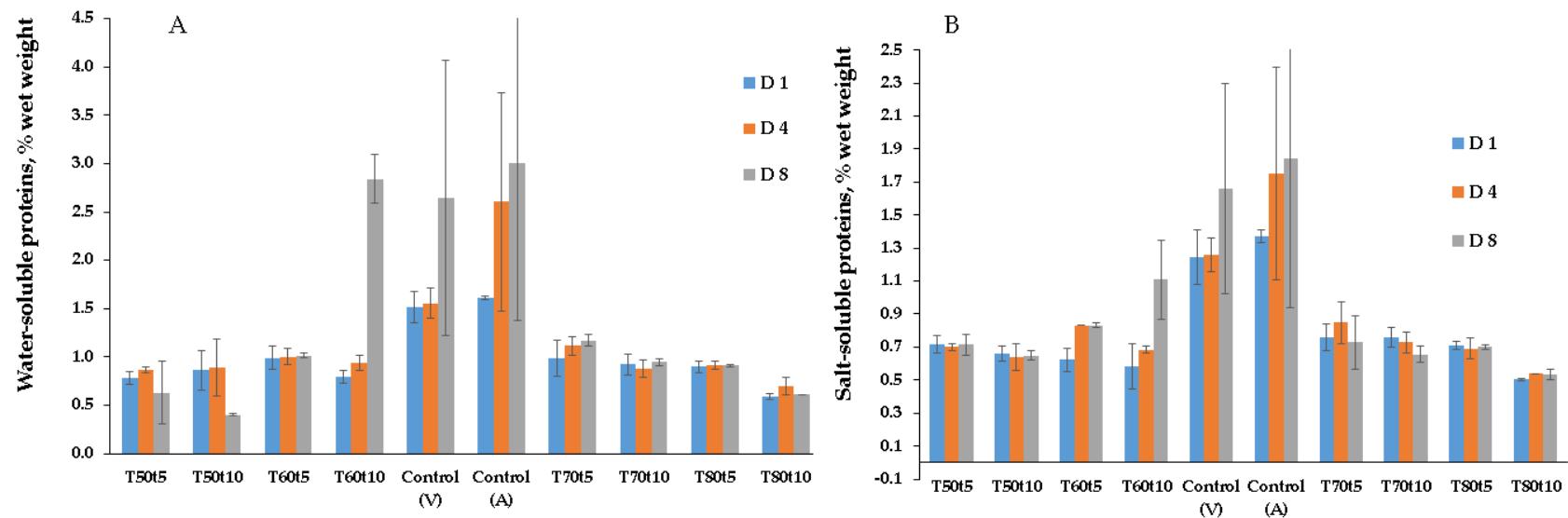


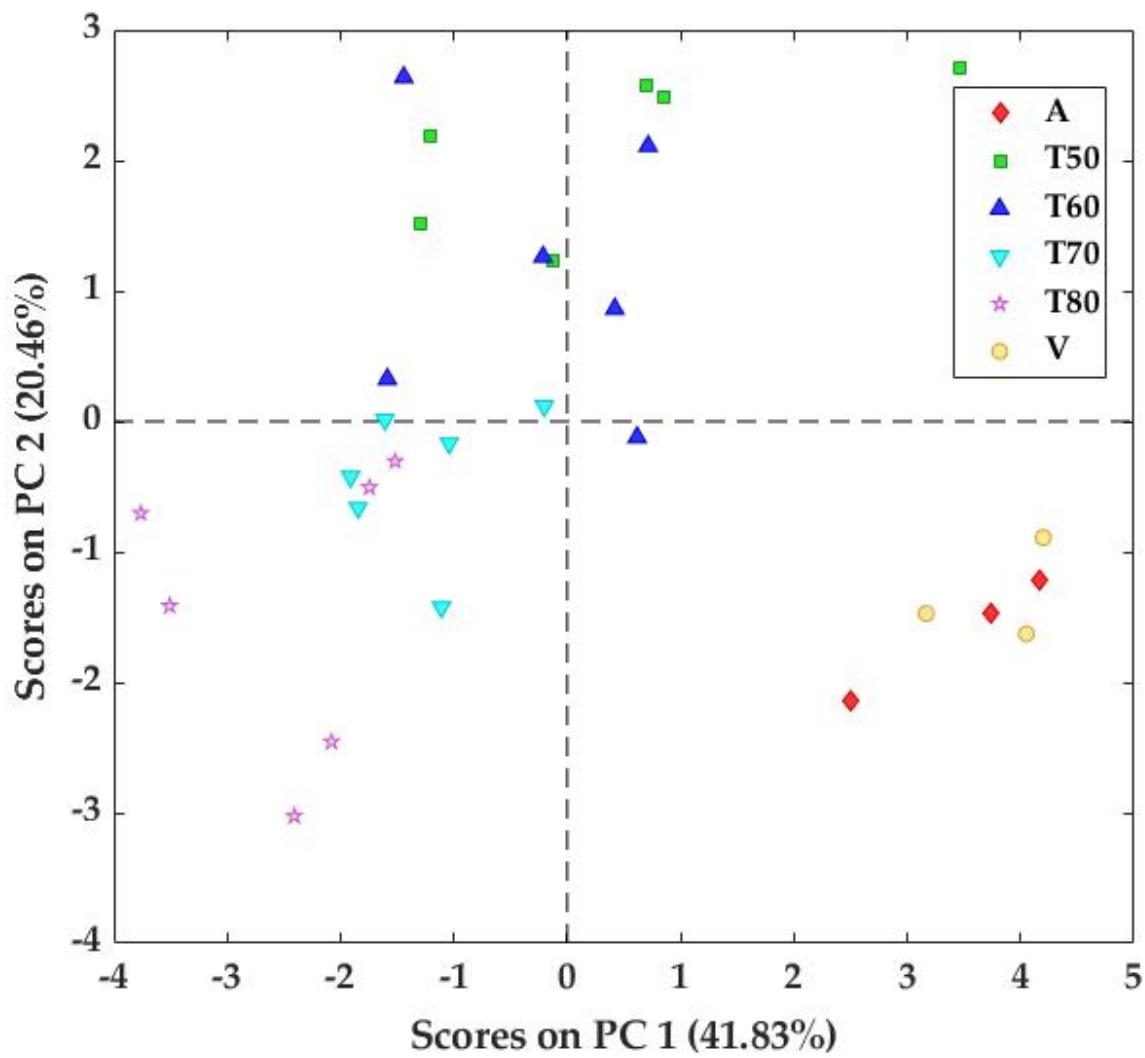
**S1:** Biplot of the PCA applied to the cooking loss data, obtained on the cod samples as a function of cooking temperature (T50, T60, T70, T80) and cooking time (t5 min, t10 min).

**S2:** Texture parameters obtained on the cod samples as a function of cooking temperature; T, cooking time; t, and storage days; D (V; vacuum-packed samples, A; air-packed samples). *No unit for the cohesiveness, springiness, and resilience parameters.*

