Table S1. Honey samples used for NMR analysis

Sample	Location of origin	Supplier	Declared botanical origin
	North Macedonia		
M1	Brod	beekeeper	polyfloral
M2	Kriva Palanka	beekeeper	polyfloral mountain
M4	Kruševo	beekeeper	polyfloral
M5	Debar	beekeeper	polyfloral forest
M7	Krushe	beekeeper	honeydew
M8	Petrovec	beekeeper	polyfloral meadow
M9	Rastesh	beekeeper	honeydew
M10	Orovnik	beekeeper	polyfloral forest
M11	Kriva Palanka	beekeeper	polyfloral meadow
M12	Trpejca	beekeeper	polyfloral meadow
M13	Mešeišta	beekeeper	acacia (black locust)
M14	Dojran	beekeeper	polyfloral meadow
M15	Brod	beekeeper	honeydew
M16	Brod1	beekeeper	honeydew
M17	Negotino	beekeeper	polyfloral
M18	Petrovec	beekeeper	polyfloral
	Bulgaria		
B1	Korkina	beekeeper	honeydew
B2	Ludogorie	commercial	honeydew
B3	Stara Zagora	commercial	honeydew
B4	Popina	beekeeper	honeydew
B5	Kalofer	commercial	honeydew
B6	Stara Zagora	commercial	honeydew
B7	Kostinbrod	beekeeper	honeydew
B8	Stara Zagora	commercial	honeydew
B9	Grozdiovo, Dolni Chiflik	commercial	honeydew
B10	Bardo, Ihtiman	beekeeper	forest
B11	Zhelyava	beekeeper	forest
B12	Padesh, Blagoevgrad	beekeeper	polyfloral forest
B13	Kraevo	beekeeper	forest
B14	Strandzha	commercial	honeydew
B15	NA*	commercial	polyfloral forest
B16	Plovdiv	commercial	honeydew
B17	Krushovitsa, Vratsa	beekeeper	polyfloral
B18	Yambol	beekeeper	polyfloral
B19	Korkina	beekeeper	polyfloral
B20	Rogosh, Plovdiv	beekeeper	polyfloral
B21	Dragoyna, Rhodopes	beekeeper	polyfloral
B22	NA*	commercial	polyfloral

* NA – not declared

Table S2. Concentration range (min-max) and average content (avg) of studied components according to origin of honey

