

Table S1. *Taxus baccata* L. full factorial ANOVA results for pot experiment and field studies for nitrogen, carbon, C/N ratio, total nonstructural carbohydrates (TNC), starch and total phenolic compounds (TPhC).

	Source	Nparm	DF	Nitrogen			Carbon			C/N			TNC			Starch			Phenols		
				DFDen	F Ratio	Prob > F	DFDen	F Ratio	Prob > F	DFDen	F Ratio	Prob > F	DFDen	F Ratio	Prob > F	DFDen	F Ratio	Prob > F	DFDen	F Ratio	Prob > F
Pot experiment	Year	1	1	2.389394	8.0246	0.086	1.759342	7.5139	0.1276	2.58485	6.5766	0.0962	2.036319	0.039	0.8614	4.129035	1.5596	0.2779	11.74193	0.4202	0.5293
	Season	3	3	163.9359	31.882	<.0001	149.1165	13.5465	<.0001	165.6764	19.7514	<.0001	141.1253	16.7666	<.0001	165.9932	233.3175	<.0001	165.022	48.9488	<.0001
	Year*Season	3	3	160.3439	17.9457	<.0001	136.6769	1.5232	0.2113	162.9413	11.6726	<.0001	136.6727	6.1285	0.0006	166.4301	3.9169	0.0098	165.3943	3.0023	0.0321
	Sex	1	1	117.336	0.218	0.6414	147.6419	0.6061	0.4375	122.7341	0.0083	0.9276	145.1238	8.9515	0.0033	131.3219	1.8266	0.1789	145.8388	9.2253	0.0028
	Year*Sex	1	1	120.2935	0.0072	0.9325	130.9086	0.0181	0.8931	126.1391	0.1818	0.6705	141.6145	3.3831	0.068	140.7991	0.5416	0.463	158.0574	0.1413	0.7075
	Season*Sex	3	3	183.0897	1.0849	0.3568	100.577	2.7091	0.0491	186.2636	0.8858	0.4496	148.9429	0.9833	0.4024	191.0165	3.6413	0.0138	184.407	4.774	0.0031
	Fertilization	1	1	179.0066	506.3196	<.0001	185.0941	4.9744	0.0269	183.9018	330.3575	<.0001	163.6566	0.0186	0.8916	185.475	0.0005	0.982	176.4746	5.5887	0.0192
	Year*Fertilization	1	1	177.2057	12.7748	0.0005	177.3871	0.2694	0.6044	182.586	18.1344	<.0001	162.5948	1.6603	0.1994	185.1508	2.0462	0.1543	176.0146	0.0694	0.7925
	Season*Fertilization	3	3	161.9042	0.9568	0.4147	166.7652	0.3796	0.7679	166.0462	2.0592	0.1076	150.7107	2.2916	0.0805	168.4343	3.5045	0.0167	164.0123	0.5954	0.6189
	Sex*Fertilization	1	1	154.3281	0.6009	0.4394	157.2388	0.0098	0.9214	161.6579	0.0025	0.96	142.7102	0.0918	0.7623	161.8615	0.2748	0.6009	155.0077	0.2392	0.6255
	Needle age	1	1	169.6638	9.2365	0.0027	177.9084	0.0551	0.8146	164.8427	15.4945	0.0001	141.8381	7.6274	0.0065	164.8658	67.2943	<.0001	165.5301	50.7891	<.0001
	Year*Needle age	1	1	169.6638	0.1213	0.728	177.9084	0.0059	0.939	164.8478	0.1056	0.7457	141.8363	19.0737	<.0001	164.8658	0.0302	0.8621	165.5301	5.7614	0.0175
	Season*Needle age	3	3	169.6991	8.958	<.0001	177.9679	0.645	0.5871	164.8781	12.6655	<.0001	141.7609	16.282	<.0001	164.8926	15.7294	<.0001	165.1338	10.1117	<.0001
	Sex*Needle age	1	1	169.6613	0.0575	0.8108	177.9109	2.7901	0.0966	164.8414	2.7247	0.1007	141.6882	0.2653	0.6073	164.856	1.7767	0.1844	165.4988	1.1971	0.2755
	Fertilization*Needle age	1	1	169.6613	4.0551	0.0456	177.9109	0.0158	0.9	164.8443	0.2464	0.6203	141.6614	0.2181	0.6412	164.895	3.8108	0.0526	165.7823	1.4207	0.235
Field experiment	Year	1	1	8.771347	1.3042	0.2837	8.668043	6.5528	0.0316	6.759651	19.498	0.0034	10.87008	17.5488	0.0016	7.319996	1.4692	0.2631	11.20526	10.0528	0.0087
	Season	3	3	60.42261	37.3266	<.0001	62.65499	3.7071	0.0161	54.18357	32.275	<.0001	67.06398	22.5069	<.0001	60.34684	33.0496	<.0001	67.03468	2.593	0.0598
	Year*Season	3	3	58.10745	0.6582	0.5811	62.81913	0.1912	0.902	51.7036	0.6301	0.5989	66.60178	7.1387	0.0003	58.23686	0.4052	0.7498	66.68935	11.5998	<.0001
	Sex	1	1	9.207492	14.9649	0.0036	9.478226	0.7439	0.4097	9.595824	8.7921	0.0148	19.44317	0.4933	0.4908	9.555839	16.6427	0.0024	19.05156	5.5455	0.0294
	Year*Sex	1	1	8.866391	0.953	0.3548	9.003602	2.6053	0.1409	6.807996	13.1773	0.0088	11.33803	0.5033	0.4924	7.366055	1.5911	0.2456	12.00417	0.0279	0.8701
	Sex*Season	3	3	64.67598	0.6784	0.5685	64.76949	1.0657	0.3699	59.76142	2.6851	0.0546	69.97256	1.461	0.2327	64.62396	0.3528	0.7873	71.24763	3.0998	0.0321
	Needle age	1	1	87.32078	14.1385	0.0003	86.51623	0.133	0.7163	88.32233	23.7731	<.0001	85.79162	0.5181	0.4736	80.03641	13.8394	0.0004	82.47081	65.4908	<.0001
	Year*Needle age	1	1	87.32078	1.4521	0.2314	86.51623	2.925	0.0908	88.32233	0.153	0.6966	85.76931	4.457	0.0377	80.03628	1.3928	0.2414	82.45931	14.2603	0.0003
	Sex*Needle age	1	1	87.81363	1.1974	0.2768	89.2926	0.0025	0.9599	88.49471	0.9065	0.3436	86.28601	0.1194	0.7305	80.21324	0.4459	0.5062	82.60958	5.3872	0.0228
	Needle age*Season	3	3	87.30555	0.5181	0.671	86.52537	0.1258	0.9446	88.30122	1.6789	0.1773	85.71173	5.6484	0.0014	79.9079	0.3715	0.7738	82.45876	3.6334	0.0162