

# Supporting material – Tabulated values of Figures 4–18.

**Table S1** Values for **Figure 4**. Extractives groups in spruce bark hexane extract (amount, mg/g of dry bark)

Compounds	Winter storage				Summer storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Unidentified	29.3 ± 0.5	13.9 ± 0.3	29.7 ± 0.2	20.7 ± 0.1	18.7 ± 0.2	22.3 ± 0.4	18.2 ± 0.2	36.8 ± 0.2
Resin Acids	12.1 ± 0.1	6.0 ± 0.1	11.4 ± 0.04	9.7 ± 2.2	12.7 ± 0.4	7.7 ± 0.4	10.5 ± 0.2	12.2 ± 0.3
Fatty Acids	9.2 ± 0.7	7.5 ± 0.8	10.1 ± 0.1	6.4 ± 3.4	10.9 ± 0.2	5.5 ± 0.3	5.3 ± 0.1	4.3 ± 0.1
Triglycerides	4.7 ± 0.1	5.2 ± 0.06	5.8 ± 0.003	0.6 ± 0.1	9.4 ± 0.4	3.9 ± 0.5	3.6 ± 0.1	3.3 ± 0.1
Steryl Esters	1.9 ± 0.1	2.3 ± 0.7	2.9 ± 0.1	1.7 ± 0.1	3.4 ± 0.1	4.2 ± 0.3	3.7 ± 0.2	4.0 ± 0.2
Sterols	2.4 ± 0.04	2.9 ± 0.9	3.5 ± 0.1	2.4 ± 0.1	4.2 ± 0.1	4.8 ± 0.5	4.4 ± 0.03	4.8 ± 0.2
Fatty Alcohols	1.7 ± 0.02	0.6 ± 0.06	0.8 ± 0.04	0.9 ± 0.1	1.1 ± 0.02	0.9 ± 0.1	0.7 ± 0.01	1.1 ± 0.04
Diterpenoids	2.8 ± 0.1	1.8 ± 0.06	3.2 ± 0.01	2.2 ± 0.8	5.7 ± 0.04	1.8 ± 0.2	3.4 ± 0.1	3.7 ± 0.06
Other	2.7 ± 0.6	1.0 ± 0.4	2.6 ± 0.2	2.5 ± 0.2	3.0 ± 0.9	2.0 ± 0.5	2.6 ± 0.1	4.7 ± 0.2

**Table S2** Values for **Figure 5**. Extractives groups in spruce bark water extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Unidentified	140.9 ± 1.6	159.2 ± 19.7	198.3 ± 0.8	136.8 ± 0.04	155.6 ± 13.1	158.0 ± 1.3	143.4 ± 2.9	68.7 ± 0.1
Sugars	66.9 ± 0.03	47.8 ± 10.6	30.0 ± 2.6	6.1 ± 0.7	42.1 ± 2.5	23.1 ± 1.9	4.8 ± 0.6	7.1 ± 0.5
Stilbenes	23.5 ± 0.03	17.1 ± 2.9	6.1 ± 0.1	1.3 ± 0.3	9.9 ± 2.0	6.7 ± 0.2	1.4 ± 0.2	0.7 ± 0.08
Organic Acids	22.4 ± 0.7	21.9 ± 5.0	17.1 ± 0.6	2.2 ± 0.2	40.0 ± 3.8	26.7 ± 2.6	6.2 ± 0.1	16.7 ± 0.4
Alcohols	11.1 ± 0.2	10.9 ± 2.3	10.0 ± 0.2	3.1 ± 0.4	12.6 ± 1.4	8.3 ± 0.4	2.0 ± 0.1	2.4 ± 0.3
Sesquistilbenes	10.8 ± 0.7	15.4 ± 2.5	17.3 ± 2.6	8.8 ± 0.9	8.2 ± 1.9	9.5 ± 0.9	5.9 ± 0.3	6.3 ± 0.6
Distilbenes	10.1 ± 0.5	14.7 ± 0.9	15.2 ± 0.4	7.4 ± 0.3	13.7 ± 4.4	15.0 ± 1.1	9.5 ± 1.9	5.4 ± 0.2
Flavonoids	4.6 ± 0.5	4.9 ± 1.4	3.2 ± 0.1	1.0 ± 0.01	5.1 ± 0.8	3.2 ± 0.003	1.2 ± 0.03	1.5 ± 0.2
Others	8.4 ± 0.3	18.0 ± 4.1	11.4 ± 0.7	9.4 ± 0.6	14.5 ± 3.7	8.6 ± 0.9	1.7 ± 0.1	4.0 ± 0.2