class	*mixed (BG)*			*mixed (NM)*			*honeydew (BG)*			*honeydew (NM)*			*polyfloral (BG)*		
g/100g	**min**	**max**	**avg**	**min**	**max**	**avg**	**min**	**max**	**avg**	**min**	**max**	**avg**	**min**	**max**	**avg**
IMu	0.00	0.42	0.13	0.00	0.52	0.17	0.00	0.68	0.23	0.27	0.75	0.57	0.00	0.52	0.13
αβTr	0.14	0.40	0.24	0.11	0.30	0.24	0.22	0.49	0.37	0.31	0.48	0.41	0.00	0.20	0.13
Gb	0.00	0.00	0.00	0.00	0.20	0.05	0.00	0.24	0.05	0.00	0.30	0.08	0.00	0.21	0.06
Tu	0.84	1.48	1.23	0.88	2.08	1.52	1.43	2.09	1.86	1.55	2.15	1.84	0.24	1.07	0.74
Mu	0.49	1.21	0.79	0.59	1.53	1.08	1.36	3.31	1.87	1.75	2.77	2.37	0.17	0.59	0.43
Lu	0.04	0.50	0.19	0.04	0.20	0.11	0.14	0.37	0.21	0.22	0.72	0.35	0.00	0.09	0.05
Er	0.00	0.92	0.36	0.00	0.56	0.31	0.00	0.78	0.32	0.00	0.24	0.11	0.00	0.31	0.09
Pa	0.07	0.38	0.25	0.00	0.35	0.19	0.00	0.42	0.30	0.00	0.37	0.26	0.00	0.17	0.03
Ma	0.27	1.53	0.81	0.60	1.52	1.00	0.61	1.87	1.24	0.37	0.62	0.52	0.72	1.68	1.22
Ng	0.24	0.46	0.33	0.21	0.53	0.41	0.35	0.69	0.54	0.44	0.84	0.72	0.00	0.32	0.18
IMa	0.50	1.17	0.82	0.44	1.34	0.89	0.00	2.95	1.43	1.58	2.54	2.02	0.00	0.81	0.53
Tru	0.50	0.98	0.74	0.00	1.11	0.66	0.54	1.53	0.82	0.93	2.19	1.55	0.25	0.48	0.37
ααTr	0.00	0.78	0.20	0.00	0.30	0.05	0.00	0.22	0.11	0.00	0.44	0.15	0.00	0.00	0.00
1-Ks	0.00	0.25	0.10	0.00	0.29	0.13	0.18	0.62	0.40	0.00	0.53	0.29	0.00	0.16	0.03
Kb	0.49	1.08	0.71	0.36	0.97	0.77	0.43	0.79	0.63	0.77	1.36	1.20	0.00	0.34	0.19
Mz	0.00	0.00	0.00	0.00	0.21	0.06	0.00	0.24	0.10	0.00	0.14	0.03	0.00	0.00	0.00
Su	0.05	0.38	0.16	0.02	0.82	0.22	0.00	1.04	0.31	0.05	0.26	0.12	0.09	0.43	0.21
Rf	0.18	0.25	0.22	0.18	0.37	0.27	0.34	0.90	0.49	0.14	0.57	0.46	0.00	0.23	0.08
G	30.85	36.45	33.77	27.32	36.24	31.33	27.18	36.31	31.13	27.90	33.80	30.13	33.36	38.81	35.17
F	36.18	39.68	37.52	35.62	41.08	39.00	30.86	37.80	34.84	31.48	36.02	34.23	38.19	41.22	39.24
Q	0.00	0.14	0.06	0.00	0.10	0.04	0.14	0.71	0.35	0.00	0.76	0.43	0.00	0.00	0.00
Pro	0.04	0.09	0.06	0.04	0.17	0.09	0.08	0.15	0.11	0.06	0.14	0.08	0.02	0.17	0.10
rBd	0.00	0.02	0.01	0.00	0.01	0.00	0.02	0.15	0.06	0.00	0.10	0.02	0.00	0.00	0.00
mBd	0.00	0.06	0.02	0.00	0.05	0.02	0.04	0.30	0.13	0.00	0.23	0.05	0.00	0.00	0.00
U1	0.00	0.05	0.03	0.00	0.06	0.02	0.03	0.18	0.10	0.05	0.24	0.09	0.00	0.00	0.00
U2	0.02	0.06	0.04	0.00	0.18	0.03	0.10	0.23	0.15	0.00	0.33	0.05	0.00	0.05	0.02
U3	0.00	0.16	0.06	0.00	0.28	0.03	0.00	0.32	0.19	0.00	0.23	0.07	0.00	0.19	0.11
U4	0.00	0.20	0.06	0.00	0.44	0.11	0.14	0.31	0.20	0.00	0.21	0.07	0.00	0.10	0.03
U5	0.00	0.10	0.05	0.00	0.18	0.06	0.00	0.18	0.09	0.00	0.21	0.11	0.04	0.22	0.11
U6	0.00	0.09	0.03	0.00	0.24	0.07	0.00	0.07	0.04	0.00	0.19	0.09	0.00	0.07	0.02
U7	0.00	0.03	0.01	0.00	0.02	0.00	0.00	0.05	0.02	0.00	0.05	0.02	0.00	0.00	0.00
U8	0.04	0.09	0.06	0.00	0.07	0.04	0.02	0.07	0.05	0.00	0.07	0.04	0.03	0.06	0.05
U9	0.02	0.07	0.04	0.00	0.10	0.06	0.00	0.12	0.08	0.00	0.13	0.09	0.00	0.08	0.05
U10	0.05	0.09	0.07	0.05	0.11	0.07	0.05	0.13	0.09	0.05	0.12	0.08	0.07	0.19	0.11
U11	0.04	0.09	0.07	0.00	0.13	0.06	0.07	0.20	0.11	0.09	0.22	0.16	0.00	0.05	0.01
U12	0.00	0.26	0.04	0.00	0.00	0.00	0.00	0.06	0.01	0.00	0.05	0.01	0.00	0.10	0.02
U13	0.25	0.47	0.36	0.28	0.65	0.48	0.38	0.71	0.53	0.57	0.85	0.71	0.00	0.28	0.16
U14	0.24	0.35	0.30	0.17	0.44	0.30	0.00	0.79	0.41	0.27	0.45	0.32	0.00	0.49	0.32
U15	0.00	0.08	0.05	0.04	0.07	0.06	0.00	0.10	0.06	0.04	0.07	0.06	0.00	0.08	0.04
U16	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.11	0.03	0.00	0.00	0.00

