

Table S1. Chemical composition of the honey samples studied (in g/100 g)

	<i>Tuxtla Chico</i>														
	Mh1	Mh2	Mh3	Mh4	Mh5	Mh6	Mh7	Mh8	Mh9	Mh10	Mh11	Mh12	min	max	avg.
G	23.64	25.24	23.50	23.61	20.22	18.85	18.07	18.29	17.40	21.83	24.83	18.52	17.40	25.24	21.17
F	27.60	30.57	28.99	29.27	28.93	27.74	27.27	27.74	26.81	29.29	29.73	28.16	26.81	30.57	28.51
Gb	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.20	0.14	0.00	0.20	0.04
Su	0.18	0.00	0.11	0.10	0.00	0.10	0.15	0.16	0.14	0.11	0.10	0.11	0.00	0.18	0.10
IMa	0.69	0.57	0.73	0.74	0.68	0.55	0.68	0.66	0.57	0.63	0.84	0.49	0.49	0.84	0.65
IMu	0.83	0.59	0.00	0.60	0.55	0.46	0.82	0.56	0.60	0.39	1.05	0.67	0.00	1.05	0.59
Kb	1.98	1.75	2.05	1.83	2.48	2.56	2.61	2.74	2.57	2.40	1.52	2.88	1.52	2.88	2.28
Lu	0.27	0.20	0.24	0.23	0.26	0.20	0.25	0.23	0.26	0.26	0.31	0.17	0.17	0.31	0.24
Ma	1.17	1.34	1.64	1.23	2.00	2.03	1.97	2.51	2.12	1.94	1.11	2.37	1.11	2.51	1.79
Mu	3.68	2.63	3.21	3.44	3.74	4.16	3.60	4.10	4.12	2.70	3.06	3.49	2.63	4.16	3.49
Ng	0.83	1.01	0.93	0.83	1.22	1.16	1.05	0.94	1.07	1.32	0.72	1.16	0.72	1.32	1.02
αTr	0.00	0.00	0.08	0.00	0.00	0.07	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.08	0.02
$\alpha$$\beta$Tr	0.42	0.33	0.39	0.40	0.36	0.46	0.40	0.44	0.42	0.31	0.34	0.34	0.31	0.46	0.38
Tru	8.94	6.71	7.86	8.39	9.27	9.96	9.77	10.29	10.61	6.98	7.50	8.72	6.71	10.61	8.75
Tu	2.43	2.15	2.57	2.38	3.18	3.61	3.24	3.81	3.68	2.49	1.95	3.29	1.95	3.81	2.90
Er	0.32	0.19	0.27	0.24	0.23	0.95	1.19	0.52	0.80	0.73	0.15	0.84	0.15	1.19	0.54
1-Ks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mr	0.31	0.27	0.39	0.25	0.45	0.56	0.34	0.32	0.43	0.36	0.00	0.45	0.00	0.56	0.34
Mz	0.15	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.02
Pa	0.24	0.23	0.33	0.33	0.39	0.52	0.39	0.39	0.50	0.29	0.14	0.42	0.14	0.52	0.35
mBd	0.03	0.05	0.03	0.06	0.02	0.00	0.02	0.02	0.00	0.00	0.06	0.00	0.00	0.06	0.02
rBd	0.04	0.02	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.04	0.01
Pro	0.03	0.00	0.00	0.03	0.03	0.01	0.02	0.02	0.04	0.03	0.04	0.03	0.00	0.04	0.02
U1-16	3.82	2.92	3.58	3.74	4.00	4.12	4.00	4.23	4.24	3.00	3.26	3.64	2.92	4.24	3.71

