

## Supplementary Material

**Table S1.** Statistical analysis results for ash. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops).

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation	
Ash	Acetone	16w	Red	59.33 (A)	14.71	
			Green	0 (B)	0.00	
		30w	Red	1.33 (B)	0.45	
			Green	35 (AB)	10.29	
		30	Red	0 (B)	0.00	
			Green	33.67 (AB)	9.11	
		60w	Red	0 (B)	0.00	
			Green	16 (AB)	3.67	
		Acetonitrile	16w	Red	46 (AB)	12.12
				Green	19 (AB)	4.76
			30w	Red	30 (AB)	7.72
				Green	8.33 (B)	2.13
	30		Red	0 (B)	0.00	
			Green	20 (AB)	6.30	
	60w		Red	8.67 (B)	2.53	
			Green	0 (B)	0.00	
	Chloroform		16w	Red	1.33 (B)	0.38
				Green	0.33 (B)	0.08
			30w	Red	0.67 (B)	0.17
				Green	4 (B)	1.26
		30	Red	61 (A)	16.81	
			Green	0 (B)	0.00	
		60w	Red	6 (B)	1.61	
			Green	0 (B)	0.00	
THF		16w	Red	0 (B)	0.00	
			Green	0 (B)	0.00	

		30w	Red	0 (B)	0.00	
			Green	0 (B)	0.00	
		30	Red	20 (AB)	5.64	
			Green	0 (B)	0.00	
		60w	Red	0 (B)	-----	
			Green	1.33 (B)	0.50	
		Pyridine	16w	Red	4 (B)	1.07
				Green	3.33 (B)	0.80
	30w		Red	0 (B)	0.00	
			Green	0 (B)	0.00	
	30		Red	0 (B)	0.00	
			Green	1 (B)	0.27	
	60w	Red	-	-		
		Green	-	-		

**Table S2.** Statistical analysis results for Douglas-fir. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops)

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation
Douglas-fir	Acetone	16w	Red	0 (C)	0
			Green	0.33 (C)	0.24
		30w	Red	0 (C)	0
			Green	0 (C)	0
		30	Red	0 (C)	0
			Green	0 (C)	0
		60w	Red	0 (C)	0
			Green	0 (C)	0
	Acetonitrile	16w	Red	0 (C)	0
			Green	0 (C)	0
		30w	Red	4 (BC)	2.83
			Green	0 (C)	0
		30	Red	19.67 (A)	13.91
			Green	0 (C)	0

		60w	Red	0 (C)	0	
			Green	0 (C)	0	
	Chloroform	16w	Red	0 (C)	0	
			Green	0 (C)	0	
		30w	Red	0 (C)	0	
			Green	0 (C)	0	
		30	Red	0 (C)	0	
			Green	0 (C)	0	
		60w	Red	0 (C)	0	
			Green	0 (C)	0	
		THF	16w	Red	0 (C)	0
				Green	0 (C)	0
			30w	Red	0 (C)	0
				Green	0 (C)	0
	30		Red	10 (B)	7.07	
			Green	0 (C)	0	
	60w		Red	0 (C)	-----	
			Green	0 (C)	0	
	Pyridine		16w	Red	25 (A)	17.68
				Green	7.67 (BC)	5.43
		30w	Red	5.33 (BC)	3.77	
			Green	0 (C)	0	
		30	Red	8.33 (BC)	5.89	
			Green	0 (C)	0	
60w		Red	-	-		
		Green	-	-		

**Table S3.** Statistical analysis results for Pacific silver fir. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops).

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation
	Acetone	16w	Red	0.67 (C)	0.22

Pacific silver fir		30w	Green	6.33 (BC)	1.5
			Red	3.67 (C)	1.11
		30	Green	0 (C)	0
			Red	0 (C)	0
		60w	Green	0 (C)	0
			Red	0 (C)	0
	Acetonitrile	16w	Red	2.33 (C)	0.69
			Green	0 (C)	0
		30w	Red	75.33 (A)	13.67
			Green	0 (C)	0
		30	Red	34.67 (B)	7.28
			Green	0 (C)	0
	60w	Red	0.33 (C)	0.11	
		Green	0 (C)	0	
	Chloroform	16w	Red	0 (C)	0
			Green	1.33 (C)	0.38
		30w	Red	0 (C)	----
			Green	6.67 (BC)	2.02
		30	Red	0.33 (C)	0.083
			Green	2 (C)	0.58
	60w	Red	0 (C)	0	
		Green	8.33 (BC)	2.34	
	THF	16w	Red	0.67 (C)	0.19
			Green	0 (C)	0
		30w	Red	1 (C)	0.3
			Green	0 (C)	0
		30	Red	3.33 (C)	0.97
			Green	0 (C)	0
	60w	Red	1.67 (C)	0.48	
		Green	0.67 (C)	0.25	
Pyridine	16w	Red	6.67 (BC)	1.8	
		Green	10.33 (BC)	2.76	
	30w	Red	13 (BC)	3.32	

