Supplementary data for the article:

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Table S1. Propolis: sample location, collection date and type

No.	Village/ Town-City	Date	Type	Propolis	No.	Village/ Town-City	Date	Type	Propolis
P1	Erzurum	06/ 2015	Orange		P11	Persembe-Ordu	06/ 2015	Orange	
P2	Bayramic-Canakkale	05/ 2015	Orange		P12	Arguvan-Malatya	05/ 2015	Orange	
P3	Bayramic-Canakkale	05/ 2015	Blue		P13	Yesilyurt-Malatya	05/ 2015	Blue	
P4	Adana	05/ 2015	Orange		P14	Bingol	05/ 2015	Third type	
P5	Bingol	05/ 2015	Blue		P15	Uzumlu-Erzincan	06/ 2015	Blue	
P6	Bozcaada-Canakkale	06/ 2015	Blue		P16	Dogansehir-Malatya	05/ 2015	Orange	
P7	Bingol	05/ 2015	Orange		P17	Erzurum	06/ 2015	Orange	
P8	Ayvacık-Canakkale	06/ 2015	Orange		P18	Usak	06/ 2015	Orange	
P9	Mersin	05/ 2015	Orange		P19	Erzurum	06/ 2015	Blue	
P10	Bingol	05/ 2015	Blue		P20	Erzurum	06/ 2015	Blue	

Table S1. Continued

No.	Village/ Town- City	Date	Type	Propolis	No.	Village/ Town-City	Date	Type	Propolis
P21	Akcadag-Malatya	05/ 2015	Orange		P31	Aydın	06/ 2015	Orange	
P22	Erzincan	06/ 2015	Orange		P32	Karacasu-Aydın	06/ 2015	Orange	
P23	Ordu	06/ 2015	Blue		P33	Sakarya	09/ 2014	Orange	
P24	Tekevler-Elazığ	06/ 2015	Orange		P34	Sakarya	2013	Orange	
P25	Yazıhan-Malatya	05/ 2015	Orange		P35	Sakarya	05/ 2015	Orange	
P26	Erzurum	06/ 2015	Orange		P36	Yazıhan-Malatya	05/ 2015	Orange	
P27	Bayramic-Canakkale	06/ 2015	Third type		P37	Mardin	06/ 2015	Blue	
P28	Ordu	06/ 2015	Orange		P38	Bahcesaray -Van	07/ 2015	Blue	
P29	Puturge-Malatya	05/ 2015	Orange		P39	Van	07/ 2015	Blue	
P30	Kilis-Gaziantep	06/ 2015	Third Type		P40	Catak-Van	07/ 2015	Blue	

Table S1. Continued

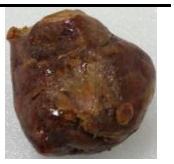
No.	Village/ Town-City	Date	Type	Propolis	No.	Village/ Town-City	Date	Type	Propolis
P41	Yalova	05/ 2015	Orange		P51	Serbia	05/ 2014	Orange	
P42	Seyitkamil-Gaziantep	07/ 2015	Third type		P52	Serbia	05/ 2014	Orange	
P43	Nizip-Gaziantep	07/ 2015	Blue		P53	Serbia	05/ 2014	Orange	
P44	Oguzeli-Gaziantep	07/ 2015	Blue		P54	Serbia	05/ 2014	Orange	
P45	Dortyol-Hatay	06/ 2015	Blue		P55	Serbia	05/ 2014	Orange	
P46	Ceyhan-Adana	06/ 2015	Orange		P56	Serbia	05/ 2014	Orange	
P47	Kars	06/ 2015	Orange		P57	Serbia	05/ 2014	Third type	
P48	Rize	05/ 2014	Blue		P58	Serbia	05/ 2014	Orange	
P49	Serbia	05/ 2014	Blue		P59	Serbia	05/ 2014	Orange	
P50	Serbia	05/ 2014	Orange		P60	Serbia	05/ 2014	Orange	

