

Figure S1 The dynamic headspace system used for BVOCs sampling.

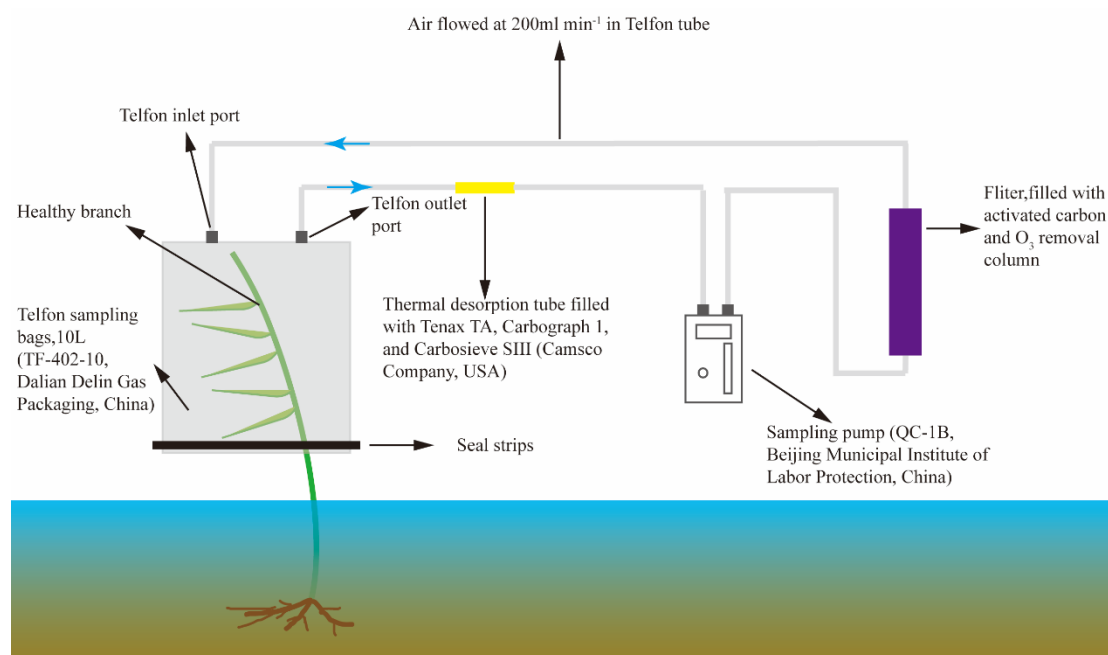


Table S1 Sampling date in this study and air temperature (T) and photosynthetically active radiation (PAR) and water temperature (WT) during the sampling.

Species	Sampling date	Sampling time	T (°C)	PAR (umol·m <sup>-2</sup> ·s <sup>-1</sup> )	WT (°C)
<i>Phragmites australis</i>	20230828	07:00-08:00	25.98333	395.3333	23.5
		09:00-10:00	29.75833	1095.556	26.25
		11:00-12:00	32.35	1357.333	29.4
		13:00-14:00	32.8	1397.778	32.51667
		15:00-16:00	30.41667	1176	31.63333
		17:00-18:00	29.83333	577	30.01667
<i>Typha angustifolia</i>	20230829	07:00-08:00	23.91667	327.278	24.1
		09:00-10:00	26.98333	975.1667	26.2
		11:00-12:00	31.4	1360.222	29.73333
		13:00-14:00	30.58333	1451.222	33.35
		15:00-16:00	29.26667	1141.611	32.71667
		17:00-18:00	29.41667	452.4444	30.21667
<i>Iris pseudacorus</i>	20230830	07:00-08:00	24.33333	233.3333	24.11667
		09:00-10:00	32.03333	936.3333	28.05
		11:00-12:00	31.95	1464.722	31.66667
		13:00-14:00	32.96667	1363.556	33.01667
		15:00-16:00	32.01667	669.5	32.28333
		17:00-18:00	29.28333	307.8889	29.98333

Table S2 External standard curves for compound quantification.