Treatments	Storage days	Hardness (g)	Chewiness (g)	Cohesiveness	Springiness	Resilience
V	1	1172.62	347.82	0.26	0.82	0.08
V	4	952.14	238.56	0.25	0.75	0.08
V	8	717.50	220.79	0.32	0.67	0.11
A	1	559.35	162.83	0.22	0.80	0.06
A	4	571.21	191.44	0.32	0.77	0.09
A	8	650.86	183.30	0.31	0.66	0.11
T50	1	1341.33	483.58	0.36	0.81	0.11
T50	4	421.98	120.17	0.26	0.74	0.08
T50	8	741.33	251.19	0.30	0.80	0.09
T50	1	721.72	235.68	0.35	0.71	0.10
T50	4	333.42	86.26	0.31	0.67	0.09
T50	8	486.20	147.23	0.25	0.87	0.06
T60	1	619.98	206.05	0.37	0.73	0.11
T60	4	456.27	131.20	0.33	0.70	0.10
T60	8	661.69	217.49	0.30	0.87	0.07
T60	1	311.41	89.93	0.36	0.63	0.08
T60	4	424.62	102.51	0.25	0.74	0.06
T60	8	579.25	204.16	0.31	0.92	0.06
T70	1	617.08	207.59	0.36	0.75	0.08
T70	4	627.30	180.94	0.29	0.78	0.07
T70	8	486.66	163.69	0.37	0.74	0.08
T70	1	341.44	86.48	0.35	0.60	0.08
T70	4	350.79	70.12	0.29	0.58	0.07
T70	8	523.85	151.27	0.37	0.67	0.07
T80	1	541.73	150.47	0.30	0.74	0.07
T80	4	608.10	170.78	0.25	0.80	0.06
T80	8	504.86	159.69	0.29	0.84	0.05
T80	1	434.49	116.59	0.27	0.73	0.06
T80	4	369.52	80.56	0.29	0.64	0.06
T80	8	451.38	131.77	0.31	0.73	0.06



**S3:** Water-soluble proteins (A) and salt-soluble proteins (B), obtained on the cod samples as a function of cooking temperature; T, cooking time; t, and storage days; D (V; vacuum-packed samples, A; air-packed samples).



S4: The PCA applied to the traditional data: T; temperature (T50, T60, T70, T80), V; vacuum-packed samples, A; air-packed samples.

**S5:** Multiple linear regression statistics*A: Fluorescence data*

## SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.894581
R Square	0.800276
Adjusted R Square	0.770317
Standard Error	0.179043
Observations	24

## ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	2.568951	0.856317	26.71272	3.38E-07
Residual	20	0.64113	0.032057		
Total	23	3.210082			

	<i>Coefficients</i>	<i>Standard</i>			<i>Upper</i>	<i>Lower</i>	<i>Upper</i>
		<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	3.635294	0.2481	14.65254	3.7E-12	3.117767	4.152821	3.117767
T	-0.02582	0.003269	-7.89798	1.42E-07	-0.03264	-0.019	-0.03264
t	-0.02798	0.014619	-1.91415	0.070019	-0.05848	0.002512	-0.05848
d	-0.04785	0.012746	-3.75449	0.001248	-0.07444	-0.02127	-0.07444