**Table S3** Values for **Figure 6**. Resin acids in spruce bark hexane extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Hydroxy Resin Acid	0.2 ± 0.04	0.2 ± 0.02	0.4 ± 0.02	0.2 ± 0.001	0.3 ± 0.03	0.3 ± 0.04	0.2 ± 0.01	0.4 ± 0.04
Pimaric Acid	0.2 ± 0.1	0.1 ± 0.004	0.2 ± 0.001	0.2 ± 0.01	0.1 ± 0.003	0.2 ± 0.01	0.2 ± 0.004	0.3 ± 0.01
Imbricatolic Acid	0.2 ± 0.01	0.2 ± 0.003	0.4 ± 0.02	0.2 ± 0.01	0.2 ± 0.001	0.2 ± 0.01	0.2 ± 0.01	0.5 ± 0.01
Hydroxydehydroabietic Acid 2	0.3 ± 0.01	0.2 ± 0.03	0.4 ± 0.03	0.5 ± 0.1	0.4 ± 0.01	0.3 ± 0.04	0.2 ± 0.001	0.5 ± 0.02
Sandaracopimaric Acid	0.4 ± 0.01	0.2 ± 0.002	0.4 ± 0.0001	0.4 ± 0.01	0.3 ± 0.003	0.3 ± 0.02	0.3 ± 0.01	0.4 ± 0.01
Hydroxydehydroabietic Acid 1	0.5 ± 0.004	0.3 ± 0.1	0.4 ± 0.001	0.2 ± 0.1	0.4 ± 0.01	0.4 ± 0.001	0.3 ± 0.003	0.2 ± 0.01

4-Hydroxycinnamic Acid	0.5 ± 0.03	0.4 ± 0.1	0.2 ± 0.02	0.2 ± 0.1	0.1 ± 0.4	0.2 ± 0.1	0.3 ± 0.01	0.2 ± 0.03
Palustric Acid	1.0 ± 0.1	0.6 ± 0.1	1.1 ± 0.1	0.8 ± 0.01	1.0 ± 0.02	0.2 ± 0.1	1.2 ± 0.03	1.2 ± 0.1
Neoabietic Acid	1.2 ± 0.2	0.9 ± 0.1	1.0 ± 0.03	0.8 ± 0.3	1.6 ± 0.1	0.3 ± 0.03	1.1 ± 0.02	0.9 ± 0.1
Levopimaric Acid	1.3 ± 0.1	0.6 ± 0.1	1.1 ± 0.04	0.6 ± 0.4	1.3 ± 0.1	0.3 ± 0.04	1.2 ± 0.03	0.9 ± 0.1
Abietic Acid	1.4 ± 0.2	0.7 ± 0.2	1.5 ± 0.01	1.2 ± 0.02	1.9 ± 0.2	0.8 ± 0.03	1.1 ± 0.04	1.0 ± 0.04
Isopimaric Acid	1.7 ± 0.1	1.0 ± 0.03	2.0 ± 0.02	1.6 ± 0.5	1.9 ± 0.03	1.2 ± 0.1	1.5 ± 0.03	1.6 ± 0.03
Dehydroabietic Acid	2.4 ± 0.1	1.2 ± 0.2	2.3 ± 0.02	2.3 ± 0.03	2.5 ± 0.1	2.5 ± 0.1	2.6 ± 0.1	3.2 ± 0.04