			Green	3 (C)	0.833
		30	Red	25.67 (BC)	5.11
			Green	C	0.128
		60w	Red	-	-
			Green	-	-

**Table S4.** Statistical analysis results for red alder. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops).

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation	
Red alder	Acetone	16w	Red	0 (C)	0	
			Green	2.67 (C)	0.46	
		30w	Red	0 (C)	0	
			Green	0 (C)	0	
		30	Red	0 (C)	0	
			Green	0 (C)	0	
		60w	Red	0 (C)	0	
			Green	0 (C)	0	
		Acetonitrile	16w	Red	10 (B)	2.29
				Green	0 (C)	0
			30w	Red	54.33 (A)	8.99
				Green	0 (C)	0
	30		Red	4.33 (BC)	0.85	
			Green	0 (C)	0	
	60w		Red	0 (C)	0	
			Green	0 (C)	0	
	Chloroform		16w	Red	0 (C)	0
				Green	0 (C)	0
			30w	Red	0 (C)	0
				Green	0 (C)	0
		30	Red	0.33 (C)	0.06	
			Green	0 (C)	0	
		60w	Red	0 (C)	0	

			Green	0 (C)	0
	THF	16w	Red	0 (C)	0
			Green	0 (C)	0
		30w	Red	0 (C)	0
			Green	0 (C)	0
		30	Red	9 (B)	1.69
			Green	0 (C)	0
		60w	Red	0 (C)	----
			Green	0 (C)	0
	Pyridine	16w	Red	0 (C)	0
			Green	0 (C)	0
		30w	Red	0 (C)	0
			Green	0 (C)	0
		30	Red	0 (C)	0
			Green	0 (C)	0
		60w	Red	-	-
			Green	-	-

**Table S5.** Statistical analysis results for mountain hemlock. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops).

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation
Mountain hemlock	Acetone	16w	Red	B	0
			Green	2.33 (B)	0.58
		30w	Red	33 (AB)	8.91
			Green	0 (B)	0
		30	Red	0 (B)	0
			Green	0 (B)	0
		60w	Red	33.33 (AB)	9.96
			Green	1.33 (B)	0.41
	Acetonitrile	16w	Red	25.67 (AB)	6.58
			Green	0 (B)	0

		30w	Red	34.67 (AB)	10.9
			Green	0 (B)	0
		30	Red	58.33 (A)	13.63
			Green	0 (B)	0
		60w	Red	4.33 (B)	0.98
			Green	0.33 (B)	0.14
	Chloroform	16w	Red	0 (B)	0
			Green	0 (B)	0
		30w	Red	0 (B)	0
			Green	0.67 (B)	0.25
		30	Red	0.33 (B)	0.13
			Green	0 (B)	0
	60w	Red	0.33 (B)	0.11	
		Green	0 (B)	0	
	THF	16w	Red	0.67 (B)	0.19
			Green	4.33 (B)	1.22
		30w	Red	0.33 (B)	0.09
			Green	0 (B)	0
30		Red	11.67 (B)	2.94	
		Green	1.33 (B)	0.35	
60w	Red	6.67 (B)	1.66		
	Green	0.67 (B)	0.23		
Pyridine	16w	Red	21.33 (AB)	5.34	
		Green	9 (B)	2.24	
	30w	Red	14.33 (AB)	4.22	
		Green	26.67 (AB)	7.59	
	30	Red	0 (B)	-----	
		Green	13.67 (AB)	3.64	
60w	Red	-	-		
	Green	-	-		

**Table S6.** Statistical analysis results for sugar maple. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops).

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation	
Sugar maple	Acetone	16w	Red	0 (B)	0	
			Green	0 (B)	0	
		30w	Red	7 (B)	2.16	
			Green	0 (B)	0	
		30	Red	0 (B)	0	
			Green	0 (B)	0	
		60w	Red	1 (B)	0.34	
			Green	0 (B)	0	
		Acetonitrile	16w	Red	1.67 (B)	0.45
				Green	0 (B)	0
			30w	Red	24.67 (A)	4.93
				Green	0 (B)	0
	30		Red	4.33 (B)	1.33	
			Green	0 (B)	0	
	60w		Red	2.33 (B)	0.61	
			Green	0 (B)	0	
	Chloroform		16w	Red	1 (B)	0.22
				Green	0 (B)	0
			30w	Red	0 (B)	-----
				Green	3.7 (B)	1.17
		30	Red	0 (B)	0	
			Green	0 (B)	0	
		60w	Red	1 (B)	0.29	
			Green	0 (B)	0	
		THF	16w	Red	9 (B)	2.49
				Green	0 (B)	0
			30w	Red	5.33 (B)	1.55
				Green	0 (B)	0
	30		Red	6.33 (B)	1.95	
			Green	0 (B)	0	
60w	Red		3.67 (B)	1.03		
	Green		0 (B)	0		



