

**Table S1.** Correlation matrix presenting the Pearson's coefficients (r) for 42 examined components *vs.* optical rotation angle.

	[ $\alpha$ ]	G	F	Gb	IMa	IMu	Kb	Lu	Ma	Mu	Ng	Su	$\alpha\alpha$ Tr	$\alpha\beta$ Tr	Tru	Tu	Er	1-Ks	Mr	Mz	Pa	Rf
[ $\alpha$ ]	1																					
G	<i>0.09*</i>	1																				
F	<b>-0.89**</b>	-0.17	1																			
Gb	-0.22	-0.20	0.28	1																		
IMa	-0.20	-0.45	0.23	0.09	1																	
IMu	-0.19	-0.37	0.22	0.01	0.71	1																
Kb	-0.54	-0.29	0.52	0.14	0.67	0.57	1															
Lu	-0.42	-0.33	0.37	-0.03	0.76	0.60	0.79	1														
Ma	<b>0.88</b>	0.03	-0.69	-0.19	-0.32	-0.29	-0.60	-0.49	1													
Mu	-0.44	-0.41	0.39	0.05	<b>0.87</b>	0.70	0.77	<b>0.86</b>	-0.51	1												
Ng	-0.50	-0.33	0.45	0.20	<b>0.82</b>	0.57	<b>0.81</b>	0.80	-0.53	<b>0.89</b>	1											
Su	0.15	-0.36	-0.39	0.03	-0.17	-0.12	-0.18	-0.21	-0.09	-0.19	-0.25	1										
$\alpha\alpha$ Tr	-0.16	0.04	0.07	0.05	0.18	0.35	0.32	0.50	-0.26	0.30	0.31	-0.11	1									
$\alpha\beta$ Tr	-0.58	-0.45	0.50	0.09	0.76	0.52	0.74	0.77	-0.57	<b>0.86</b>	<b>0.90</b>	-0.14	0.27	1								
Tru	-0.38	-0.33	0.42	0.13	<b>0.88</b>	0.67	<b>0.84</b>	<b>0.81</b>	-0.51	0.80	0.76	-0.20	0.24	0.68	1							
Tu	-0.62	-0.42	0.56	0.10	0.66	0.48	0.66	0.67	-0.53	<b>0.82</b>	<b>0.80</b>	-0.22	0.16	<b>0.88</b>	0.61	1						
Er	-0.35	-0.30	0.35	0.17	0.20	0.01	0.11	0.19	-0.25	0.27	0.26	-0.11	0.11	0.35	0.15	0.50	1					
1-Ks	-0.21	-0.09	0.12	-0.01	0.51	0.31	0.45	0.67	-0.33	0.55	0.46	-0.14	0.52	0.44	0.48	0.25	0.00	1				
Mr	<b>0.89</b>	0.03	-0.72	-0.21	-0.33	-0.27	-0.62	-0.50	<b>0.97</b>	-0.54	-0.57	-0.04	-0.24	-0.61	-0.51	-0.59	-0.27	-0.30	1			
Mz	-0.07	-0.13	0.06	-0.02	0.11	0.23	0.07	0.21	-0.13	0.14	0.11	-0.06	0.60	0.10	0.10	0.10	0.43	0.37	-0.08	1		
Pa	-0.08	-0.30	0.05	0.01	0.43	0.40	0.21	0.43	-0.22	0.37	0.33	0.01	0.54	0.32	0.39	0.30	0.53	0.35	-0.16	<b>0.82</b>	1	
Rf	-0.48	-0.55	0.38	0.11	0.67	0.49	0.59	0.67	-0.55	0.74	0.67	0.12	0.22	0.78	0.61	0.66	0.28	0.59	-0.58	0.27	0.43	1

\* Data without statistical significance at level  $p > 0.05$  are given in italics

\*\* High positive correlations ( $r > 0.8$ ) are highlighted in red, and strong negative correlations ( $r < -0.8$ ) - in blue.

**Table S2.** Honey and jam samples investigated

Sample	Type	Botanical origin	Geographical origin	Specific rotation $[\alpha]_D^{20}$
dl1	nectar	diluted	Bulgaria	+7.2
dl2	honeydew	diluted	Bulgaria	+31.1
dl3	nectar	diluted	Romania	+89.2
dl4	nectar	diluted	Romania	+34.1
dl5	nectar	diluted	Romania	+34.1
dl6	nectar	diluted	Romania	+46.1
dl7	nectar	diluted	Bulgaria	+39.3
ch8	mixed	chestnut	Bulgaria	-11.5
ch9	mixed	chestnut	Bulgaria	-3.2
ch10	mixed	chestnut	Bulgaria	-2.5
ch11	mixed	chestnut	Bulgaria	+18.4
cf12	honeydew	coniferous	Bulgaria	-6.3
cf13	honeydew	coniferous	Italy	+9.0
cf14	honeydew	coniferous	Romania	-8.1
ok15	honeydew	oak	Bulgaria	-9.7
ok16	honeydew	oak	Bulgaria	-11.3
ok17	honeydew	oak	Bulgaria	-10.4
ok18	honeydew	oak	Bulgaria	-2.9
ok19	honeydew	oak	Bulgaria	-7.4
ok20	honeydew	oak	Bulgaria	-8.6
ok21	honeydew	oak	Bulgaria	-10.6
ok22	honeydew	oak	North Macedonia	-0.2
ok23	honeydew	oak	Romania	-9.4
ok24	honeydew	oak	Romania	-4.6
ts25	nectar	thistle	Romania	+2.5
ts26	nectar	thistle	Bulgaria	-18.8
tm27	nectar	thyme	Bulgaria	-8.3
cr28	nectar	coriander	Bulgaria	-9.4
rs29	nectar	rapeseed	Bulgaria	-11.2
pf30	nectar	polyfloral	Greece	-16.9

<b>pf31</b>	nectar	polyfloral	Bulgaria	-14.8
<b>ac32</b>	nectar	acacia	Bulgaria	-14.6
<b>ac33</b>	nectar	acacia	Bulgaria	-14.1
<b>ac34</b>	nectar	acacia	Bulgaria	-19.2
<b>ld35</b>	nectar	linden	Bulgaria	-16.3
<b>ld36</b>	nectar	linden	Romania	-15.8
<b>mx37</b>	mixed	mixed	Bulgaria	-14.4
<b>mx38</b>	mixed	mixed	Bulgaria	-9.3
<b>mx39</b>	mixed	mixed	North Macedonia	-15.0
<b>mx40</b>	mixed	mixed	Romania	-11.3
<b>mx41</b>	mixed	mixed	Romania	-35.2
<b>jm42</b>	jam	jam	Bulgaria	+22.7

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