Pure standard	Formula	CAS Number	Standard curves	Compounds represented
$\alpha$ -Pinene	C <sub>10</sub> H <sub>16</sub>	80-56-8	y=111259510x-2467567	$\alpha$ -Pinene
Anisole	C <sub>7</sub> H <sub>8</sub> O	100-66-3	y=123756917x-4137624	Others
Isoprene	C <sub>5</sub> H <sub>8</sub>	78-79-5	y=25884917x-1304823	Isoprene
1-Hexanol	C <sub>6</sub> H <sub>14</sub> O	111-27-3	y=89973932x-2163480	Alcohols
p-Isopropyl toluene	C <sub>10</sub> H <sub>14</sub>	99-87-6	y=170205366x+10286644	Alkanes
Methyl salicylate	C <sub>8</sub> H <sub>8</sub> O <sub>3</sub>	119-36-8	y=177408816x-8702327	Esters
Myrcene	C <sub>10</sub> H <sub>16</sub>	123-35-3	y=115157023x+888868	Myrcene
Decanal	C <sub>10</sub> H <sub>20</sub> O	112-31-2	y=154569640x-5120717	Aldehydes
Hexanal	C <sub>6</sub> H <sub>12</sub> O	66-25-1	y=73341987x-1206090	Aldehydes
Camphor	C <sub>10</sub> H <sub>16</sub> O	464-49-3	y=181060532x-238760	Camphor
Geranyl acetate	C <sub>12</sub> H <sub>20</sub> O <sub>2</sub>	105-87-3	y=159067345x+6226828	Esters
Benzaldehyde	C <sub>7</sub> H <sub>6</sub> O	100-52-7	y=137076776x+15042568	Others
cis-3-Hexen-1-ol	C <sub>6</sub> H <sub>12</sub> O	928-96-1	y=96534660x+2830167	Alcohols
Camphene	C <sub>10</sub> H <sub>16</sub>	79-92-5	y=73338809x-2361697	Camphene
$\alpha$ -Phenethyl alcohol	C <sub>8</sub> H <sub>10</sub> O	60-12-8	y=170205365x+10286644	Others
n-Capryl(ic) aldehyde	C <sub>8</sub> H <sub>16</sub> O	124-13-0	y=102081624x+2385330	Aldehydes
n-Butyl butyrate	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>	109-21-7	y=8172561x-270792	Esters
Nonanoic acid, 4-methyl-	C <sub>10</sub> H <sub>20</sub> O <sub>2</sub>	45019-28-1	y=154569640x-5120718	Carboxylic acids
Hexyl benzoate	C <sub>9</sub> H <sub>10</sub> O <sub>2</sub>	93-89-0	y=184858666x+4764753	Esters
$\gamma$ -Terpinene	C <sub>10</sub> H <sub>16</sub>	99-85-4	y=146857219x+3386375	$\gamma$ -Terpinene
6-Methylhept-5-en-2-one	C <sub>8</sub> H <sub>14</sub> O	110-93-0	y=108182709x+800386	Ketones
Nonanal	C <sub>9</sub> H <sub>18</sub> O	124-19-6	y=155553849x-2390235	Aldehydes
alpha, para-Dimethylstyrene	C <sub>10</sub> H <sub>12</sub>	1195-32-0	y=174601809x+3336042	Others
1-Octanol	C <sub>8</sub> H <sub>18</sub> O	111-87-5	y=270009672x-14179273	Alcohols
3-Carene	C <sub>10</sub> H <sub>16</sub>	13466-78-9	y=229416145x+7885538	3-Carene
Menthone	C <sub>10</sub> H <sub>18</sub> O	98-55-5	y=154254538x+5057379	Ketones
Linalyl acetate	C <sub>12</sub> H <sub>20</sub> O <sub>2</sub>	115-95-7	y=87145462x-1119659	Esters
Ethyl crotonate	C <sub>6</sub> H <sub>10</sub> O <sub>2</sub>	623-70-1	y=165739266x+1799963	Esters
2-Ethyl-1-hexanol	C <sub>8</sub> H <sub>18</sub> O	104-76-7	y=470034686x-14821905	Alcohols
2-Nonanone	C <sub>9</sub> H <sub>18</sub> O	821-55-6	y=180919952x-5995011	Ketones
$\beta$ -pinene	C <sub>10</sub> H <sub>16</sub>	127-91-3	y=1167597593x+83010577	$\beta$ -pinene
(Z)- $\beta$ -ocimene	C <sub>10</sub> H <sub>16</sub>	13877-91-3	y=451522060x+6646016	(Z)- $\beta$ -ocimene

Table S3 All compounds detected in *Phragmites australis* samples.