**Table S4** Values for Figure 7. Fatty acids in spruce bark hexane extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Acid 25:0	0.1 ± 0.01	0.1 ± 0.02	0.2 ± 0.02	0.1 ± 0.01	0.1 ± 0.001	0.1 ± 0.01	0.1 ± 0.001	0.2 ± 0.003
Acid 17:0	0.2 ± 0.00003	0.2 ± 0.001	0.3 ± 0.002	0.2 ± 0.1	0.4 ± 0.003	0.2 ± 0.01	0.2 ± 0.001	0.1 ± 0.001
Acid 18:0	0.1 ± 0.01	0.2 ± 0.01	0.3 ± 0.002	0.2 ± 0.1	0.3 ± 0.001	0.2 ± 0.01	0.3 ± 0.004	0.3 ± 0.002
Acid 24:0	0.6 ± 0.1	0.1 ± 0.01	0.3 ± 0.01	0.4 ± 0.02	0.2 ± 0.02	0.3 ± 0.01	0.3 ± 0.003	0.4 ± 0.003
Acid 20:0	0.4 ± 0.01	0.2 ± 0.01	1.6 ± 0.02	0.3 ± 0.01	0.2 ± 0.1	0.2 ± 0.002	0.3 ± 0.001	0.3 ± 0.003
Acid 16:0	0.4 ± 0.001	0.4 ± 0.003	0.5 ± 0.001	0.4 ± 0.1	0.7 ± 0.002	0.3 ± 0.01	0.4 ± 0.003	0.2 ± 0.004
Acid 22:0	0.9 ± 0.01	0.3 ± 0.002	0.6 ± 0.01	0.6 ± 0.01	0.5 ± 0.01	0.8 ± 0.01	0.5 ± 0.002	0.6 ± 0.01
Acid 18:3	1.6 ± 0.02	1.6 ± 0.1	1.7 ± 0.02	1.0 ± 0.4	2.0 ± 0.01	0.8 ± 0.02	0.7 ± 0.01	0.4 ± 0.02
Acid 18:2	2.1 ± 0.1	2.3 ± 0.4	2.4 ± 0.02	1.5 ± 1.2	3.2 ± 0.01	1.3 ± 0.04	1.2 ± 0.02	0.7 ± 0.1
Acid 18:1	1.8 ± 0.03	2.0 ± 0.2	2.3 ± 0.1	1.6 ± 1.0	3.3 ± 0.1	1.1 ± 0.1	1.5 ± 0.03	0.9 ± 0.004

**Table S5** Values for Figure 8. Diterpenoids in spruce bark hexane extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Isopimaral	0.1 ± 0.003	0.1 ± 0.02	0.1 ± 0.002	0.1 ± 0.02	0.1 ± 0.001	0.1 ± 0.01	0.1 ± 0.002	0.1 ± 0.001
Pimarol	0.3 ± 0.02	0.1 ± 0.01	0.1 ± 0.02	0.1 ± 0.03	0.3 ± 0.002	0.1 ± 0.01	0.1 ± 0.002	0.1 ± 0.0003
Epimanoyl Oxide	0.1 ± 0.002	0.1 ± 0.01	0.1 ± 0.0001	0.1 ± 0.0001	0.1 ± 0.003	0.1 ± 0.002	0.1 ± 0.001	0.2 ± 0.002
Isopimarol	0.1 ± 0.002	0.1 ± 0.04	0.2 ± 0.01	0.1 ± 0.04	0.2 ± 0.004	0.1 ± 0.002	0.1 ± 0.001	0.1 ± 0.002
Cubebene	0.7 ± 0.01	0.6 ± 0.3	0.0 ± 0.0004	0.0 ± 0.003	0.0 ± 0.02	0.0 ± 0.0002	0.0 ± 0.0002	0.0 ± 0.006
Dehydroabietal	0.1 ± 0.01	0.1 ± 0.004	0.2 ± 0.001	0.1 ± 0.1	0.2 ± 0.004	0.1 ± 0.01	0.2 ± 0.002	0.2 ± 0.002
Palustral	0.2 ± 0.02	0.1 ± 0.04	0.3 ± 0.01	0.1 ± 0.001	0.2 ± 0.01	0.1 ± 0.01	0.2 ± 0.003	0.3 ± 0.01
Cis-Abienol	0.5 ± 0.01	0.4 ± 0.04	0.4 ± 0.01	0.3 ± 0.2	0.5 ± 0.0002	0.2 ± 0.01	0.2 ± 0.01	0.2 ± 0.01
Thunbergol	0.4 ± 0.1	0.6 ± 0.1	0.9 ± 0.01	0.1 ± 0.01	2.8 ± 0.03	0.6 ± 0.04	1.4 ± 0.04	0.2 ± 0.01
Manool	0.6 ± 0.1	0.2 ± 0.2	0.7 ± 0.1	0.5 ± 0.2	1.9 ± 0.4	0.4 ± 0.2	1.0 ± 0.1	0.7 ± 0.1
Δ13-(trans-)Neoabienol	0.9 ± 0.1	0.5 ± 0.1	1.0 ± 0.004	0.8 ± 0.3	1.0 ± 0.02	0.7 ± 0.02	0.9 ± 0.01	1.1 ± 0.001