	<i>Cacahoatán</i>														
	Mh13	Mh14	Mh15	Mh16	Mh17	Mh18	Mh19	Mh20	Mh21	Mh22	Mh23	Mh24	min	max	avg.
G	14.58	19.16	18.56	16.40	17.85	17.47	16.84	20.04	17.13	16.31	18.67	16.78	14.58	20.04	17.48
F	25.67	28.04	27.66	26.45	27.12	26.71	26.97	28.13	26.67	24.26	27.47	26.64	24.26	28.13	26.82
Gb	0.10	0.17	0.00	0.04	0.00	0.11	0.12	0.16	0.06	0.07	0.00	0.00	0.00	0.17	0.07
Su	0.18	0.00	0.08	0.09	0.22	0.14	0.08	0.10	0.13	0.21	0.10	0.16	0.00	0.22	0.12
IMa	0.62	0.70	0.52	0.56	0.66	0.80	0.67	0.56	0.66	0.67	0.68	0.73	0.52	0.80	0.65
IMu	0.72	0.80	0.93	0.73	0.45	0.55	0.61	0.41	0.74	0.64	0.57	0.67	0.41	0.93	0.65
Kb	2.48	2.34	2.34	2.49	2.38	2.01	2.48	2.34	2.48	2.53	2.32	2.37	2.01	2.53	2.38
Lu	0.30	0.20	0.28	0.24	0.26	0.31	0.27	0.18	0.25	0.30	0.32	0.24	0.18	0.32	0.26
Ma	2.02	1.92	1.76	1.90	1.85	1.43	1.84	2.00	1.94	2.07	1.79	2.02	1.43	2.07	1.88
Mu	5.24	4.12	4.59	4.97	4.34	4.93	4.92	3.50	4.04	4.80	4.16	4.35	3.50	5.24	4.50
Ng	1.04	1.46	1.31	1.25	1.31	1.05	1.35	1.68	1.12	1.31	1.09	1.24	1.04	1.68	1.27
ααTr	0.00	0.02	0.05	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.11	0.02
αβTr	0.39	0.37	0.36	0.43	0.40	0.41	0.36	0.33	0.38	0.39	0.34	0.40	0.33	0.43	0.38
Tru	12.65	9.42	10.26	11.82	10.46	11.38	11.05	8.49	10.63	11.86	9.89	11.04	8.49	12.65	10.74
Tu	4.71	3.42	3.67	4.00	3.82	3.42	4.23	3.14	3.70	4.25	3.36	3.70	3.14	4.71	3.79
Er	1.72	1.00	1.12	1.52	1.40	1.11	1.44	1.06	1.47	1.30	1.06	1.28	1.00	1.72	1.29
1-Ks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mr	0.53	0.28	0.33	0.29	0.37	0.41	0.39	0.44	0.57	0.36	0.39	0.41	0.28	0.57	0.40
Mz	0.09	0.05	0.06	0.00	0.07	0.09	0.00	0.07	0.06	0.00	0.00	0.04	0.00	0.09	0.04
Pa	0.73	0.44	0.42	0.66	0.56	0.65	0.58	0.42	0.53	0.67	0.57	0.52	0.42	0.73	0.56
mBd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.01	0.01	0.00	0.03	0.01
rBd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.01	0.00	0.02	0.00
Pro	0.03	0.02	0.03	0.03	0.04	0.03	0.02	0.02	0.03	0.03	0.05	0.03	0.02	0.05	0.03
U1-16	5.27	4.04	4.35	4.80	4.38	4.78	4.75	3.58	4.31	4.90	4.21	4.44	3.58	5.27	4.48

Acronyms: F—Fructose; G—Glucose; Gb—Gentiobiose; Su—Sucrose; Ima—Isomaltose; IMu—Isomaltulose; Kb—Kojibiose; Lu—Leucrose; Ma—Maltose; Mu—Maltulose; Ng—Nigerose; Tru—Trehalulose; Tu—Turanose; ααTr—αα-Trehalose; αβTr—αβ-Trehalose; Er—Erlase; 1-Ks—1-Kestose; Mr—Maltotriose; Mz—Melezitose; Pa—Panose; mBd—meso-2,3butanediol; rBd—racemic 2,3butanediol; Pro—Proline; U—Unknown.

Table S2. Total phenolic content of *Scaptotrigona mexicana* honey.