B: Diffuse reflectance data

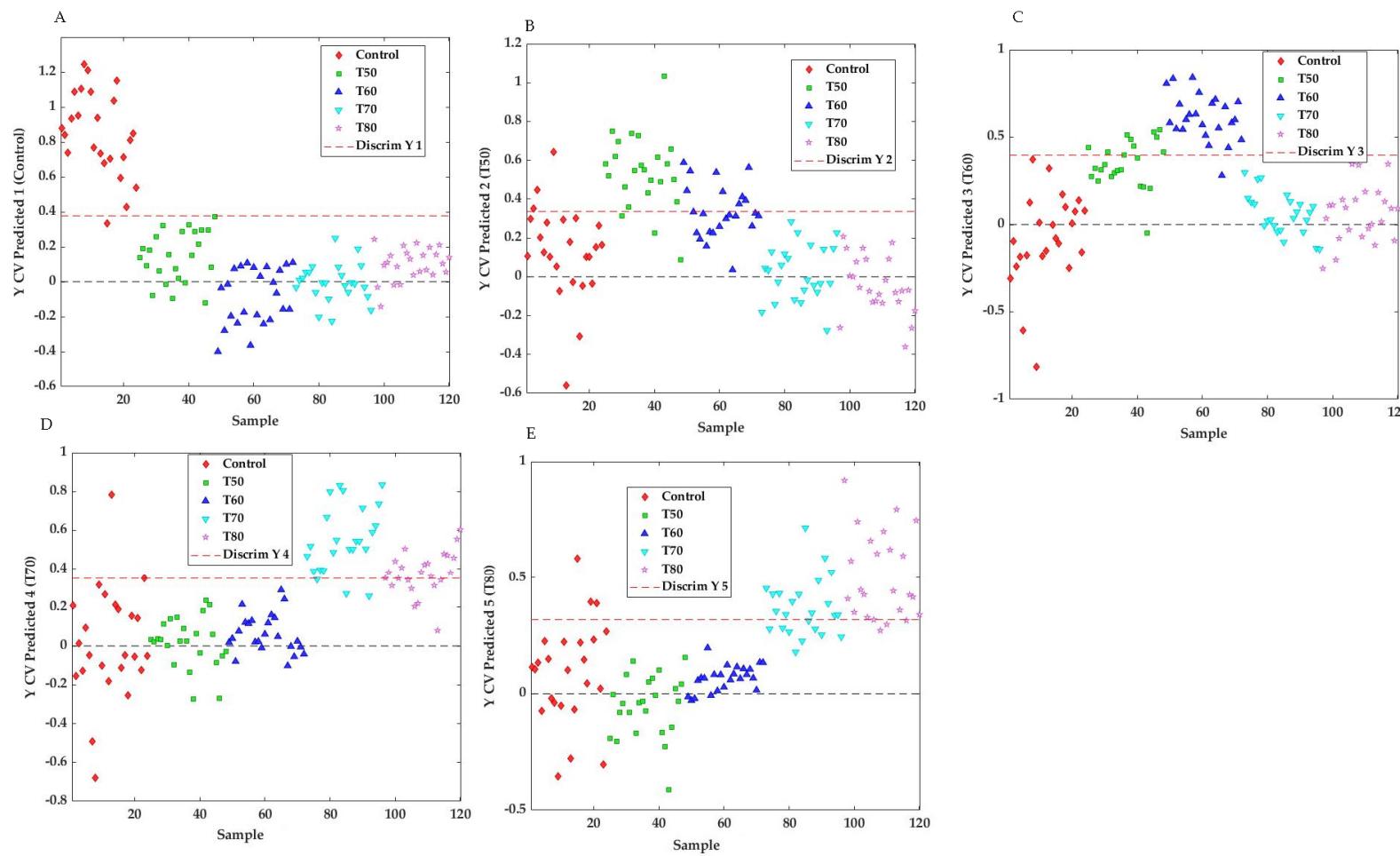
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.928716
R Square	0.862514
Adjusted R	
Square	0.841891
Standard	
Error	0.03322
Observations	24