N O.	Retention	Molecular Formula	Molecu lar Weight	CAS Number	Substance	Peak Area (A×10 <sup>8</sup> )
1	1.854	C <sub>5</sub> H <sub>8</sub>	68	78-79-5	Isoprene	484.32
2	2.06	C <sub>5</sub> H <sub>10</sub>	70	287-92-3	Cyclopentane	20.96
3	2.07	C <sub>6</sub> H <sub>10</sub> O	98	1002-28-4	3-Hexynol	0.46
4	2.22	C <sub>5</sub> H <sub>12</sub> O	88	137-32-6	2-Methylbutan-1-ol	2.37
5	2.34	C <sub>5</sub> H <sub>10</sub> O	86	1569-50-2	3-Penten-2-ol	2.04
6	2.36	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	132	5405-41-4	Ethyl 3-Hydroxybutyrate	1.57
7	2.44	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	60	64-19-7	Acetic Acid	1.53
8	2.60	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	130	19781-76-1	6-Heptene-2,4-Dio	0.01
9	2.69	C <sub>6</sub> H <sub>6</sub>	78	71-43-2	Benzene	1.15
10	2.95	C <sub>7</sub> H <sub>14</sub>	98	2532-58-3	1,3-Dimethylcyclop entane	1.92
11	3.029	C <sub>7</sub> H <sub>16</sub>	100	142-82-5	Heptane	0.70
12	3.089	C <sub>5</sub> H <sub>10</sub> O	86	107-87-9	Pentan-2-one	1.23
13	3.144	C <sub>5</sub> H <sub>10</sub> O	86	590-86-3	Isovaleraldehyde	0.01
14	3.319	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	100	80-62-6	Methyl methacrylate	1.27
15	3.384	C <sub>8</sub> H <sub>14</sub> O	126	4423-94-3	2-Ethylcyclohexanone	0.01
16	3.52	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	74	79-09-4	Propionic acid	0.14
17	3.59	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>	104	111-29-5	1,5-Pentanediol	0.04
18	4.1	C <sub>7</sub> H <sub>8</sub>	92	108-88-3	Toluene	39.45
19	4.49	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	118	105-58-8	Ethyl carbonate	85.15
20	4.645	C <sub>9</sub> H <sub>20</sub>	128	921-47-1	2,3,4-trimethylhexane	0.34
21	4.825	C <sub>6</sub> H <sub>12</sub> O	100	66-25-1	Hexanal	1.90
22	6.021	C <sub>8</sub> H <sub>10</sub>	106	100-41-4	Ether	2.69
23	6.231	C <sub>8</sub> H <sub>10</sub>	106	95-47-6	O-Xylene	9.13
24	6.436	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	88	79-31-2	Isobutyric Acid	0.04
25	6.561	C <sub>8</sub> H <sub>18</sub> O	130	142-96-1	Dibutyl Ether	4.25
26	6.706	C <sub>9</sub> H <sub>18</sub>	126	124-11-8	Nonene	1.28
27	6.766	C <sub>17</sub> H <sub>18</sub> O <sub>2</sub>	254	28049-10-7	3-Phenylpropionic Acid 2- Phenylethylester	4.35
28	6.901	C <sub>9</sub> H <sub>20</sub>	128	111-84-2	Nonane	3.18
29	6.971	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	128	141-32-2	Butyl Acrylate	2.38
30	7.096	C <sub>7</sub> H <sub>14</sub> O	114	111-71-7	Heptanal	2.98
31	7.296	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	130	590-01-2	Butyl Propanoate	1.23
32	7.471	C <sub>10</sub> H <sub>16</sub>	136	99-85-4	P-Mentha-1,4-Diene	0.47
33	7.751	C <sub>10</sub> H <sub>16</sub>	136	80-56-8	α-pinene	1.68
34	8.162	C <sub>10</sub> H <sub>16</sub>	136	79-92-5	Camphene	5.22
35	8.427	C <sub>8</sub> H <sub>16</sub> O	128	928-68-7	2-Heptanone, 6-methyl	0.14
36	8.642	C <sub>7</sub> H <sub>6</sub> O	106	100-52-7	Benzaldehyde	7.92
37	9.132	C <sub>12</sub> H <sub>26</sub>	170	13475-82-6	2,2,4,6,6-Pentamethylheptane	13.1