	Pyridine	16w	Red	12.33 (AB)	3.35
			Green	0 (B)	0
		30w	Red	11 (AB)	2.91
			Green	0.33 (B)	0.07
		30	Red	5.67 (B)	1.74
			Green	3.33 (B)	0.84
		60w	Red	-	-
			Green	-	-

**Table S7.** Statistical analysis results for Oregon maple. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops).

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation	
Oregon maple	Acetone	16w	Red	0.67 (B)	0.18	
			Green	4.67 (B)	1.49	
		30w	Red	1.67 (B)	0.58	
			Green	0 (B)	0	
		30	Red	0 (B)	0	
			Green	0 (B)	0	
		60w	Red	0 (B)	0	
			Green	0 (B)	0	
		Acetonitrile	16w	Red	7.33 (B)	2.13
				Green	3.33 (B)	1.22
			30w	Red	28 (AB)	5.57
				Green	8.33 (B)	2.63
	30		Red	2.33 (B)	0.81	
			Green	0 (B)	0	
	60w		Red	1.33 (B)	0.35	
			Green	0 (B)	0	
	Chloroform		16w	Red	0 (B)	0
				Green	0 (B)	0
			30w	Red	0.33 (B)	0.08

		30	Green	12.33 (B)	3.78	
			Red	1.67 (B)	0.49	
		60w	Green	4 (B)	1.34	
			Red	0 (B)	0	
		THF	16w	Red	0 (B)	-----
				Green	6.67 (B)	1.88
	30w		Red	2.33 (B)	0.72	
			Green	0 (B)	0	
	30		Red	45 (A)	8.68	
			Green	2.67 (B)	0.92	
	60w		Red	3 (B)	1.03	
			Green	0 (B)	0	
	Pyridine		16w	Red	5 (B)	1.63
				Green	12.33 (B)	3.47
			30w	Red	0 (B)	0
				Green	3.33 (B)	1.14
		30	Red	0 (B)	0	
			Green	8.33 (B)	2.41	
		60w	Red	-	-	
			Green	-	-	

**Table S8.** Statistical analysis results for Port-Orford cedar. Different letters under Tukey group represent significant differences at alpha = 0.05. The treatments applied were: 16w (8 drops, 24 h wait, 8 drops), 30w (15 drops, 24 h wait, 15 drops), 30 (30 drops with no wait) and 60w (30 drops, 24 h wait, 30 drops).

Wood	Solvent	Test	Pigment	Mean percent coverage	Standard deviation
Port-Orford cedar	Acetone	16w	Red	23.67 (DEF)	8.06
			Green	0 (F)	0
		30w	Red	19 (DEF)	6.52
			Green	0 (F)	0
		30	Red	6 (EF)	1.97
			Green	0 (F)	0
		60w	Red	20.33 (DEF)	7.62

		Green	19.67 (DEF)	6.94
Acetonitrile	16w	Red	38.33 (BCD)	10.99
		Green	0 (F)	0
	30w	Red	66.67 (AB)	16.55
		Green	0 (F)	0
	30	Red	72.33 (A)	18.94
		Green	0 (F)	0
	60w	Red	33.67 (CDE)	9.99
		Green	0 (F)	0
Chloroform	16w	Red	14 (DEF)	4.92
		Green	11 (DEF)	3.83
	30w	Red	4.33 (EF)	1.17
		Green	12.33 (DEF)	4.52
	30	Red	30 (DEF)	9.16
		Green	1.67 (F)	0.5
	60w	Red	0 (F)	----
		Green	8.67 (DEF)	2.88
THF	16w	Red	7.33 (DEF)	1.55
		Green	0 (F)	0
	30w	Red	17.67 (DEF)	5.55
		Green	0 (F)	0
	30	Red	64 (ABC)	14.06
		Green	0 (F)	0
	60w	Red	4.67 (EF)	0
		Green	0 (F)	0.28
Pyridine	16w	Red	18 (DEF)	6.05
		Green	20 (DEF)	7.3
	30w	Red	24 (DEF)	8.45
		Green	11.33 (DEF)	4.17
	30	Red	10.33 (DEF)	3.4
		Green	0 (F)	0
	60w	Red	-	-
		Green	-	-