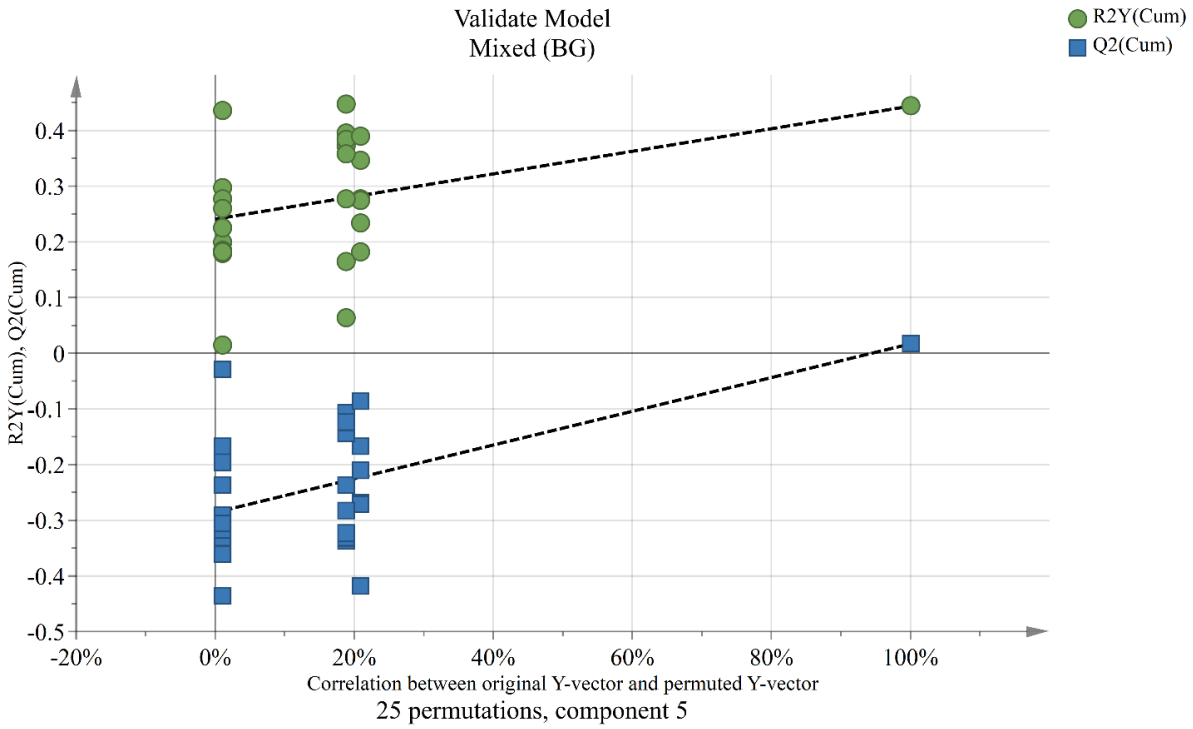

Fig S1. Permutation test for Bulgarian mixed honey class in PLS-DA model

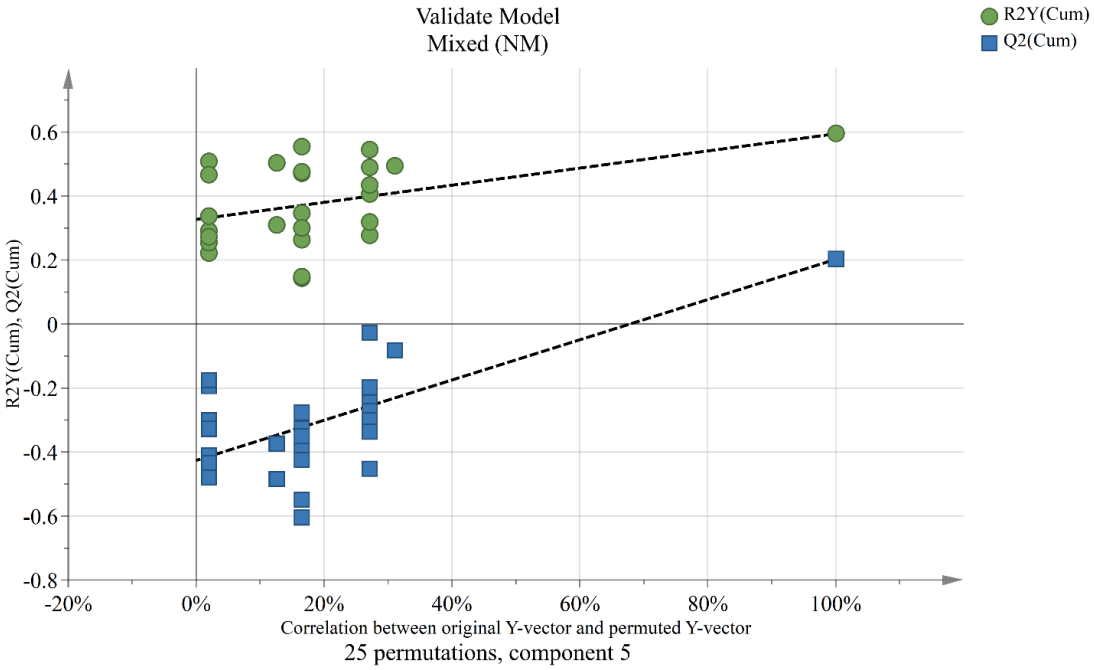