38	9.222	C <sub>8</sub> H <sub>14</sub> O	126	110-93-0	6-Methylhept-5-en-2-one	1.09
39	9.327	C <sub>10</sub> H <sub>16</sub>	136	123-35-3	Myrcene	23.81
40	9.437	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>	144	109-21-7	n-Butyl butanoate	4.24
41	9.617	C <sub>8</sub> H <sub>16</sub> O	128	124-13-0	Octanal	3.71
42	9.682	C <sub>10</sub> H <sub>16</sub>	136	13466-78-9	Carene	1.63
43	9.732	C <sub>10</sub> H <sub>16</sub> O	152	99-48-9	Carveol	12.92
44	9.747	C <sub>10</sub> H <sub>22</sub>	142	15869-95-1	4,4-Dimethyloctane	0.08
45	9.887	C <sub>11</sub> H <sub>24</sub>	156	17302-27-1	2,5-Dimethylnonane	0.24
46	9.978	C <sub>12</sub> H <sub>26</sub>	170	17312-45-7	3,4-Dimethyldecane	0.25
47	10.098	C <sub>10</sub> H <sub>14</sub>	134	99-87-6	P-Cymene	10.31
48	10.203	C <sub>10</sub> H <sub>16</sub>	136	7705-14-8	Limonene	20.46
49	10.318	C <sub>8</sub> H <sub>18</sub> O	130	104-76-7	2-Ethylhexanol	27.09
50	10.518	C <sub>10</sub> H <sub>16</sub>	136	3779-61-1	3,7-dimethylocta-1,3,6-triene	29.86
51	10.623	C <sub>15</sub> H <sub>32</sub>	212	3891-98-3	2,6,10-Trimethyldodecane	2.61
52	10.733	C <sub>15</sub> H <sub>32</sub>	212	74645-98-0	Dodecane,2,7,10-Trimethyl	1.95
53	10.793	C <sub>10</sub> H <sub>16</sub>	136	13877-91-3	β-ocimene	135.83
54	10.808	C <sub>8</sub> H <sub>18</sub>	114	563-16-6	3,3-Dimethylhexane	4.24
55	12.139	C <sub>9</sub> H <sub>18</sub> O	142	124-19-6	Nonanal	9.56
56	12.659	C <sub>9</sub> H <sub>14</sub> O	138	78-59-1	Isophorone	9.23
57	12.829	C <sub>10</sub> H <sub>16</sub>	136	7216-56-0	Neo-Alloocimene	22.82
58	13.429	C <sub>10</sub> H <sub>16</sub> O	152	464-49-3	Camphor	0.67
59	13.724	C <sub>13</sub> H <sub>26</sub> O	198	10486-19-8	Tridecanal	2.02
60	13.864	C <sub>9</sub> H <sub>20</sub> O	144	143-08-8	1-Nonanol	0.97
61	13.974	C <sub>10</sub> H <sub>20</sub> O	156	89-78-1	Menthol	3.44
62	14.049	C <sub>8</sub> H <sub>14</sub> O <sub>4</sub>	174	123-25-1	Diethyl Succinate	0.51
63	14.124	C <sub>10</sub> H <sub>8</sub>	128	91-20-3	Naphthalene	3.83
64	14.405	C <sub>10</sub> H <sub>18</sub> O	154	98-55-5	Terpineol	0.63
65	14.575	C <sub>10</sub> H <sub>20</sub> O	156	112-31-2	Decanal	1.3
66	15.06	C <sub>11</sub> H <sub>20</sub> O <sub>2</sub>	184	103-11-7	2-Ethylhexyl Acrylate	1.62
67	22.623	C <sub>16</sub> H <sub>30</sub> O <sub>4</sub>	286	74381-40-1	Propanoic Acid, 2-Methyl	3.35
68	27.065	C <sub>16</sub> H <sub>22</sub> O <sub>4</sub>	278	84-69-5	Diisobutyl phthalate	2.68

Table S4 All compounds detected in *Typha angustifolia* samples.

NO	Retention	Molecular Formula	Molecular Weight	CAS Number	Substance	Peak Area (A×10 <sup>8</sup> )
1	1.76	C <sub>5</sub> H <sub>12</sub>	72	78-78-4	Isopentane	19.27
2	2.06	C <sub>5</sub> H <sub>10</sub>	70	287-92-3	Cyclopentane	38.12
3	2.22	C <sub>5</sub> H <sub>12</sub> O	88	137-32-6	2-Methylbutan-1-ol	0.33
4	2.27	C <sub>4</sub> H <sub>8</sub> O	72	78-84-2	Isobutyraldehyde	1.89
5	2.44	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	60	64-19-7	Acetic Acid	24.42
6	2.69	C <sub>6</sub> H <sub>6</sub>	78	71-43-2	Benzene	1.26
7	2.92	C <sub>8</sub> H <sub>18</sub>	114	540-84-1	2,2,4-Trimethylpentane	0.98

