

Table S1. Results of the partial least square regression models built for the prediction of time interval within temperature group and temperature within time intervals

Detailed temperature level prediction models										
	Subgroup	Pretreatment	NrLV	NrObs	R ² Tr	RMSEC	RPDC	R ² CV	RMSECV	RPDCV
Sunflower	within 60 min	sgol@2-17-0_deTr	5	160	0.93	7.09	3.89	0.89	9.25	2.98
	within 120 min	sgol@2-21-0_sgol@2-17-2	5	157	0.87	9.85	2.80	0.82	11.76	2.35
	within 180 min	sgol@2-17-0_deTr_snv	5	160	0.94	6.72	4.08	0.90	8.59	3.19
	within 240 min	sgol@2-21-0_deTr_msc	5	149	0.96	5.63	4.76	0.94	6.78	3.96
Bastard indigo	within 60 min	sgol@2-21-0_snv	5	165	0.84	10.60	2.54	0.77	13.00	2.07
	within 120 min	sgol@2-13-0_msc	5	159	0.86	9.97	2.66	0.77	12.58	2.11
	within 180 min	snv	5	169	0.89	8.84	3.05	0.76	13.03	2.07
	within 240 min	sgol@2-13-0_sgol@2-13-2	5	139	0.92	7.51	3.60	0.88	9.35	2.89
Acacia	within 60 min	sgol@2-17-0_msc	5	156	0.79	12.44	2.18	0.68	15.36	1.77
	within 120 min	sgol@2-21-0	5	154	0.73	13.65	1.94	0.65	15.65	1.69
	within 180 min	sgol@2-17-0_deTr_msc	5	149	0.51	19.20	1.43	0.29	23.13	1.19
	within 240 min	sgol@2-13-0_sgol@2-13-1	5	162	0.73	13.52	1.94	0.60	16.52	1.59
Detailed time-period prediction models										
	Subgroup	Pretreatment	NrLV	NrObs	R ² Tr	RMSEC	RPDC	R ² CV	RMSECV	RPDCV
Sunflower	within 40 °C	sgol@2-17-0_deTr_msc	5	171	0.98	11.62	7.32	0.97	14.49	5.87
	within 60 °C	sgol@2-21-0_sgol@2-17-2	5	151	0.91	26.31	3.28	0.83	35.17	2.46
	within 80 °C	sgol@2-13-0_deTr	5	155	0.88	28.83	2.93	0.83	34.42	2.45
	within 100 °C	sgol@2-17-0_sgol@2-21-1	5	165	0.91	24.56	3.41	0.89	27.84	3.00
Bastard indigo	within 40 °C	sgol@2-13-0_deTr_snv	4	156	0.96	17.24	4.94	0.94	20.60	4.13
	within 60 °C	sgol@2-13-0	1	181	0.55	58.12	1.49	0.46	63.75	1.36
	within 80 °C	sgol@2-13-0	3	167	0.54	56.96	1.47	0.42	63.60	1.32
	within 100 °C	sgol@2-17-0_snv	5	148	0.92	24.62	3.46	0.87	30.27	2.81
Acacia	within 40 °C	sgol@2-21-0_sgol@2-21-1	5	162	0.61	53.44	1.61	0.50	60.59	1.42
	within 60 °C	sgol@2-21-0_sgol@2-17-2	4	160	0.61	53.96	1.60	0.47	62.59	1.38
	within 80 °C	sgol@2-21-0	5	158	0.79	39.47	2.16	0.67	49.02	1.74
	within 100 °C	sgol@2-21-0_sgol@2-13-1	5	145	0.87	30.71	2.76	0.83	34.62	2.45

Each row represents the best model chosen from the 41 pretreatment combinations, model parameters are computed using leave-one-sample-out cross-validation

