey 2016**

Pollen Taxa	1	%	TNV
Acer (maple)	0	0.0%	
AMARANTHACEAE (amaranth &	0	0.0%	

goosefoot)			
ASTERACEAE (dandelion-type)	0	0.0%	
ASTERACEAE (sunflower-type)	5	2.5%	
BRASSICACEAE (mustard family)	0	0.0%	
Castanea (chestnut, chinquapin)	0	0.0%	
Cephalanthus (buttonbush)	1	0.5%	
Chenopodium (goosefoot)	0	0.0%	
Cornus (dogwood)	3	1.5%	
CYPERACEAE (sedge)	0	0.0%	
Gleditsia (honey locust)	0	0.0%	
Ilex (holly, yaupon)	28	13.9%	
Lagerstroemia (crepe myrtle)	0	0.0%	
Ligustrum (privet)	15	7.4%	
Liriodendron (tulip tree)	31	<b>15.3%</b>	26.0%
Lonicera (honeysuckle)	2	1.0%	
Magnolia (magnolia)	5	2.5%	
Melilotus (clover)	0	0.0%	
Mimosa (various species)	0	0.0%	
Nyssa (tupelo)	0	0.0%	
ONAGRACEAE	0	0.0%	
Oxydendrum arboreum (sourwood)	1	0.5%	17.0%
Parthenocissus (Virginia creeper)	0	0.0%	
Pinus (pine)	0	0.0%	
Plantago (plantain)	4	2.0%	
POACEAE (grass family)	0	0.0%	
Prunus (plum, peach, cherry)	0	0.0%	
Quercus (oak)	1	0.5%	
RANUNCULACEAE (buttercups)	0	0.0%	
Rhododendron/Kalmia (laurel)	0	0.0%	
Rhus /Toxicodendron (sumac, poison ivy)	5	2.5%	
ROSACEAE (rose family)	16	7.9%	
Rubus (blackberry, dewberry)	61	30.2%	
Rumex (dock)	0	0.0%	
SCROPHULARIACEAE	0	0.0%	
Tilia (basswood)	0	0.0%	
Trifolium (clover)	21	10.4%	7.0%
Vicia (vetch)	0	0.0%	
Vitis (grape)	0	0.0%	
Zanthoxylum (prickly ash)	0	0.0%	
Zea mays (maize)	0	0.0%	
All other nectar sources combined			50.0%

Unknown pollen 3 1.5%

Totals 202 100.0% 100.0%

Lycopodium spores counted 88

Pollen concentration per 10 grams of honey 42,656

## Honey Pollen Categories

## **Honey Pollen Concentration Categories**

A= >45% predominant pollen type	Category I	0-20,000/10 g
B= 16-45% secondary pollen type	Category II	20,000-100,000/10 g
C= 3-15% important minor pollen type	Category III	100,000-500,000/10 g
D= <3% minor pollen type	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