8	2.93	C <sub>4</sub> H <sub>10</sub> O	74	71-36-3	Butanol	0.20
9	3.00	C <sub>7</sub> H <sub>14</sub>	98	592-76-7	Hept-1-ene	1.79
10	3.029	C <sub>7</sub> H <sub>16</sub>	100	142-82-5	Heptane	0.74
11	3.089	C <sub>5</sub> H <sub>10</sub> O	86	107-87-9	Pentan-2-one	0.32
12	3.144	C <sub>5</sub> H <sub>10</sub> O	86	590-86-3	Isovaleraldehyde	1.19
13	3.319	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	100	80-62-6	Methyl Methacrylate	0.11
14	3.52	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	74	79-09-4	Propionic Acid	0.53
15	4.1	C <sub>7</sub> H <sub>8</sub>	92	108-88-3	Toluene	21.08
16	4.49	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	118	105-58-8	Ethyl Carbonate	17.87
17	4.825	C <sub>6</sub> H <sub>12</sub> O	100	66-25-1	Hexanal	2.24
18	6.021	C <sub>8</sub> H <sub>10</sub>	106	100-41-4	Ether	1.59
19	6.231	C <sub>8</sub> H <sub>10</sub>	106	95-47-6	O-Xylene	4.39
20	6.436	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	88	79-31-2	Isobutyric Acid	0.01
21	6.561	C <sub>8</sub> H <sub>18</sub> O	130	142-96-1	Dibutyl Ether	1.21
22	6.691	C <sub>9</sub> H <sub>20</sub> O	144	3452-97-9	Nonanol	0.16
23	6.706	C <sub>9</sub> H <sub>18</sub>	126	124-11-8	Nonene	1.23
24	6.766	C <sub>17</sub> H <sub>18</sub> O <sub>2</sub>	254	28049-10-7	3-Phenylpropionic Acid 2-Phenylethyl Ester	0.01
25	6.901	C <sub>9</sub> H <sub>20</sub>	128	111-84-2	Nonane	2.77
26	6.971	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	128	141-32-2	Butyl Acrylate	2.11
27	7.096	C <sub>7</sub> H <sub>14</sub> O	114	111-71-7	Heptanal	3.09
28	7.166	C <sub>6</sub> H <sub>10</sub> O	98	108-94-1	Cyclohexanone	0.40
29	7.296	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	130	590-01-2	Butyl Propanoate	0.25
30	7.521	C <sub>7</sub> H <sub>8</sub> O	108	100-66-3	Anisole	46.18
31	7.651	C <sub>9</sub> H <sub>12</sub>	120	611-14-3	2-Ethyltoluene	0.01
32	7.751	C <sub>10</sub> H <sub>16</sub>	136	80-56-8	α-pinene	0.73
33	8.162	C <sub>10</sub> H <sub>16</sub>	136	79-92-5	Camphene	3.20
34	8.427	C <sub>8</sub> H <sub>16</sub> O	128	928-68-7	2-Heptanone, 6-methyl	0.18
35	8.557	C <sub>5</sub> H <sub>10</sub> O	86	590-86-3	Isovaleraldehyde	0.26
36	8.642	C <sub>7</sub> H <sub>6</sub> O	106	100-52-7	Benzaldehyde	7.34
37	9.007	C <sub>10</sub> H <sub>16</sub>	136	127-91-3	β-pinene	0.01
38	9.132	C <sub>12</sub> H <sub>26</sub>	170	13475-82-6	2,2,4,6,6-Pentamethylheptane	4.49
39	9.222	C <sub>8</sub> H <sub>14</sub> O	126	110-93-0	6-Methylhept-5-en-2-one	1.88
40	9.437	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>	144	109-21-7	Butyl butanoate	0.50
41	9.447	C <sub>6</sub> H <sub>6</sub> O	94	108-95-2	Phenol	7.13
42	9.567	C <sub>10</sub> H <sub>22</sub>	142	124-18-5	Decane	1.96
43	9.617	C <sub>8</sub> H <sub>16</sub> O	128	124-13-0	Octanal	6.93
44	9.682	C <sub>10</sub> H <sub>16</sub>	136	13466-78-9	Carene	0.99
45	9.887	C <sub>11</sub> H <sub>24</sub>	156	17302-27-1	2,5-dimethylnonane	0.11
46	9.978	C <sub>12</sub> H <sub>26</sub>	170	17312-45-7	3,4-dimethyldecane	0.25
47	10.098	C <sub>10</sub> H <sub>14</sub>	134	99-87-6	p-cymene	8.01
48	10.203	C <sub>10</sub> H <sub>16</sub>	136	7705-14-8	Limonene	6.18