Table S2. Results of pollen analysis

No.	Total pollen types	Dominant pollen (>45%)	Secondary pollen (16-45%)	Important minor pollen (3-15%)	Minor pollen (<3%)
P1	26	0	Asteraceae (16%), Rutaceae (18%)	*Cirsium arvense*, Poaceae, Rosaceae, *Ceratonia siliqua*, *Castanea sativa*, *Plantago* spp., Apiaceae	17
P2	20	0	*Cirsium arvense* (30%)	Fabaceae, Rhamnaceae, Rosaceae, Brassicaceae, *Calluna vulgaris*/*Erica manipuliflora*, Apiaceae	13
P3	18	0	Pinaceae (21%), *Castanea sativa* (17%)	Poaceae, Rosaceae, Brassicaceae, *Salix* spp., *Calluna vulgaris*/*Erica manipuliflora*	11
P4	32	0	0	Asteraceae, *Astragalus* spp., Rosaceae, *Lotus corniculatus*, Apiaceae, Myrtaceae, *Eucalyptus* spp., *Hedera helix*, *Xanthium spinosum*, *Calluna vulgaris*/*Erica manipuliflora*, Rutaceae, Oleaceae	20
P5	17	0	Asteraceae (26%), *Plantago* spp. (17%)	*Cirsium arvense*, Lamiaceae, *Astragalus* spp., Rosaceae, Brassicaceae, Apiaceae, *Salix* spp., Liliaceae	7
P6	17	Lamiaceae (53%)	0	Asteraceae, *Cirsium arvense*, *Astragalus* spp.,Liliaceae	12
P7	24	0	0	Asteraceae, Lamiaceae, Poaceae, *Astragalus* spp., Rosaceae, *Ceratonia* spp., Brassicaceae, Apiaceae, *Salix* spp., Rutaceae	14
P8	16	Rosaceae (51%)	*Cirsium arvense* (18%)	Polygonaceae, Apiaceae	12
P9	24	0	*Ceratonia siliqua* (22%)	Asteraceae, Fabaceae, Polygonaceae, *Astragalus* spp., Rosaceae, Boraginaceae, *Filipendula ulmeria*, Rutaceae	15
P10	22	0	*Lotus corniculatus* (29%)	Asteraceae, Rosaceae, Brassicaceae, Apiaceae, *Plantago* spp., Rutaceae	15
P11	8	*Castanea sativa* (88%)	0	0	7
P12	15	*Lotus corniculatus* (51%)	Asteraceae (16%)	Fabaceae, Rosaceae, Apiaceae	10
P13	19	0	Asteraceae (17%), Rosaceae (25%)	*Cirsium arvense*, Poaceae, Brassicaceae, Apiaceae	13
P14	24	0	Asteraceae (18%), *Lotus corniculatus* (19%)	Rosaceae, Brassicaceae, Apiaceae, *Plantago* spp., Rutaceae	17
P15	23	0	Asteraceae (20%)	Rosaceae, Brassicaceae, *Lotus corniculatus*, Apiaceae, *Plantago* spp., Alismataceae	16
P16	15	0	Asteraceae (19%), Rosaceae (16%), *Lotus corniculatus* (24%)	Aceraceae, Fabaceae, Lamiaceae, Apiaceae	8