Honey sample	TPC (mg GAE/100 g)
Mh1	90.9±2.8
Mh2	73.4±0.2
Mh3	80.9±1.5
Mh4	86.4±0.4
Mh5	84.2±0.7
Mh6	73.0±0.8
Mh7	70.5±2.1
Mh8	76.4±1.3
Mh9	72.6±0.4
Mh10	67.0±3.5
Mh11	111.0±1.4
Mh12	72.4±1.2
Mh13	64.6±1.8
Mh14	84.4±1.8
Mh15	67.5±2.1
Mh16	61.5±1.4
Mh17	63.2±2.3
Mh18	64.6±0.4
Mh19	77.2±1.9
Mh20	82.2±3.2
Mh21	88.4±1.8
Mh22	89.8±1.6
Mh23	72.9±1.9
Mh24	81.3±3.3

Table S3. Chemical composition of the investigated propolis samples (GC-MS after silylation; %TIC).

	<i>Tuxtla Chico</i>											
Compound	Mp1	Mp2	Mp3	Mp4	Mp5	Mp6	Mp7	Mp8	Mp9	Mp10	Mp11	Mp12
<i>Sugar alcohols</i>	2.9	6.8	2.0	2.1	4.8	1.3	1.9	0.5	9.5	8.3	1.3	0.4
Glycerol	1.9	2.1	1.4	1.5	3.0	0.8	1.2	0.3	6.3	4.3	0.5	0.3
Arabitol	1.0	4.3	0.6	0.5	1.2	0.5	0.7	0.2	2.6	2.7	0.8	0.1
Pinitol	-	Tr.	Tr.	Tr.	0.4	Tr.	Tr.	-	0.3	0.6	Tr.	-
Mannitol	-	0.4	-	0.1	0.2	Tr.	Tr.	-	0.3	0.7	Tr.	Tr.
<i>Phenolic acids</i>	0.3	0.3	Tr.	0.3	0.2	Tr.	Tr.	0.2	1.1	1.5	Tr.	0.1
Hydroxybenzoic acid	Tr.	0.1	Tr.	0.1	Tr.	Tr.	Tr.	0.2	0.8	0.2	Tr.	Tr.
Hydroxyphenyl acetic acid	0.3	Tr.	Tr.	0.2	0.2	Tr.	Tr.	Tr.	0.3	1.3	Tr.	0.1
<i>p</i> -Coumaric acid	Tr.	0.2	-	Tr.	-	-	Tr.	-	-	-	-	-
Caffeic acid	-	Tr.	-	-	-	-	-	-	-	-	-	-
<i>Diterpenes</i>	-	-	-	-	-	-	-	-	-	-	1.2	-
Kaurenal	-	-	-	-	-	-	-	-	-	-	-	-
Kaurenol	-	-	-	-	-	-	-	-	-	-	-	-
Kaurenoic acid	-	-	-	-	-	-	-	-	-	-	1.0	-
Hydroxukaurenoic acid	-	-	-	-	-	-	-	-	-	-	Tr.	-
Acetoxycarenoic acid	-	-	-	-	-	-	-	-	-	-	0.2	-
<i>Cardanols</i>	1.3	0.6	1.4	0.3	Tr.	Tr.	0.3	0.2	Tr.	Tr.	0.4	Tr.
Cardanol C17:2	0.4	0.4	0.4	0.2	Tr.	Tr.	0.2	0.2	Tr.	Tr.	0.2	Tr..
Cardanol C17:1	0.1	0.2	0.2	0.1	Tr.	Tr.	0.1	Tr.	Tr.	Tr.	0.2	Tr.
Cardanol C19:1	0.8	Tr.	0.8	Tr.	-	Tr.	Tr.		Tr.	Tr.	Tr.	Tr.
<i>Cardols</i>	19.3	12.6	18.4	9.5	3.6	5.9	13.3	13.2	6.3	2.7	14.2	2.9
Cardol C15:1	0.6	0.7	0.5	0.2	Tr.	0.2	0.4	0.3	0.3	0.1	0.9	0.2
Cardol C15:0	1.4	1.2	1.5	0.7	0.3	0.5	1.1	1.0	0.6	0.2	0.1	Tr.