**Table S6** Values for Figure 9. Sterols in spruce bark hexane extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-	4 weeks	12 weeks	24 weeks	zero-	4 weeks	12 weeks	24 weeks

	sample				sample			
Acid 22:0 Monoglyceride	0.0 ± 0.001	0.0 ± 0.01	0.0 ± 0.004	0.0 ± 0.001	0.0	0.0	0.0	0.0
Acid 18:2 Monoglyceride	0.2 ± 0.2	0.1 ± 0.01	0.0 ± 0.001	0.0 ± 0.0001	0.0 ± 0.0001	0.0 ± 0.0003	0.0 ± 0.001	0.1 ± 0.002
24-Methylenecycloartan-3-One	0.0 ± 0.01	0.0 ± 0.01	0.0 ± 0.0003	0.1 ± 0.06	0.0 ± 0.01	0.0 ± 0.0002	0.0 ± 0.003	0.0 ± 0.0003
Diglycerol	1.3 ± 0.3	0.2 ± 0.07	0.0 ± 0.002	0.0 ± 0.004	0.0 ± 0.001	0.0 ± 0.03	0.0 ± 0.002	0.0 ± 0.001
Campesterol	0.4 ± 0.01	0.4 ± 0.1	0.4 ± 0.004	0.4 ± 0.03	0.4 ± 0.03	0.4 ± 0.02	0.4 ± 0.001	0.4 ± 0.02
Sitosterol	2.0 ± 0.03	1.8 ± 0.6	2.2 ± 0.03	1.9 ± 0.3	2.2 ± 0.1	2.0 ± 0.05	1.7 ± 0.001	1.9 ± 0.1

**Table S7** Values for **Figure 10**. Fatty alcohols in spruce bark hexane extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Alcohol 15:0	0.3 ± 0.0001	0.1 ± 0.002	0.1 ± 0.003	0.1 ± 0.02	0.1 ± 0.003	0.1 ± 0.007	0.1 ± 0.001	0.1 ± 0.001
Alcohol 18:0	0.3 ± 0.004	0.1 ± 0.01	0.1 ± 0.004	0.1 ± 0.01	0.4 ± 0.01	0.2 ± 0.02	0.2 ± 0.002	0.2 ± 0.001
Alcohol 24:0	0.4 ± 0.01	0.1 ± 0.01	0.2 ± 0.01	0.2 ± 0.1	0.2 ± 0.01	0.2 ± 0.03	0.1 ± 0.01	0.3 ± 0.02
Alcohol 22:0	0.7 ± 0.02	0.3 ± 0.1	0.4 ± 0.03	0.4 ± 0.1	0.4 ± 0.001	0.4 ± 0.02	0.3 ± 0.0002	0.5 ± 0.02