Table S2. Continued

No.	Total pollen types	Dominant pollen (>45%)	Secondary pollen (16-45%)	Important minor pollen (3-15%)	Minor pollen (<3%)
P17	17	0	Asteraceae (17%), Rosaceae (17%)	Poaceae, *Filipendula ulmeria*, Brassicaceae, *Plantago* spp., Rutaceae, *Lotus corniculatus*	9
P18	13	*Salix* spp. (49%)	Brassicaceae (20%)	Asteraceae, Rosaceae, Apiaceae	8
P19	20	0	Solanaceae (24%)	Asteraceae, Rosaceae, *Filipendula ulmeria*, Brassicaceae, *Plantago* spp., Rutaceae	13
P20	20	0	0	Asteraceae, *Cirsium arvense*, Rhamnaceae, Polygonaceae, *Astragalus* spp., Rosaceae, *Filipendula ulmeria*, *Lotus corniculatus*, *Hedera helix*, *Centaurea cyanus*, *Plantago* spp., Rutaceae	8
P21	17	0	*Salix* spp. (34%)	Asteraceae, *Cirsiumarvense*, *Astragalus*spp., Rosaceae, Brassicaceae, *Lotus corniculatus*	10
P22	18	0	*Cirsium arvense*(20%)	Asteraceae, Poaceae, Rosaceae, *Lotus corniculatus*, Chenopodiaceae, *Salix* spp.	11
P23	7	*Castanea sativa* (85%)	0	Rosaceae	5
P24	29	0	0	Asteraceae, *Cirsium arvense*, Fabaceae, *Astragalus* spp., Rosaceae, Apiaceae, *Salix* spp.	22
P25	15	0	Asteraceae (39%), *Lotus corniculatus* (18%)	*Cirsium arvense*, Fabaceae, Lamiaceae, *Astragalus* spp., Rosaceae	8
P26	24	0	*Lotus corniculatus* (15%)	Asteraceae, *Cirsium arvense*, Poaceae, Rosaceae, *Plantago* spp., Rutaceae	17
P27	19	0	*Cirsium arvense* (16%), *Calluna vulgaris*/*Erica manipuliflora* (27%)	Poaceae, Rosaceae, Betulaceae, *Salix* spp., Liliaceae, Oleaceae	11
P28	28	0	Asteraceae (27%)	*Cirsium arvense*, Fabaceae, Lamiaceae, Rosaceae, Apiaceae, *Plantago* spp.	21
P29	21	0	Poaceae (20%), Rosaceae (16%)	Lamiaceae, *Astragalus* spp., Brassicaceae, *Xanthium spinosum*, *Salix* spp.	14
P30	27	0	Fabaceae (27%), *Echium vulgare* (17%)	*Cirsium arvense*, Rhamnaceae, *Vicia sativa*, *Astragalus* spp., Rosaceae, Brassicaceae	19
P31	22	0	*Castanea sativa* (43%),	Asteraceae, Rhamnaceae, *Astragalus* spp., Rosaceae	17
P32	24	0	*Castanea sativa* (24%)	Asteraceae, Poaceae, Rhamnaceae, *Astragalus* spp., Rosaceae, Apiaceae, Oleaceae	16
P33	14	*Castanea sativa* (84%)	0	0	13