Fig. S2. Permutation test for North Macedonian mixed honey class in PLS-DA model

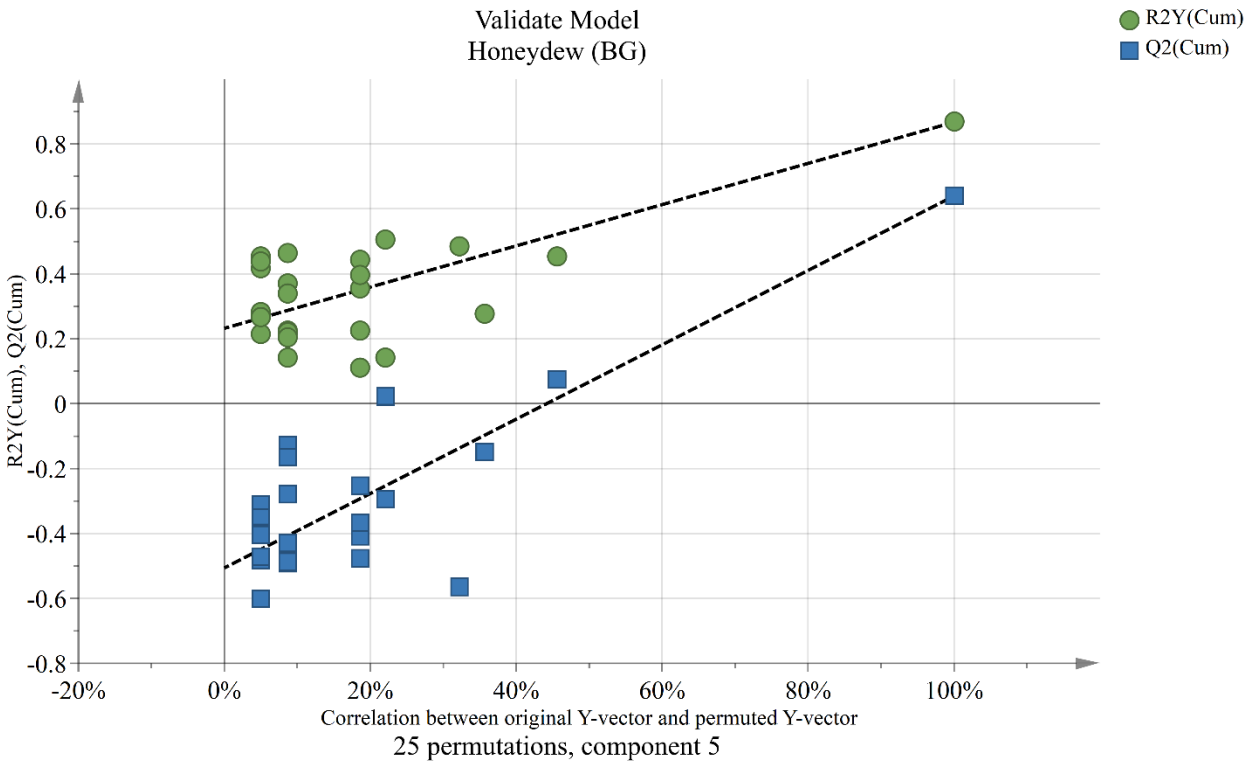

Fig S3. Permutation test for Bulgarian