**Table S8** Values for **Figure 11**. Sugars in spruce bark water extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Other	0.7 ± 0.2	0.6 ± 0.1	0.8 ± 0.003	0.2 ± 0.01	1.2 ± 0.2	0.5 ± 0.4	0.8 ± 0.003	0.2 ± 0.02
Cellobiose	0.8 ± 0.03	0.7 ± 0.1	0.4 ± 0.02	0.1 ± 0.002	0.7 ± 0.2	0.5 ± 0.1	0.1 ± 0.01	0.1 ± 0.01
Galactose	0.7 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.8 ± 0.1	0.6 ± 0.1	1.3 ± 0.5	0.5 ± 0.03	0.5 ± 0.1
Maltose	3.5 ± 0.2	4.0 ± 1.1	2.8 ± 0.2	0.7 ± 0.1	4.2 ± 0.6	3.3 ± 0.3	0.8 ± 0.1	1.3 ± 0.1
Sucrose	26.6 ± 0.1	5.6 ± 1.0	4.5 ± 0.3	0.6 ± 0.02	8.0 ± 1.0	2.7 ± 0.1	0.6 ± 0.1	1.1 ± 0.1
Glucose	34.6 ± 0.2	36.1 ± 9.3	20.8 ± 2.2	3.8 ± 0.5	27.4 ± 0.4	14.6 ± 1.0	1.9 ± 0.1	4.0 ± 0.2

**Table S9** Values for **Figure 12**. Organic acids in spruce bark water extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Other	0.8 ± 0.5	0.0	0.0	0.1 ± 0.002	0.6 ± 0.1	0.4 ± 0.1	0.2 ± 0.1	0.5 ± 0.02
Shikmic Acid	0.4 ± 0.1	1.0 ± 0.2	0.3 ± 0.02	0.1 ± 0.01	0.3 ± 0.02	0.2 ± 0.01	0.1 ± 0.0003	0.1 ± 0.01
Malic Acid	1.4 ± 0.04	0.6 ± 0.2	0.7 ± 0.03	0.1 ± 0.01	1.0 ± 0.1	0.4 ± 0.1	0.0 ± 0.01	0.1 ± 0.0004
Quinic Acid	5.3 ± 0.8	4.1 ± 1.0	3.5 ± 0.2	0.3 ± 0.04	5.6 ± 0.4	2.9 ± 0.1	0.3 ± 0.02	0.3 ± 0.03
Aconitic Acid	4.8 ± 0.4	5.4 ± 2.0	5.4 ± 0.1	0.6 ± 0.1	6.2 ± 0.9	3.9 ± 0.7	0.3 ± 0.01	0.4 ± 0.0002
Gluconic Acid	11.0 ± 0.1	11.6 ± 2.4	7.8 ± 0.5	1.1 ± 0.1	10.6 ± 0.7	6.3 ± 0.7	1.1 ± 0.02	2.2 ± 0.01

**Table S10** Values for **Figure 13**. Stilbenes in spruce bark water extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-	4 weeks	12 weeks	24 weeks	zero-	4 weeks	12 weeks	24 weeks

	sample				sample			
Rhapontigenin	0.7 ± 0.03	0.6 ± 0.1	0.3 ± 0.03	0.4 ± 0.03	0.4 ± 0.1	0.7 ± 0.0004	0.3 ± 0.01	0.3 ± 0.03
Cis-Piceatannol	0.7 ± 0.02	0.9 ± 0.1	0.5 ± 0.004	0.3 ± 0.02	0.6 ± 0.1	0.5 ± 0.03	0.2 ± 0.04	0.2 ± 0.02
Piceid	2.0 ± 0.01	2.8 ± 0.2	1.2 ± 0.02	0.3 ± 0.2	2.8 ± 0.5	1.7 ± 0.1	0.2 ± 0.003	0.1 ± 0.01
Astringin	6.3 ± 0.1	3.5 ± 2.0	1.3 ± 0.2	0.1 ± 0.04	0.2 ± 0.01	0.6 ± 0.1	0.3 ± 0.1	0.0 ± 0.01
Isorhapontin	13.8 ± 0.04	9.3 ± 1.1	2.8 ± 0.02	0.3 ± 0.1	6.0 ± 1.3	3.1 ± 0.1	0.4 ± 0.1	0.1 ± 0.02