Table S2. Continued

Sample	Total pollen types	Dominant pollen (>45%)	Secondary pollen (16-45%)	Important minor pollen (3-15%)	Minor pollen (<3%)
P34	8	*Castanea sativa* (83%)	0	Poaceae	6
P35	10	*Castanea sativa* (85%)	0	0	9
P36	23	0	*Astragalus* spp. (29%), Rosaceae (18%)	Poaceae, *Xanthium spinosum*, *Salix* spp., Boraginaceae	17
P37	22	0	0	Asteraceae, *Cirsium arvense*, Poaceae, Rosaceae, Brassicaceae, Apiaceae, *Eucalyptus* spp., *Plantago* spp., Rutaceae	14
P38	15	0	Apiaceae (19%), *Salix* spp. (16%)	Asteraceae, *Cirsium arvense*, Lamiaceae, Poaceae, *Astragalus* spp., Rosaceae, Boraginaceae, *Plantago* spp.	5
P39	20	0	Asteraceae (22%)	*Cirsium arvense*, Lamiaceae, Poaceae, *Astragalus* spp., Rosaceae, Apiaceae, *Plantago* spp., *Salix* spp.	11
P40	25	0	Asteraceae (20%)	*Cirsium arvense*, Fabaceae, *Astragalus* spp., Rosaceae, Boraginaceae, *Lotus corniculatus*, Apiaceae, *Plantago* spp., Rutaceae	15
P41	20	0	*Castanea sativa* (24%), Apiaceae (26%)	*Helianthus annuus*, *Cirsium arvense*, Rhamnaceae, Rosaceae, *Plantago* spp., *Salix* spp.	12
P42	19	0	0	*Cirsium arvense*, Fabaceae, Lamiaceae, Poaceae, Rhamnaceae, Rosaceae, Apiaceae	12
P43	17	0	*Vicia sativa* (31%), *Astragalus* spp. (18%)	Asteraceae, *Cirsium arvense*, Rosaceae, Apiaceae, Liliaceae	10
P44	25	0	Rosaceae (19%)	Asteraceae, *Cirsium arvense*, Lamiaceae, Poaceae, Rhamnaceae, *Filipendula ulmeria*, Rutaceae, Oleaceae	16
P45	22	0	0	Polygonaceae, Rosaceae, Apiaceae, Myrtaceae, *Filipendula ulmeria*, *Eucalyptus* spp., Chenopodiaceae, *Calluna vulgaris*/*Erica manipuliflora*, Rutaceae, Oleaceae	12
P46	25	0	0	*Helianthus annuus*, Asteraceae, Rhamnaceae, Polygonaceae, Rosaceae, *Filipendula ulmeria*, Myrtaceae, Chenopodiaceae, *Calluna vulgaris*/*Erica manipuliflora*, Rutaceae	15
P47	16	Fabaceae (51%)	0	*Cirsium arvense*, *Echium vulgare*, *Astragalus* spp., Rosaceae, *Lotus corniculatus*, Apiaceae, *Salix* spp.	8
P48	20	0	*Castanea sativa* (30%)	Fabaceae, Lamiaceae, Polygonaceae, Ericaceae, Rosaceae, *Lotus corniculatus*	13

Table S2. Continued

Sample	Total pollen types	Dominant pollen (>45%)	Secondary pollen (16-45%)	Important minor pollen (3-15%)	Minor pollen (<3%)
P49	28	0	*Castanea sativa* (29%)	Asteraceae, *Cirsium arvense*, Fabaceae, Polygonaceae, *Echium vulgare*, Rosaceae, *Tilia* spp.	20
P50	12	0	Fabaceae (28%), Rosaceae (40%)	Aceraceae, Asteraceae, *Tilia* spp.	7
P51	21	0	*Helianthus annuus* (17%), Asteraceae (32%)	Rosaceae, *Tilia* spp., Apiaceae	16
P52	27	0	Asteraceae (21%)	Fabaceae, Polygonaceae, Rosaceae, Betulaceae, Apiaceae, *Quercus* spp., *Plantago* spp., *Salix* spp.	18
P53	26	0	*Cirsium arvense*(17%)	Asteraceae, *Trifolium repens*, Poaceae, Rosaceae, Brassicaceae, Apiaceae, *Plantago* spp., *Salix* spp.	17
P54	15	*Castanea sativa* (66%)	0	Rosaceae	13
P55	13	Rosaceae (52%)		Aceraceae, Asteraceae, Lamiaceae, *Salix* spp.	8
P56	14	0	Asteraceae (32%), Rosaceae (27%)	*Helianthus annuus*, *Tilia* spp., Apiaceae	9
P57	14	0	Asteraceae (31%), Rosaceae (33%)	*Cirsium arvense*, Apiaceae	10
P58	6	0	Aceraceae (32%), *Aesculus hippocastanum* (19%), *Salix* spp. (20%)	Rhamnaceae, *Juglans regia*, Rosaceae	0
P59	22	0	0	Asteraceae, *Cirsium arvense*, Fabaceae, Polygonaceae, Rosaceae, Boraginaceae, *Quercus* spp., *Salix* spp.	14
P60	24	0	*Tilia* spp. (24%)	*Helianthus annuus*, Asteraceae, Rosaceae, *Hedera helix*, *Salix* spp.	18