honeydew honey class in PLS-DA model

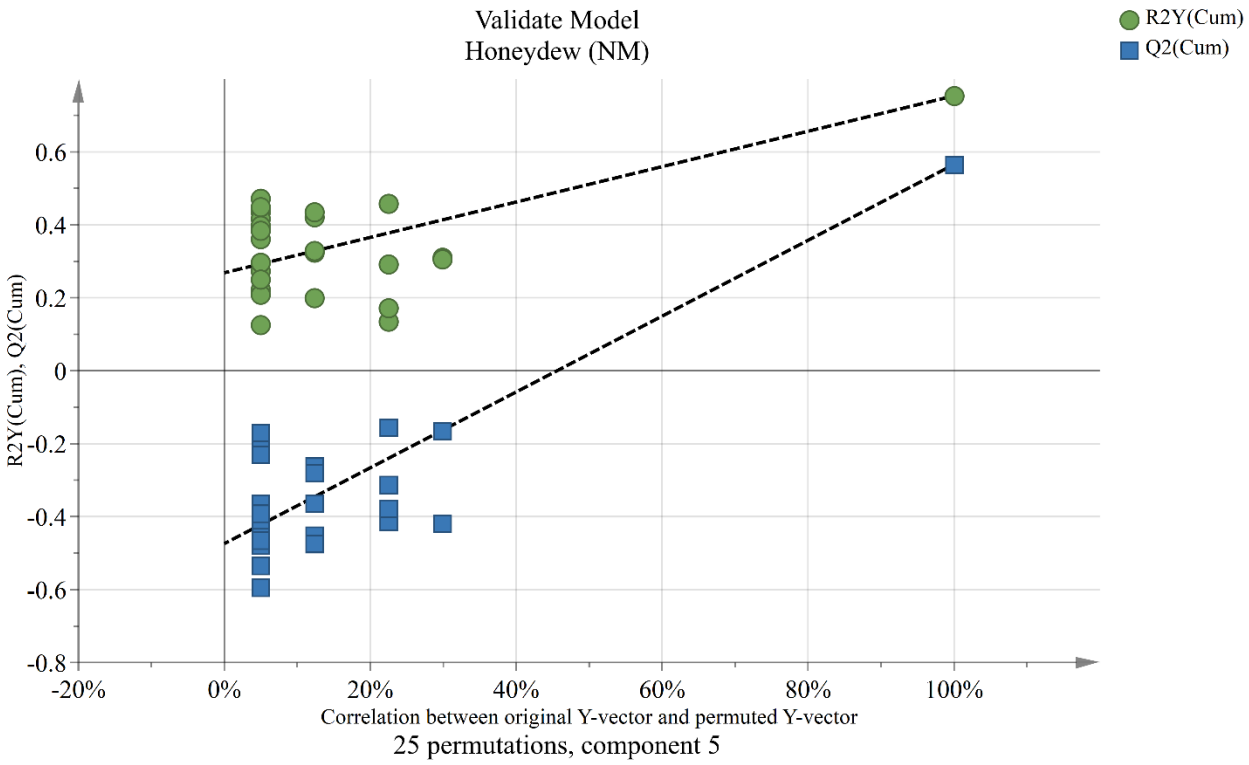

Fig S4. Permutation test for North Macedonian honeydew honey class in PLS-DA model