49	10.318	C <sub>8</sub> H <sub>18</sub> O	130	104-76-7	2-Ethylhexanol	24.09
50	10.623	C <sub>15</sub> H <sub>32</sub>	212	3891-98-3	2,6,10-Trimethyldodecane	0.15
51	10.763	C <sub>7</sub> H <sub>8</sub> O	108	100-51-6	Benzyl Alcohol	12.87
52	10.808	C <sub>8</sub> H <sub>18</sub>	114	563-16-6	3,3-Dimethylhexane	3.75
53	12.139	C <sub>9</sub> H <sub>18</sub> O	142	124-19-6	Nonanal	9.41
54	12.659	C <sub>9</sub> H <sub>14</sub> O	138	78-59-1	Isophorone	13.21
55	13.329	C <sub>10</sub> H <sub>20</sub> O <sub>2</sub>	172	103-09-3	2-Ethylhexyl Acetate	1.26
56	13.429	C <sub>10</sub> H <sub>16</sub> O	152	464-49-3	Camphor	0.49
57	13.724	C <sub>13</sub> H <sub>26</sub> O	198	10486-19-8	Tridecanal	0.54
58	13.864	C <sub>9</sub> H <sub>20</sub> O	144	143-08-8	1-Nonanol	0.27
59	13.879	C <sub>14</sub> H <sub>28</sub> O	212	124-25-4	Tetradecanal	1.21
60	13.974	C <sub>10</sub> H <sub>20</sub> O	156	89-78-1	Menthol	0.66
61	14.049	C <sub>8</sub> H <sub>14</sub> O <sub>4</sub>	174	123-25-1	Diethyl Succinate	0.65
62	14.124	C <sub>10</sub> H <sub>8</sub>	128	91-20-3	Naphthalene	1.41
63	14.575	C <sub>10</sub> H <sub>20</sub> O	156	112-31-2	Decanal	11.50
64	14.85	C <sub>14</sub> H <sub>30</sub> O	214	112-72-1	1-Tetradecanol	0.01
65	15.06	C <sub>11</sub> H <sub>20</sub> O <sub>2</sub>	184	103-11-7	2-Ethylhexyl acrylate	1.91
66	16.636	C <sub>15</sub> H <sub>32</sub> O	228	629-76-5	1-Pentadecanol	0.53
67	18.982	C <sub>14</sub> H <sub>30</sub>	198	629-59-4	Tetradecane	8.10
68	20.202	C <sub>10</sub> H <sub>10</sub> O <sub>4</sub>	194	131-11-3	Dimethyl Phthalate	26.81
69	22.623	C <sub>16</sub> H <sub>30</sub> O <sub>4</sub>	286	74381-40-1	Propanoic Acid, 2-Methyl	3.38
70	27.065	C <sub>16</sub> H <sub>22</sub> O <sub>4</sub>	278	84-69-5	Diisobutyl phthalate	5.41
71	28.116	C <sub>20</sub> H <sub>34</sub> O	290	596-85-0	Manool	6.23

Table S5 All compounds detected in *Iris pseudacorus* samples.

NO.	Retention	Molecular Formula	Molecular Weight	CAS Number	Substance	Peak Area (A×10 <sup>8</sup> )
1	1.76	C <sub>5</sub> H <sub>12</sub>	72	78-78-4	Isopentane	11.24
2	2.06	C <sub>5</sub> H <sub>10</sub>	70	287-92-3	Cyclopentane	20.77
3	2.22	C <sub>5</sub> H <sub>12</sub> O	88	137-32-6	2-Methylbutan-1-ol	1.61
4	2.29	C <sub>4</sub> H <sub>8</sub> O	72	78-84-2	Isobutyraldehyde	0.72
5	2.36	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	132	5405-41-4	Ethyl 3-hydroxybutyrate	1.21
6	2.44	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	60	64-19-7	Acetic Acid	9.06
7	2.69	C <sub>6</sub> H <sub>6</sub>	78	71-43-2	Benzene	2.05
8	2.92	C <sub>8</sub> H <sub>18</sub>	114	540-84-1	2,2,4-Trimethylpentane	0.19
9	2.93	C <sub>4</sub> H <sub>10</sub> O	74	71-36-3	Butanol	0.65
10	2.95	C <sub>7</sub> H <sub>14</sub>	98	2532-58-3	1,3-Dimethylcyclopentane	0.01
11	3.00	C <sub>7</sub> H <sub>14</sub>	98	592-76-7	Hept-1-ene	0.15

