

Can *Abies alba* needles be used as bio-passive samplers to assess air quality?

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SM Table 1 Results obtained from analyzing all generations of needles

No.	<2012							2012							2013						
	Aerosols concentration [mg/g]	C [%]	TC [mg/g]	EC [mg/g]	OC [mg/g]	$\delta^{13}\text{C}_{\text{aerosols}}$	$\delta^{13}\text{C}_{\text{needle}}$	Aerosols concentration [mg/g]	C [%]	TC [mg/g]	EC [mg/g]	OC [mg/g]	$\delta^{13}\text{C}_{\text{aerosols}}$	$\delta^{13}\text{C}_{\text{needle}}$	Aerosols concentration [mg/g]	C [%]	TC [mg/g]	EC [mg/g]	OC [mg/g]	$\delta^{13}\text{C}_{\text{aerosols}}$	$\delta^{13}\text{C}_{\text{needle}}$
1	2.5	40.7	1.00	0.05	0.95	-30.6	-31.5	2.2	45.7	1.01	0.05	0.96	-29.7	-31.6	0.8	71.1	0.55	0.01	0.53	-29.7	-31
2	4.6	32	1.46	0.02	1.44	-31.3	-33	3.3	53.7	1.77	0.03	1.74	-31.1	-33.1	2.2	39.5	0.87	0.03	0.83	-30.9	-32.9
3	3.9	35.8	1.39	0.05	1.34	-28.2	-29.4	2.5	39.4	0.97	0.04	0.94	-27.2	-29.4	1.5	34.7	0.52	0.02	0.51	-27.6	-29.7
4	9.1	27	2.46	0.09	2.37	-28.2	-30.6	5.3	32.0	1.70	0.04	1.65	-28.1	-30.9	1.2	65.0	0.81	0.01	0.80	-28.8	-31.7
5	4.6	34.4	1.57	0.03	1.54	-31.3	-33.7	4.4	45.1	1.97	0.04	1.94	-31.2	-33.9	3.2	25.5	0.82	0.02	0.80	-31.3	-34.1
6	5.6	34.8	1.93	0.05	1.88	-28.9	-32.4	3.6	37.8	1.35	0.06	1.29	-28.5	-32.2	2.4	37.2	0.89	0.04	0.85	-28.9	-32.4
7	5.9	26.3	1.56	0.01	1.55	-29.4	-32.6	3.4	41.5	1.39	0.06	1.33	-29.4	-32.8	2.0	37.4	0.76	0.02	0.74	-29.8	-33.4
8	3.2	33.4	1.07	0.04	1.03	-29.7	-31.7	3.1	49.7	1.52	0.05	1.47	-29.5	-32.1	2.1	37.2	0.77	0.02	0.75	-29.6	-32.3
9	4.7	35.1	1.66	0.03	1.63	-30	-33.9	2.8	41.4	1.14	0.04	1.11	-30.2	-33.7	1.7	49.8	0.84	0.02	0.81	-31	-32.9
10	2.1	36.9	0.78	0.03	0.75	-29	-31.4	2.2	33.3	0.73	0.02	0.70	-29	-31.8	1.4	40.8	0.58	0.02	0.57	-29.6	-31.5
11	2.5	26.4	0.65	0.04	0.61	-29.1	-32.2	2.4	33.9	0.81	0.06	0.75	-28.9	-32.3	0.3	97.7	0.33	0.01	0.33	-29.3	-32
12	11.3					-29	-30.8	5.1	11.4	0.58	0.11	0.47	-28.9	-30.9	1.8	45.9	0.84	0.05	0.79	-28.8	-30.4
13	5.8	34.1	1.97	0.03	1.93	-29	-34.4	5.5	42.9	2.37	0.05	2.32	-28.9	-34.5	2.2	39.9	0.89	0.02	0.87	-30.2	-33.7
14	5.9	45.5	2.68	0.03	2.65	-29.1	-32.5	4.6	50.8	2.35	0.07	2.27	-29.3	-32.4	1.2	54.9	0.66	0.03	0.64	-29.8	-30.8
15	4.9	53	2.61	0.18	2.43	-28.4	-30.2	2.2	40.9	0.90	0.1	0.80	-27.9	-31	2.6	39.1	1.01	0.06	0.94	-28.5	-30.1
16	2.4	28.1	0.67	0.02	0.65	-29.6	-33.4	2.1	42.1	0.89	0.05	0.83	-29.6	-33.4	1.1	45.9	0.49	0.02	0.47	-30	-32.7
17	2.7	35.7	0.97	0.05	0.92	-29.6	-32.9	2.6	43.5	1.12	0.11	1.01	-29.6	-32.6	2.1	42.7	0.92	0.03	0.89	-30.2	-32.2
18	4.3	36.2	1.54	0.1	1.44	-31.2	-31.8						-30.9	-31.6	2.0	30.2	0.62	0.01	0.61	-30.7	-31.6
19	3.4	41.6	1.42	0.04	1.39	-29.7	-31.9	2.5	40.0	0.98	0.04	0.95	-29.8	-32.3	1.3	40.3	0.54	0.02	0.52	-30.1	-32.7
20	2	35.1	0.71	0.06	0.66	-28.3	-31	1.8	45.3	0.80	0.05	0.75	-28.3	-30.2	1.5	50.8	0.74	0.04	0.70	-28.3	-30.1