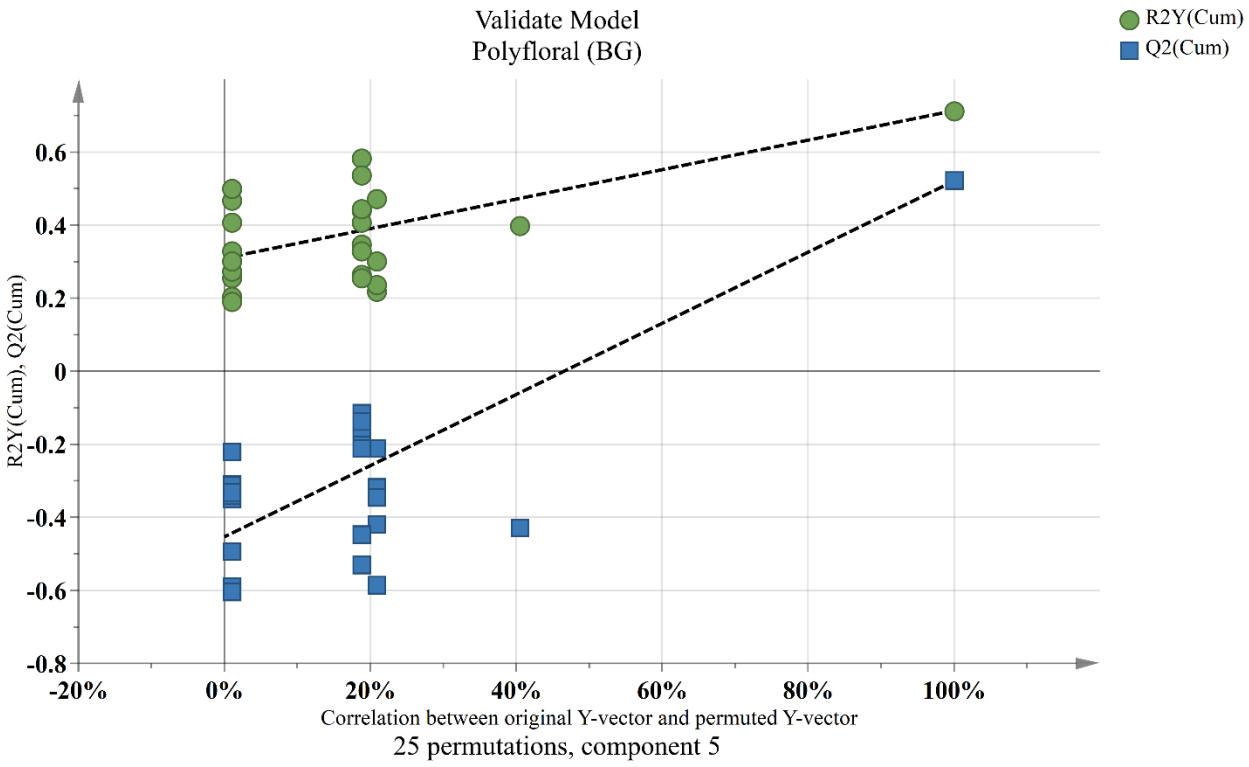

Fig. S5. Permutation test for Bulgarian polyfloral honey class in PLS-DA model

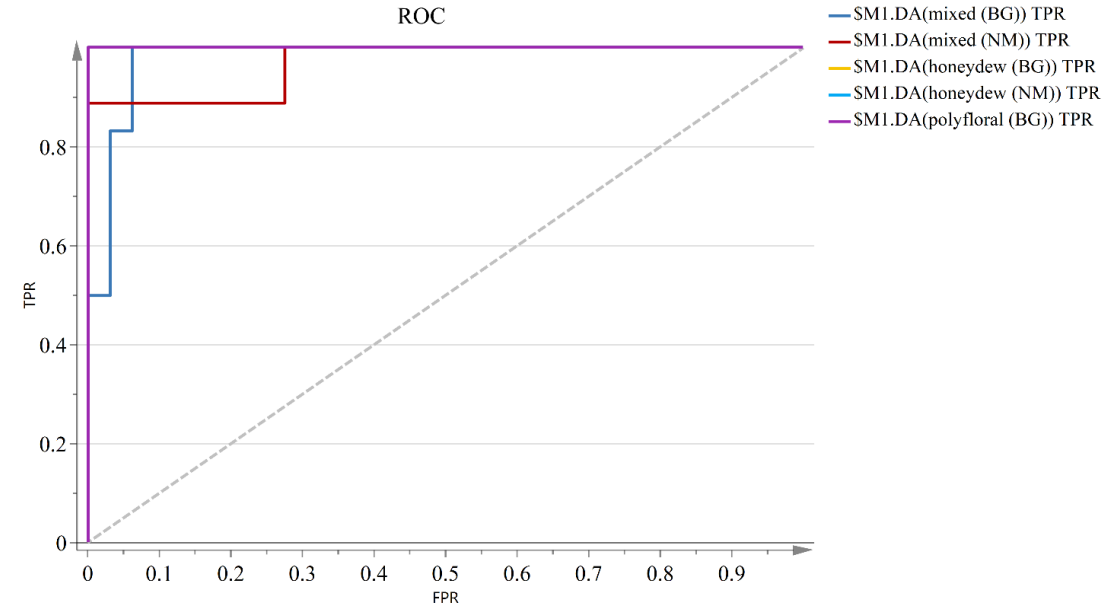

Fig. S6. ROC analysis for Bulgarian mixed, North Macedonian mixed, Bulgarian honeydew, North Macedonian honeydew and Bulgarian polyfloral honeys