Cardol C17:2	7.0	5.0	8.4	3.6	1.1	1.9	5.4	5.1	2.0	0.8	5.0	0.8
Cardol C17:1	1.3	0.7	1.1	0.6	0.2	0.5	1.1	0.9	0.5	0.2	0.7	0.2
Cardol C17:1 (isomer)	1.3	0.8	1.4	0.6	0.3	0.4	0.9	0.9	0.4	0.2	0.9	0.3
Cardol C17:1 (isomer)	4.5	2.7	4.8	2.5	0.9	1.3	3.9	3.3	1.7	0.8	3.7	0.8
Cardol C17:0	0.2	Tr.	Tr.	Tr.	0.2	0.3	0.2	Tr.	0.1	Tr.	0.3	Tr.
Cardol C19:1	3.0	1.5	0.4	1.3	0.6	0.8	0.3	1.7	0.7	0.4	2.6	0.6
Lignans	-	-	-	-	-	-	-	-	-	-	0.8	-
Dihydrocubebin	-	-	-	-	-	-	-	-	-	-	0.8	-
3,4-Methylenedioxy secoisolariciresinol	-	-	-	-	-	-	-	-	-	-	-	-
Anacardic acids	2.6	4.0	8.4	3.1	1.2	1.7	5.5	5.1	1.9	1.0	5.7	1.4
Anacardic acid C15:0	0.2	0.1	0.5	0.2	Tr.	0.1	0.4	0.4	0.2	Tr.	0.4	Tr.
Anacardic acid C15:2	1.2	1.8	3.3	1.2	0.4	0.6	2.1	2.0	0.7	0.4	2.0	0.4
Anacardic acid C15:1	1.2	1.2	1.9	1.0	0.4	0.6	1.8	1.5	0.7	0.4	1.7	0.4
Anacardic acid C17:1		0.9	2.7	0.7	0.4	0.4	1.2	1.2	0.3	0.2	1.6	0.6
Triterpenes ursane/oleanane type	10.6	8.1	11.9	19.0	13.1	20.8	12.0	17.9	12.4	12.7	10.8	14.7
β -Amyrenone	0.8	0.1	0.3	1.4	0.7	2.1	1.0	1.0	1.4	1.4	0.1	1.6
β -Amyrin	4.1	3.0	3.6	4.4	2.9	3.7	3.2	4.7	3.6	2.3	3.3	2.7
α -Amyrenone	1.2	0.9	1.2	3.0	1.4	5.6	2.4	2.4	1.0	3.0	1.0	3.5
α -Amyrin	4.5	3.8	6.8	7.9	4.8	4.6	3.4	8.3	4.4	3.0	5.3	3.3
Amyrin acetate	-	0.3	-	2.3	3.3	4.8	2.0	1.5	2.0	3.0	1.1	3.6
Triterpenes cycloartane type	16.4	13.2	16.5	16.1	10.1	12.6	15.3	15.6	9.0	8.7	14.9	11.5
Cycloartenol	7.5	5.7	5.4	8.2	6.1	7.6	5.4	6.2	5.7	4.9	5.4	6.1
Mangiferolic acid	1.7	1.6	2.2	2.0	1.3	1.6	2.5	2.4	0.7	1.3	2.5	2.2
Isomaniferolic acid	7.2	5.9	8.9	5.9	2.7	3.4	7.4	7.0	2.6	2.5	7.0	3.2
Others												
Ethylamine	1.0	1.1	3.2	1.0	0.9	0.2	1.5	1.1	1.2	2.7	1.1	0.8