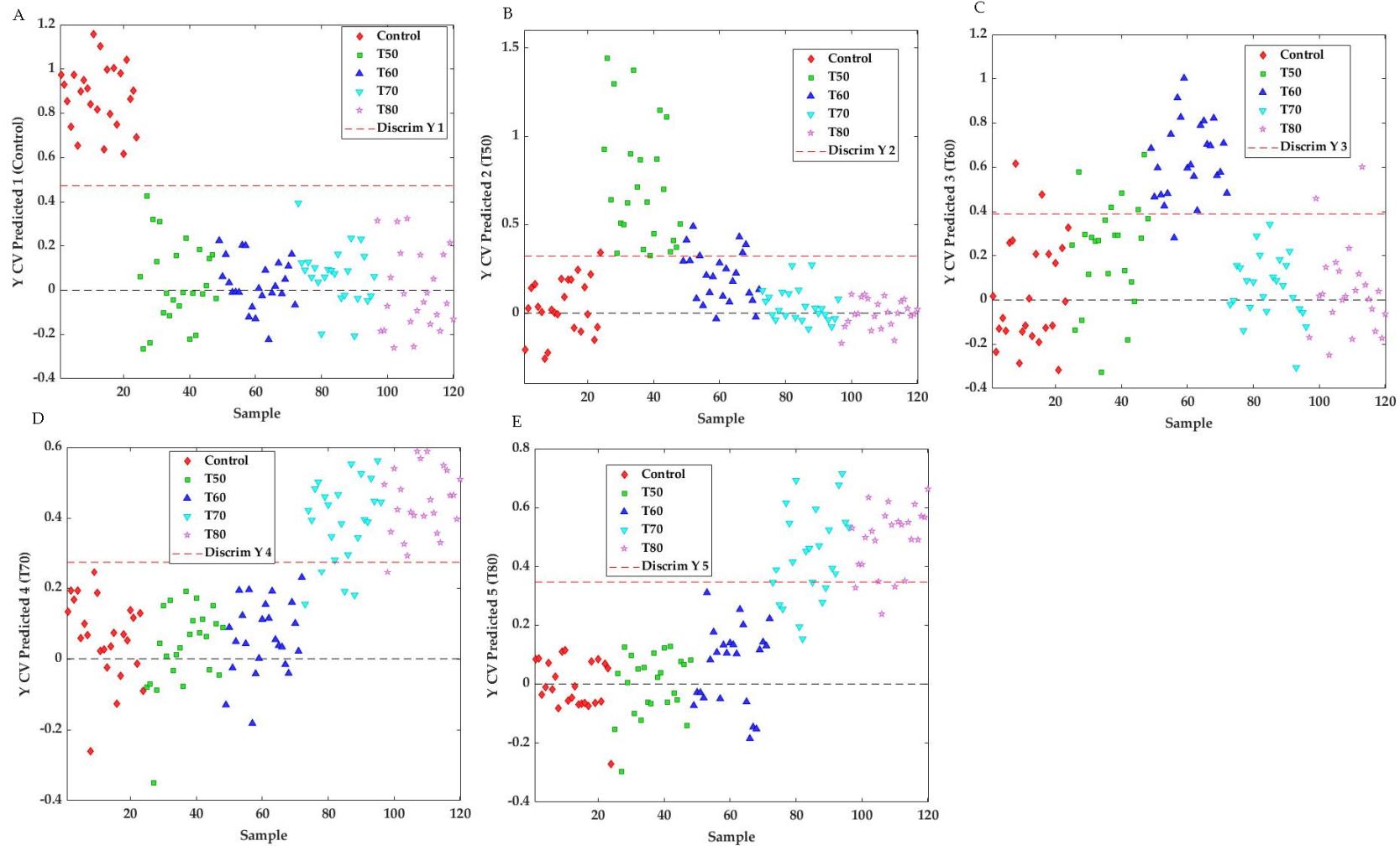
ANOVA

	df	SS	MS	F	Significance F
Regression	3	0.138466	0.046155	41.82307	8.35E-09
Residual	20	0.022072	0.001104		
Total	23	0.160538			