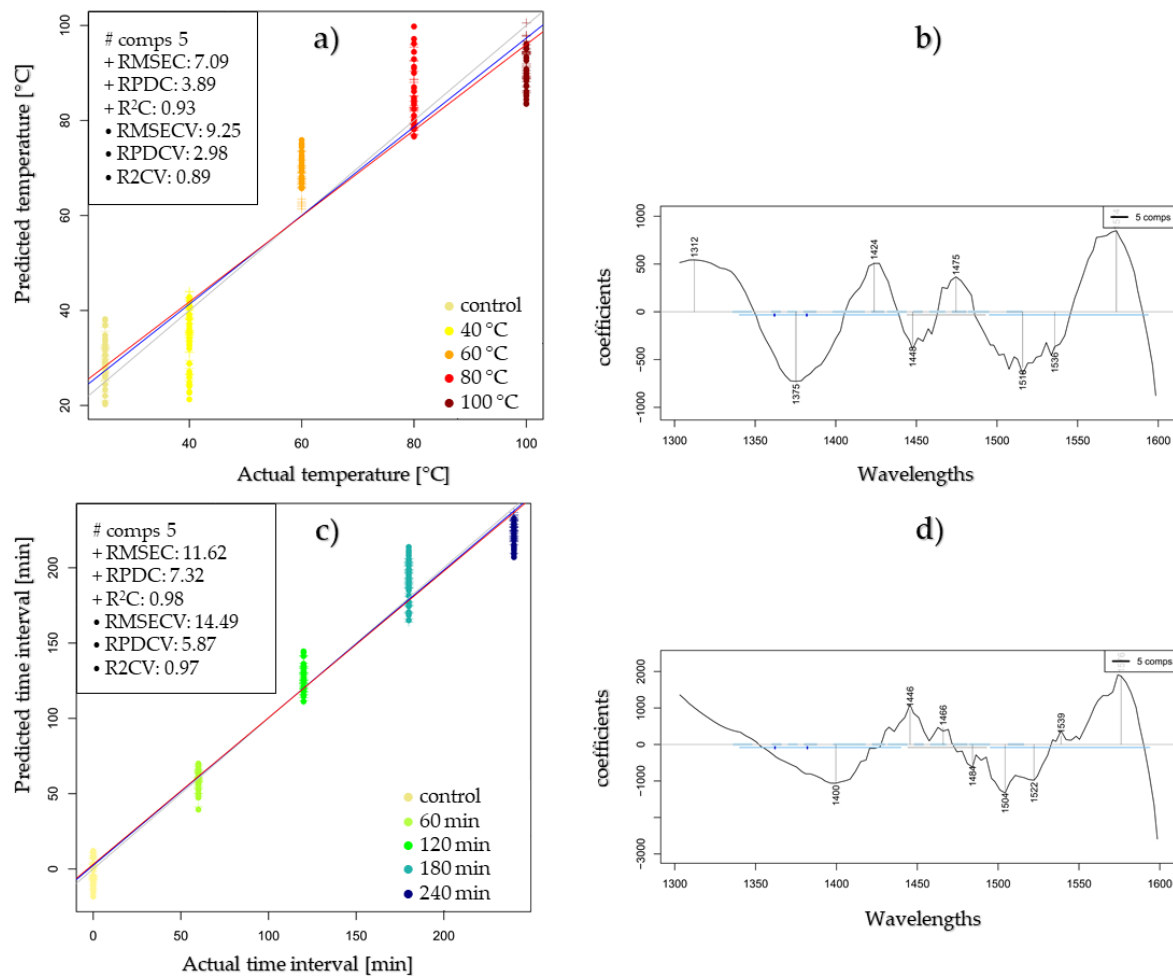


Figure S1: Partial least square regression plot of the sunflower honeys: **a)** regression plot of honeys heated for 60 min regressed on the temperature levels with Savitzky–Golay smoothing (window size: 17) and detrending; **b)** the respective regression vector; **c)** regression plot of honeys heated at 40 °C regressed on the time intervals with Savitzky–Golay smoothing (window size: 17), detrending, and MSC; **d)** the respective regression vector.