	<i>Cacahoatán</i>											
	Mp13	Mp14	Mp15	Mp16	Mp17	Mp18	Mp19	Mp20	Mp21	Mp22	Mp23	Mp24
<i>Sugar alcohols</i>	1.1	0.7	0.6	1.0	0.8	0.6	2.1	1.7	1.5	3.1	5.6	1.2
Glycerol	0.7	0.5	0.3	0.7	0.5	0.4	1.4	1.0	0.8	1.7	1.5	1.0
Arabitol	0.4	0.2	0.3	0.3	0.3	0.2	0.6	0.7	0.7	1.3	1.1	0.2
Pinitol	-	-	-	-	-	-	0.1	-	-	0.1	Tr.	-
<i>Phenolic acids</i>	0	0	0	0	0	0	0.2	0	0	0	0.2	0
<i>p</i> -coumaric acid	-	-	-	-	-	-	0.2	-	-	-	-	-
<i>Diterpenes</i>	47.1	14.5	39	21.8	44.7	32.4	31.9	37.5	27.1	34.1	23.3	29.2
Kaurenal	2.2	0.6	1.4	0.7	1.1	1.0	1.0	1.2	0.8	1.2	0.7	1.0
Kaurenol	4.3	1.2	2.9	1.2	2.6	2.1	2.0	2.8	1.7	2.6	1.4	1.9
Kaurenoic acid	32.6	9.1	26.3	14.9	27.4	22.1	21.8	25.6	18.5	23.3	16.4	20.0
Hydroxukaurenoic acid	1.9	0.9	1.9	1.2	2.5	1.8	1.8	1.7	1.5	1.7	1.2	1.7
Acetoxykaurenoic acid	6.1	2.7	6.5	3.8	11.1	5.4	5.2	6.2	4.6	5.3	3.6	4.6
<i>Cardanols</i>	0.3	3.6	1.8	2.1	1.6	2.1	1.8	1.4	2.2	-	-	-
Cardanol C17:2	Tr.	0.8	0.6	0.4	0.5	0.7	0.6	0.6	0.4	0.3	0.3	0.6
Cardanol C17:1	Tr.	0.7	0.2	0.5	0.6	-	0.6	0.4	0.6	0.6	0.5	0.7
Cardanol C19:1	-	-	-	-	-	-	-	0.2	0.2	-	-	0.2
Cardanol C19:1 (isomer)	0.3	2.1	1.0	1.2	0.5	1.4	0.6	0.5	1.0	0.6	0.8	1.1
<i>Cardols</i>	1.4	11.5	3.6	9.9	1.5	5.4	3.6	2.6	6	2.7	5.1	6
Cardol C15:1	-	0.5	Tr.	0.3	-	0.2	Tr.	0.2	0.5	0.1	0.2	0.2
Cardol C15:0	-	1.0	0.3	0.7	-	0.4	0.2	0.2	-	0.2	0.4	0.5
Cardol C17:2	0.6	4.4	1.7	4.5	0.8	2.2	1.7	1.0	3.0	1.1	2.2	2.3
Cardol C17:1	0.2	1.1	0.3	0.7	0.3	0.4	0.4	0.3	0.5	-	0.4	0.5
Cardol C17:1 (isomer)	0.2	1.0	0.3	0.6	0.2	0.4	0.4	0.2	1.4	0.3	0.4	0.6
Cardol C17:1 (isomer)	0.4	3.3	1.0	3.0	0.5	1.8	0.9	0.7	0.6	0.2	1.5	1.9
Cardol C17:0	Tr.	0.2	Tr.	0.1	Tr.	Tr.	Tr.	Tr.	Tr.	0.8	Tr.	Tr.