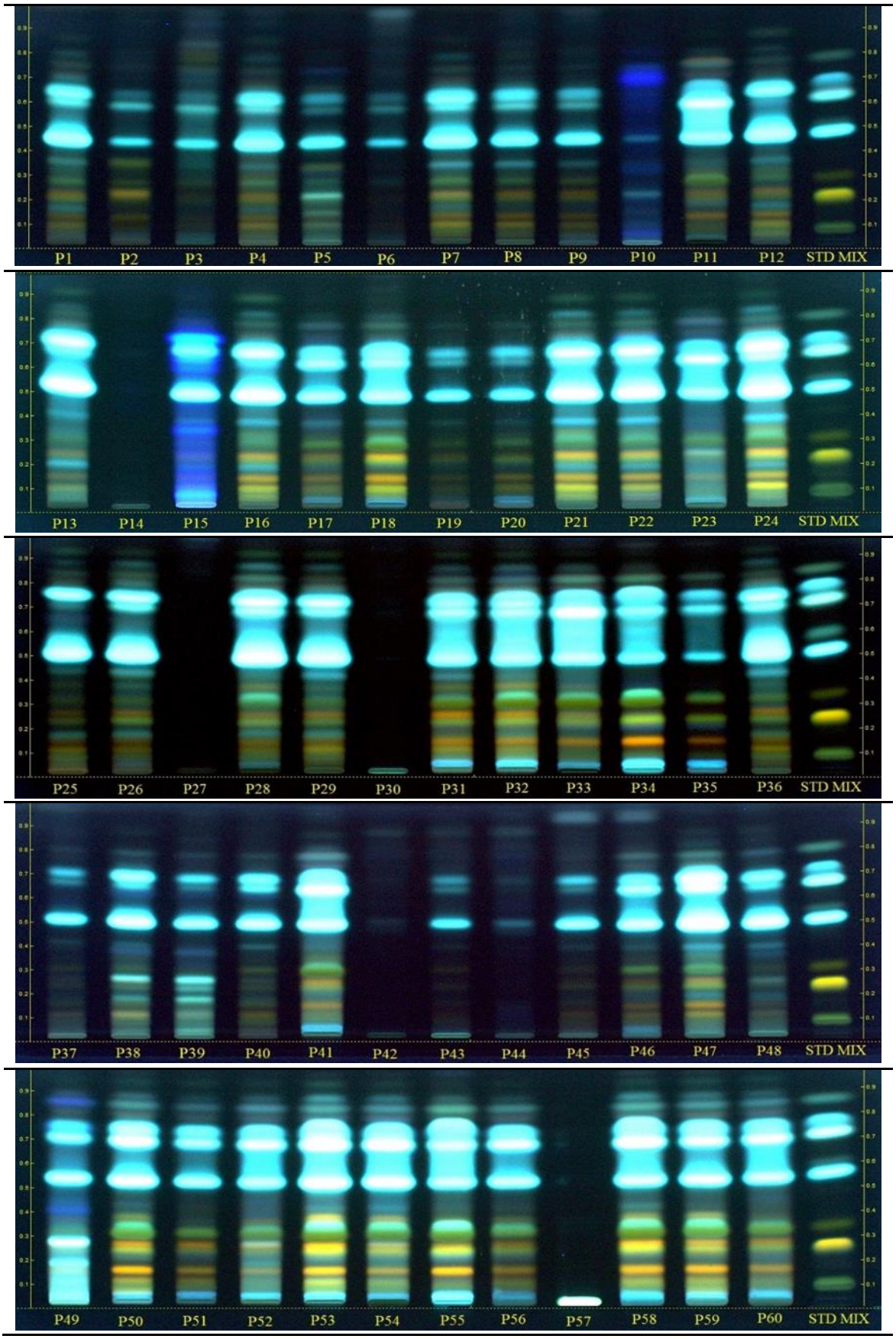


Figure S1. HPTLC chromatograms of hydroalcoholic propolis extracts at 366 nm. Developing solvent system: *n*-hexane-ethyl acetate-acetic acid (5:3:1, v/v/v), derivatization: NP/PEG 400.