12	3.029	C <sub>7</sub> H <sub>16</sub>	100	142-82-5	Heptane	0.26
13	3.089	C <sub>5</sub> H <sub>10</sub> O	86	107-87-9	Pentan-2-one	0.53
14	3.144	C <sub>5</sub> H <sub>10</sub> O	86	590-86-3	Isovaleraldehyde	0.94
15	3.319	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	100	80-62-6	Methyl Methacrylate	1.04
16	3.52	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	74	79-09-4	Propionic Acid	0.14
17	4.1	C <sub>7</sub> H <sub>8</sub>	92	108-88-3	Toluene	15.70
18	4.49	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	118	105-58-8	Ethyl Carbonate	12.72
19	4.645	C <sub>9</sub> H <sub>20</sub>	128	921-47-1	2,3,4-trimethylhexane	2.86
20	4.825	C <sub>6</sub> H <sub>12</sub> O	100	66-25-1	Hexanal	2.16
21	6.021	C <sub>8</sub> H <sub>10</sub>	106	100-41-4	Ether	2.59
22	6.231	C <sub>8</sub> H <sub>10</sub>	106	95-47-6	O-xylene	5.40
23	6.561	C <sub>8</sub> H <sub>18</sub> O	130	142-96-1	Dibutyl Ether	1.64
24	6.691	C <sub>9</sub> H <sub>20</sub> O	144	3452-97-9	Nonanol	0.14
25	6.706	C <sub>9</sub> H <sub>18</sub>	126	124-11-8	Nonene	0.99
26	6.766	C <sub>17</sub> H <sub>18</sub> O <sub>2</sub>	254	28049-10-7	3-Phenylpropionic Acid 2-Phenylethyl Ester	4.59
27	6.901	C <sub>9</sub> H <sub>20</sub>	128	111-84-2	Nonane	2.05
28	6.971	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	128	141-32-2	Butyl Acrylate	2.03
29	7.096	C <sub>7</sub> H <sub>14</sub> O	114	111-71-7	Heptanal	2.36
30	7.166	C <sub>6</sub> H <sub>10</sub> O	98	108-94-1	Cyclohexanone	2.02
31	7.296	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	130	590-01-2	Butyl Propanoate	0.36
32	7.471	C <sub>10</sub> H <sub>16</sub>	136	99-85-4	p-Mentha-1,4-diene	0.30
33	7.521	C <sub>7</sub> H <sub>8</sub> O	108	100-66-3	Anisole	0.01
34	7.651	C <sub>9</sub> H <sub>12</sub>	120	611-14-3	2-Ethyltoluene	0.01
35	7.751	C <sub>10</sub> H <sub>16</sub>	136	80-56-8	Alpha-pinene	4.19
36	8.427	C <sub>8</sub> H <sub>16</sub> O	128	928-68-7	2-Heptanone, 6-methyl	0.01
37	8.557	C <sub>5</sub> H <sub>10</sub> O	86	590-86-3	Isovaleraldehyde	0.11
38	8.642	C <sub>7</sub> H <sub>6</sub> O	106	100-52-7	Benzaldehyde	8.90
39	9.007	C <sub>10</sub> H <sub>16</sub>	136	127-91-3	β-Pinene	0.73
40	9.132	C <sub>12</sub> H <sub>26</sub>	170	13475-82-6	2,2,4,6,6-Pentamethylheptane	14.64
41	9.222	C <sub>8</sub> H <sub>14</sub> O	126	110-93-0	6-Methylhept-5-en-2-one	3.77
42	9.327	C <sub>10</sub> H <sub>16</sub>	136	123-35-3	Myrcene	0.01
43	9.437	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>	144	109-21-7	n-Butyl butanoate	0.95
44	9.447	C <sub>6</sub> H <sub>6</sub> O	94	108-95-2	Phenol	1.80
45	9.567	C <sub>10</sub> H <sub>22</sub>	142	124-18-5	Decane	0.82
46	9.617	C <sub>8</sub> H <sub>16</sub> O	128	124-13-0	Octanal	6.83
47	9.682	C <sub>10</sub> H <sub>16</sub>	136	13466-78-9	Carene	3.55
48	10.098	C <sub>10</sub> H <sub>14</sub>	134	99-87-6	P-Cymene	19.63
49	10.203	C <sub>10</sub> H <sub>16</sub>	136	7705-14-8	Limonene	17.34
50	10.318	C <sub>8</sub> H <sub>18</sub> O	130	104-76-7	2-Ethylhexanol	16.69

