

Table S4: Analysis of variance color change (Delta E)

Variate: Colour_change

Source of variation	d.f.	s.s.	m.s.	v.r.	F pr.
Replicate stratum	2	16.951	8.475	1.49	
Replicate.*Units* stratum					
convstrt	1	2.407	2.407	0.42	0.516
convstrt.NP	5	128.518	25.704	4.52	<.001
convstrt.Coating	16	2272.044	142.003	25.00	<.001
convstrt.NP.Coating	40	297.328	7.433	1.31	0.134
Residual	124	704.434	5.681		
Total	188	3421.681			

Tables of means

Variate: Colour_change

Grand mean 9.32

convstrt	Control	Treated					
	9.05	9.37					
rep.	27	162					
convstrt	NP	TiA100	TiA40	TiR100	TiR50	Un	Zn35
Control						9.05	
Treated		9.40	10.00	8.19	8.20		10.51
convstrt	NP	Zn80					
Treated		9.91					
convstrt	Coating	Cas	Cer	Cut	Dan	Ko	Os
Control		10.52	8.28	11.53	6.74	8.94	2.89
	rep.	3	3	3	3	3	3
Treated		10.81	9.38	11.36	8.76	8.11	3.63
	rep.	18	18	18	18	18	18
convstrt	Coating	Sip	Tri	Xyl			
Control		6.00	6.20	20.33			
	rep.	3	3	3			
Treated		10.31	6.17	15.80			
	rep.	18	18	18			
convstrt	NP	Coating	Cas	Cer	Cut	Dan	Ko
Control	Un		10.52	8.28	11.53	6.74	8.94
Treated	TiA100		10.86	7.69	12.77	8.25	7.48
	TiA40		10.77	15.15	12.27	10.24	7.66
	TiR100		12.09	7.88	8.28	6.32	7.15
	TiR50		8.71	6.32	8.58	8.11	7.76
	Zn35		11.42	9.56	13.54	10.53	8.94
	Zn80		11.03	9.68	12.70	9.13	9.64

convstrt	NP	Coating	Os	Sip	Tri	Xyl
Control	Un		2.89	6.00	6.20	20.33
Treated	TiA100		4.43	11.95	4.67	16.54
	TiA40		2.64	9.01	6.82	15.42
	TiR100		2.00	7.33	4.52	18.16
	TiR50		2.87	11.04	6.41	13.99
	Zn35		5.29	11.48	8.28	15.57
	Zn80		4.57	11.06	6.29	15.12

Standard errors of means

Table convstrt convstrt convstrt convstrt

		NP	Coating	NP	
				Coating	
rep.	unequal	27	unequal	3	
d.f.	124	124	124	124	
e.s.e.	0.459	0.459	1.376	1.376	min.rep
	0.187		0.562		max.rep

Standard errors of differences of means

Table	convstrt	convstrt	convstrt	convstrt	
		NP	Coating	NP	
				Coating	
rep.	unequal	27	unequal	3	
d.f.	124	124	124	124	
s.e.d.			1.946		min.rep
	0.495	0.649	1.486	1.946	max-min
			0.794		max.rep

Least significant differences of means (5% level)

Table	convstrt	convstrt	convstrt	convstrt	
		NP	Coating	NP	
				Coating	
rep.	unequal	27	unequal	3	
d.f.	124	124	124	124	
l.s.d.			3.852		min.rep
	0.981	1.284	2.942	3.852	max-min
			1.573		max.rep