**Table S11** Values for **Figure 14**. Alcohols in spruce bark water extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Coniferin	0.6 ± 0.01	0.6 ± 0.2	0.3 ± 0.01	0.1 ± 0.01	0.6 ± 0.1	0.3 ± 0.02	0.0 ± 0.001	0.1 ± 0.01
Mannitol	0.3 ± 0.01	0.3 ± 0.07	0.5 ± 0.01	0.7 ± 0.1	0.3 ± 0.03	0.5 ± 0.05	0.1 ± 0.004	0.5 ± 0.03
Arabitol	0.4 ± 0.04	0.4 ± 0.1	0.3 ± 0.01	0.6 ± 0.1	0.2 ± 0.02	0.5 ± 0.04	0.4 ± 0.01	0.6 ± 0.03
Inositol	0.5 ± 0.01	0.5 ± 0.1	0.6 ± 0.01	0.1 ± 0.02	1.0 ± 0.1	0.6 ± 0.04	0.1 ± 0.003	0.1 ± 0.002
Maltitol	0.6 ± 0.01	0.8 ± 0.1	1.5 ± 0.1	0.2 ± 0.003	1.6 ± 0.2	1.1 ± 0.04	0.2 ± 0.01	0.2 ± 0.03
Maltotriitol	1.7 ± 0.03	1.1 ± 0.2	1.1 ± 0.04	0.4 ± 0.02	1.1 ± 0.2	0.9 ± 0.05	0.2 ± 0.004	0.3 ± 0.04
Guaiacyl Glycerol	1.1 ± 0.1	1.2 ± 0.5	1.2 ± 0.1	0.4 ± 0.1	1.7 ± 0.2	1.2 ± 0.1	0.4 ± 0.02	0.2 ± 0.1
Salicin	1.9 ± 0.1	1.9 ± 0.6	1.8 ± 0.01	0.1 ± 0.02	1.5 ± 0.2	0.6 ± 0.02	0.3 ± 0.01	0.2 ± 0.01
Pinitol	4.0 ± 0.02	3.9 ± 0.9	2.6 ± 0.02	0.6 ± 0.1	4.6 ± 0.4	2.5 ± 0.2	0.3 ± 0.01	0.2 ± 0.01

**Table S12** Values for **Figure 15**. Flavonoids in spruce bark water extract (amount, mg/g of dry bark)

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
Ampelopsin	0.5 ± 0.1	0.2 ± 0.01	0.0	0.2 ± 0.002	1.0 ± 0.1	0.8 ± 0.1	0.2 ± 0.02	0.2 ± 0.04
Naringin	1.0 ± 0.1	0.9 ± 0.4	0.8 ± 0.02	0.1 ± 0.004	1.3 ± 0.3	0.5 ± 0.02	0.3 ± 0.03	0.1 ± 0.01
Catechin	1.0 ± 0.3	1.2 ± 0.3	0.5 ± 0.03	0.3 ± 0.004	0.8 ± 0.1	0.7 ± 0.1	0.3 ± 0.01	0.4 ± 0.04
Taxifolin	1.1 ± 0.02	0.9 ± 0.2	0.7 ± 0.1	0.2 ± 0.002	0.4 ± 0.1	0.7 ± 0.03	0.4 ± 0.001	0.7 ± 0.1
Taxifolin Glycoside	1.0 ± 0.1	1.8 ± 0.6	1.3 ± 0.01	0.1 ± 0.01	1.6 ± 0.2	0.5 ± 0.02	0.1 ± 0.003	0.1 ± 0.004