Anacardic acids	Tr.	5.1	1.5	2.4	0.4	2.3	1.2	0.8	2.2	1.6	2.0	1.4
Anacardic acid C15:2	Tr.	1.9	0.9	1.4	0.2	0.9	0.4	0.4	1.2	0.6	0.8	0.5
Anacardic acid C15:1	Tr.	1.6	0.6	Tr.	0.1	0.8	0.6	0.3	0.8	0.6	0.7	0.5
Anacardic acid C17:1	-	1.3	-	1.0	0.1	0.6	0.2	0.1	0.2	0.4	0.5	0.4
Anacardic acid C15:0	-	0.3	-	-	-	-	-	-	-	-	-	-
Lignans	16.2	7.8	19.8	11.6	15.5	17.1	18.5	21.2	16.4	19.3	13.2	17.3
Dihydrocubebin	15.4	7.1	18.5	10.9	23.2	16.0	17.4	19.7	15.3	18.0	12.4	16.3
3,4-Methylenedioxy secoisolariciresinol	0.8	0.7	1.3	0.7	2.3	1.1	1.1	1.5	1.1	1.3	0.8	1.0
Triterpenes ursane/oleanane type	5.1	8.7	3.3	9.4	2.3	7.7	7.9	5.2	8.4	6.2	10.9	7.8
β -Amyrenone	0.5	0.6	0.4	0.9	0.2	0.7	0.8	0.5	0.2	0.7	0.7	0.8
β -Amyrin	0.8	3.2	1.3	3.3	0.6	2.0	2.2	1.3	2.4	2.2	3.0	2.8
α -Amyrenone	1.1	1.0	0.6	1.2	0.4	1.3	0.9	0.6	1.0	0.8	1.0	0.9
α -Amyrin	2.1	3.5	1.0	4.0	0.6	2.4	2.0	1.2	2.6	1.6	3.6	3.0
Amyrin acetate	0.6	0.4	-	-	0.5	1.3	2.0	1.6	2.2	0.9	2.6	0.3
Triterpenes cycloartane type	3.6	15.1	5.0	9.3	2.1	7.1	6.8	4.6	8.5	4.8	8.9	9.6
Cycloartenol	2.6	5.1	2.3	5.8	0.9	3.4	3.7	2.8	4.1	3.2	4.8	5.1
Mangiferolic acid	0.4	3.8	1.1	0.8	0.5	1.4	2.0	0.6	1.6	1.6	1.4	1.6
Isomaniferolic acid	0.6	6.2	1.6	2.7	0.7	2.3	1.1	1.0	2.8	-	2.7	2.9
Others												
Ethylamine	1.0	0.1	1.2	1.0	1.1	1.2	1.3	1.2	1.1	1.2	1.2	1.1
Quinic acid	Tr.	0.3	0.8	0.3	1.1	0.5	0.7	0.6	0.5	0.7	0.5	0.7
Quinic acid (isomer)	0.8	0.4	1.1	0.6	1.5	1.0	1.0	0.9	0.8	1.1	0.7	1.0

Tr. – traces (< 0.1);

Table S4. DPPH and FRAP for propolis of *Scaptotrigona mexicana*^a

Sample	DPPH (%RSA)	FRAP ($\mu\text{mol Fe}^{2+}/\text{L}$)
Mp1	7.16 \pm 0.01	178 \pm 4
Mp2	5.37 \pm 0.19	165 \pm 9
Mp3	5.34 \pm 0.27	148 \pm 1
Mp4	4.35 \pm 0.46	173 \pm 1
Mp5	1.76 \pm 0.18	189 \pm 9
Mp6	2.05 \pm 0.19	171 \pm 8
Mp7	4.66 \pm 0.11	172 \pm 11
Mp8	5.65 \pm 0.17	212 \pm 10
Mp9	8.50 \pm 0.29	281 \pm 6
Mp10	3.98 \pm 0.15	186 \pm 4
Mp11	15.34 \pm 0.28	149 \pm 3
Mp12	13.27 \pm 0.07	109 \pm 5
Mp13	17.69 \pm 0.07	345 \pm 9
Mp14	17.14 \pm 0.10	248 \pm 4
Mp15	17.47 \pm 0.17	334 \pm 11
Mp16	8.16 \pm 0.09	275 \pm 14
Mp17	8.80 \pm 0.11	337 \pm 3
Mp18	6.97 \pm 0.09	265 \pm 9
Mp19	6.36 \pm 0.26	247 \pm 4
Mp20	7.06 \pm 0.11	300 \pm 9
Mp21	7.69 \pm 0.33	292 \pm 41
Mp22	7.72 \pm 0.19	289 \pm 3
Mp23	6.87 \pm 0.24	279 \pm 2
Mp24	7.02 \pm 0.33	303 \pm 5
BG ^b	17.01 \pm 0.21	411 \pm 1

^a Tested concentration 1.0 mg/mL.

^b Bulgarian *Apis mellifera* propolis. tested concentration 0.1 mg/mL.