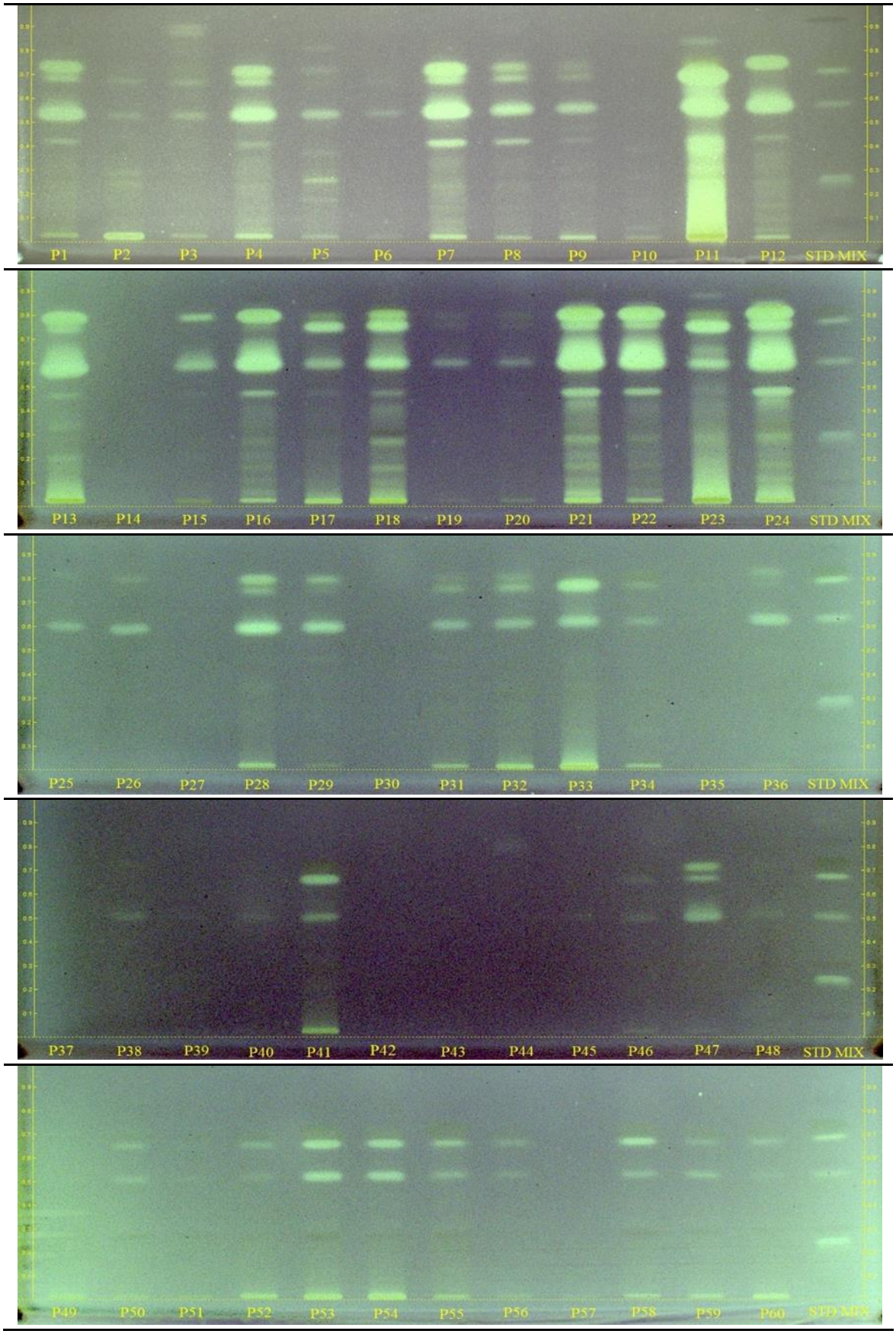


Figure S2. HPTLC chromatograms of hydroalcoholic propolis extracts at white light. Developing solvent system: *n*-hexane-ethyl acetate-acetic acid (5:3:1, v/v/v), derivatization: $DPPH^{\cdot}$ solution.