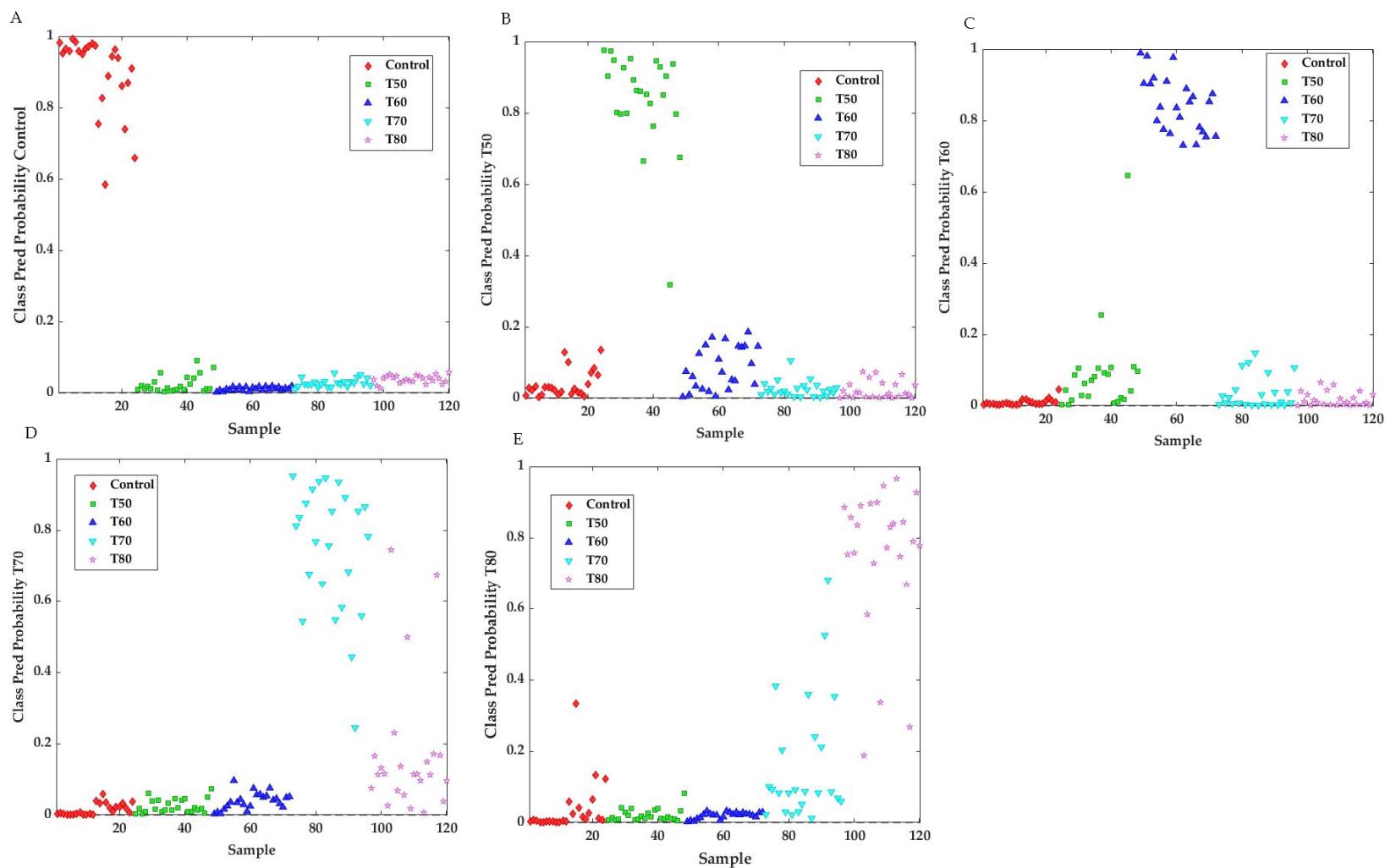
	Coefficients	Standard			Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
		Error	t Stat	P-value				
Intercept	1.095726	0.046033	23.8029	3.8E-16	0.999702	1.191749	0.999702	1.191749
T	-0.00643	0.000607	-10.6045	1.17E-09	-0.0077	-0.00517	-0.0077	-0.00517
t	-0.00387	0.002712	-1.42838	0.168615	-0.00953	0.001784	-0.00953	0.001784
d	-0.00783	0.002365	-3.3125	0.003475	-0.01277	-0.0029	-0.01277	-0.0029