**Table S13** Values for **Figure 16**. Monosaccharides in extractives-free bark (amount, % of dry matter)

Compounds	Winter Storage		Summer Storage	
	zero-sample	24 weeks	zero-sample	24 weeks
Galactose	2.8 ± 0.2	2.4 ± 0.1	1.8 ± 0.2	2.6 ± 0.2
Xylose	3.0 ± 0.2	4.0 ± 0.1	2.5 ± 0.3	3.7 ± 0.3
Mannose	3.8 ± 0.3	3.3 ± 0.1	1.4 ± 0.2	2.6 ± 0.2
Arabinose	6.5 ± 0.5	5.4 ± 0.1	6.2 ± 0.7	5.7 ± 0.4
Glucose	35.8 ± 4.2	32.7 ± 0.03	33.0 ± 1.7	29.1 ± 2.0

**Table S14** Values for **Figure 17**. Hemicelluloses in extractives-free bark (amount, % of dry matter)

Compounds	Winter Storage				Summer Storage			
	zero-	4 weeks	12 weeks	24 weeks	zero-	4 weeks	12 weeks	24 weeks

	sample				sample			
Glucuronic Acid	$0.3 \pm 0.1$	$0.3 \pm 0.1$	$0.3 \pm 0.04$	$0.6 \pm 0.2$	$0.2 \pm 0.02$	$0.9 \pm 0.5$	$1.6 \pm 0.5$	$1.4 \pm 0.1$
Rhamnose	$0.7 \pm 0.1$	$1.1 \pm 0.1$	$0.8 \pm 0.1$	$1.0 \pm 0.1$	$0.6 \pm 0.02$	$1.1 \pm 0.3$	$1.1 \pm 0.2$	$1.0 \pm 0.04$
Mannose	$2.4 \pm 0.4$	$1.7 \pm 0.4$	$2.1 \pm 0.3$	$2.8 \pm 0.4$	$0.7 \pm 0.2$	$2.5 \pm 0.2$	$2.0 \pm 0.1$	$2.7 \pm 0.1$
Galactose	$3.1 \pm 0.2$	$3.6 \pm 0.4$	$3.0 \pm 0.3$	$3.8 \pm 0.4$	$1.8 \pm 0.3$	$3.6 \pm 0.6$	$3.7 \pm 0.5$	$4.2 \pm 0.2$
Xylose	$3.9 \pm 0.4$	$3.7 \pm 0.8$	$3.5 \pm 0.2$	$4.6 \pm 0.3$	$1.9 \pm 0.4$	$4.5 \pm 1.0$	$3.8 \pm 0.4$	$4.5 \pm 0.5$
Galacturonic Acid	$6.7 \pm 0.8$	$8.2 \pm 0.4$	$5.7 \pm 0.6$	$7.3 \pm 1.0$	$3.9 \pm 0.3$	$8.2 \pm 1.1$	$8.9 \pm 1.0$	$8.1 \pm 1.2$
Arabinose	$6.3 \pm 0.3$	$8.9 \pm 1.1$	$6.1 \pm 1.0$	$7.5 \pm 1.0$	$4.9 \pm 0.4$	$7.9 \pm 1.2$	$8.2 \pm 1.9$	$7.2 \pm 0.6$
Glucose	$2.7 \pm 0.1$	$3.3 \pm 0.4$	$6.3 \pm 0.7$	$5.6 \pm 0.5$	$8.9 \pm 0.8$	$5.6 \pm 0.2$	$7.3 \pm 1.4$	$7.3 \pm 0.6$

**Table S15** Values for **Figure 18**. Total phenolic content (TPC) of water extracts

Compounds	Winter Storage				Summer Storage			
	zero-sample	4 weeks	12 weeks	24 weeks	zero-sample	4 weeks	12 weeks	24 weeks
TPC	$111.0 \pm 1.2$	$131.8 \pm 9.1$	$112.9 \pm 6.5$	$76.8 \pm 5.2$	$89.4 \pm 19.7$	$94.9 \pm 1.7$	$74.7 \pm 1.0$	$46.9 \pm 0.6$
Unidentified (non-phenolic)	72.8	95.1	88.4	67.1	60.7	70.0	62.6	39.3
Unidentified (polyphenols)	68.1	64.1	109.9	69.7	94.9	88.0	80.8	29.4