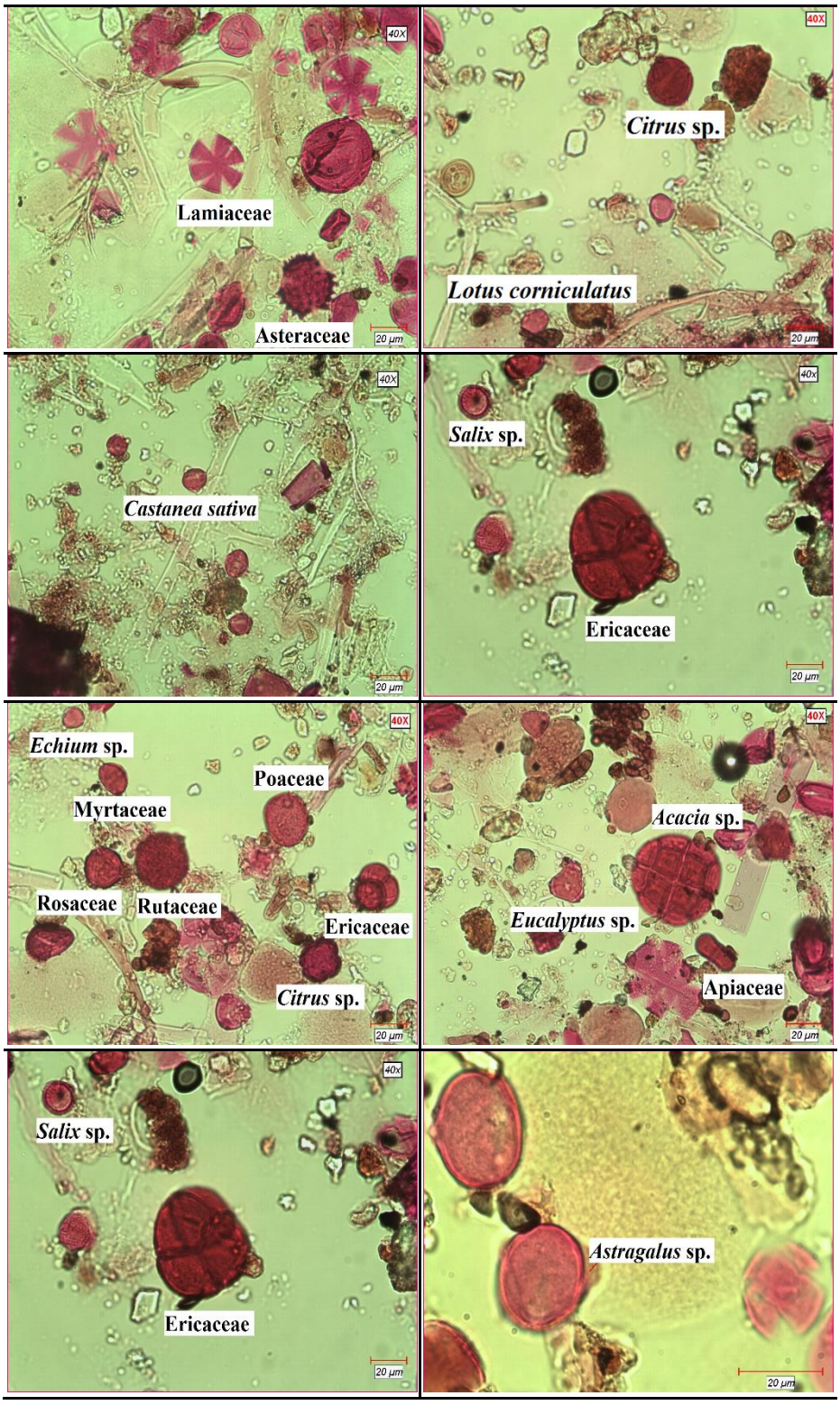


Figure S3. Pollen grains found in propolis samples