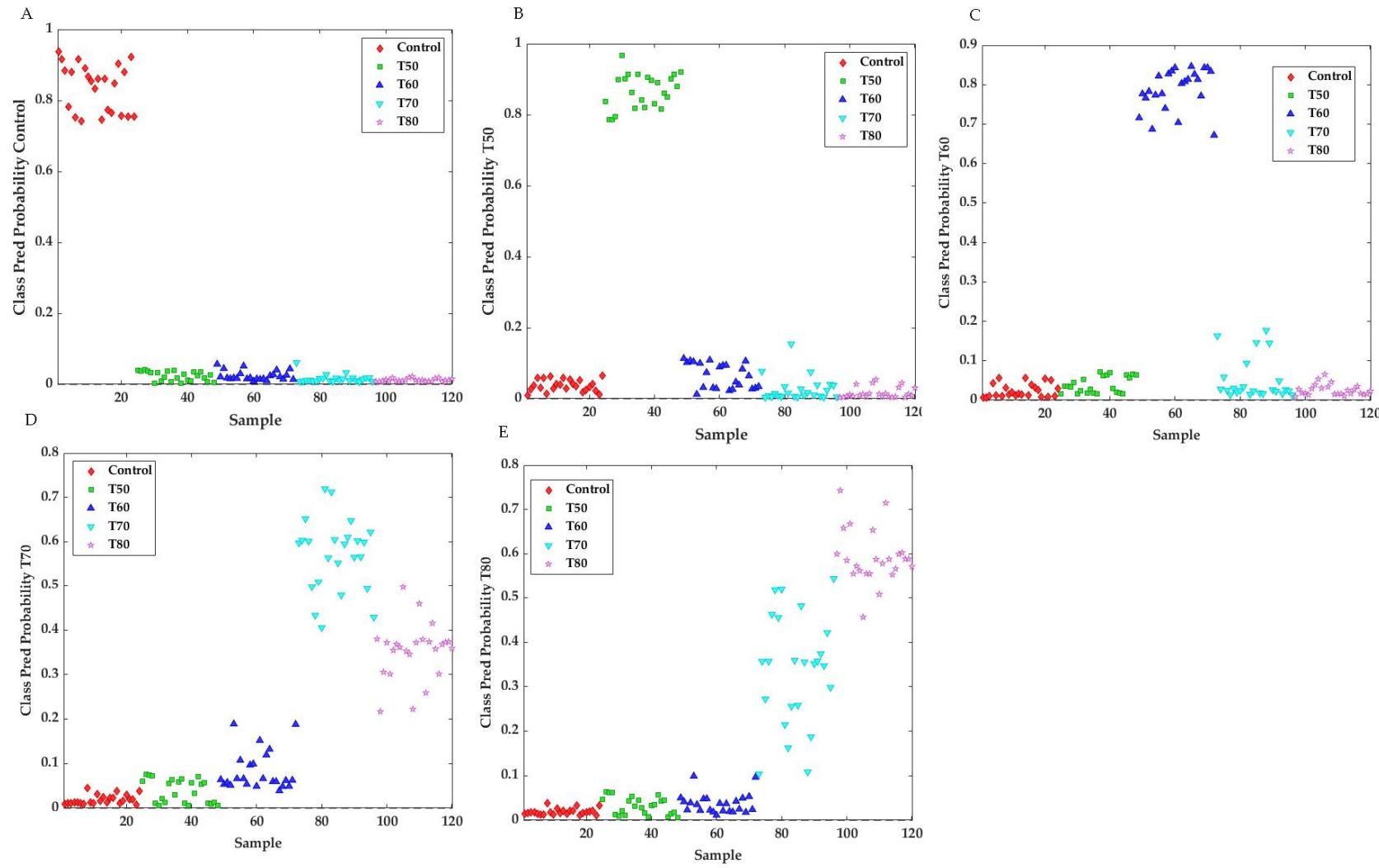
**S6:** Cross-validated predicted class resulted from application of PLSDA on the fluorescence data, obtained on the different cod groups:  
A; Control, B; T50, C; T60, D; T70, E; T80.



**S7:** Cross-validated predicted class resulted from application of PLSDA on the diffuse reflectance data, obtained on the different cod groups: A; Control, B; T50, C; T60, D; T70, E; T80.



**S8:** Prediction probability of the SVMC model applied to the fluorescence data, obtained on the different cod groups: A; Control, B; T50, C; T60, D; T70, E; T80.



**S9:** Prediction probability of the SVM model applied to the diffuse reflectance data, obtained on the different cod groups: A; Control, B; T50, C; T60, D; T70, E; T80.