51	10.623	C <sub>15</sub> H <sub>32</sub>	212	3891-98-3	2,6,10-Trimethyldodecane	7.15
52	10.733	C <sub>15</sub> H <sub>32</sub>	212	74645-98-0	Dodecane,2,7,10-Trimethyl	4.61
53	10.763	C <sub>7</sub> H <sub>8</sub> O	108	100-51-6	Benzyl Alcohol	5.16
54	10.808	C <sub>8</sub> H <sub>18</sub>	114	563-16-6	3,3-Dimethylhexane	2.69
55	12.139	C <sub>9</sub> H <sub>18</sub> O	142	124-19-6	Nonanal	10.72
56	12.659	C <sub>9</sub> H <sub>14</sub> O	138	78-59-1	Isophorone	18.79
57	13.329	C <sub>10</sub> H <sub>20</sub> O <sub>2</sub>	172	103-09-3	2-Ethylhexyl Acetate	0.38
58	13.429	C <sub>10</sub> H <sub>16</sub> O	152	464-49-3	Camphor	0.20
59	13.724	C <sub>13</sub> H <sub>26</sub> O	198	10486-19-8	Tridecanal	0.96
60	13.864	C <sub>9</sub> H <sub>20</sub> O	144	143-08-8	1-Nonanol	0.34
61	13.879	C <sub>14</sub> H <sub>28</sub> O	212	124-25-4	Tetradecanal	0.63
62	13.974	C <sub>10</sub> H <sub>20</sub> O	156	89-78-1	Menthol	1.08
63	14.049	C <sub>8</sub> H <sub>14</sub> O <sub>4</sub>	174	123-25-1	Diethyl succinate	1.30
64	14.124	C <sub>10</sub> H <sub>8</sub>	128	91-20-3	Naphthalene	1.61
65	14.405	C <sub>10</sub> H <sub>18</sub> O	154	98-55-5	Terpineol	0.65
66	14.575	C <sub>10</sub> H <sub>20</sub> O	156	112-31-2	Decanal	13.23
67	20.202	C <sub>10</sub> H <sub>10</sub> O <sub>4</sub>	194	131-11-3	Dimethyl Phthalate	42.63
68	22.623	C <sub>16</sub> H <sub>30</sub> O <sub>4</sub>	286	74381-40-1	Propanoic Acid, 2-Methyl	3.09
69	27.065	C <sub>16</sub> H <sub>22</sub> O <sub>4</sub>	278	84-69-5	Diisobutyl Phthalate	3.07
70	28.116	C <sub>20</sub> H <sub>34</sub> O	290	596-85-0	Manool	3.54

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Table S6 The analysis of the Pearson Correlation Coefficient results for *Phragmites australis*.

		Pn	Gs	Ci	Tr	Vpd	TEMP	PAR	IR	MR	OVOCR	AR	OR
Pn	Pearson correlation	1	0.91169	-0.14522	0.820109	-0.19915	0.978484	0.973067	-0.4668	0.57724	-0.2167	-0.29638	-0.10288
Pn	p-value		<0.0001	0.56532	<0.0001	0.428209	<0.0001	<0.0001	0.050823	0.01213	0.387744	0.232394	0.684585
Gs	Pearson correlation	0.91169	1	0.145277	0.624684	-0.45087	0.844362	0.842567	-0.14239	0.762773	-0.04341	-0.10047	0.071698
Gs	p-value	<0.0001		0.565172	0.005579	0.060395	<0.0001	<0.0001	0.573006	0.000232	0.864209	0.691619	0.777396
Ci	Pearson correlation	-0.14522	0.145277	1	-0.65973	-0.87777	-0.21142	-0.18765	0.581387	0.565626	0.524888	0.511022	0.67608
Ci	p-value	0.56532	0.565172		0.002892	<0.0001	0.399702	0.455898	0.011385	0.014424	0.025314	0.030209	0.002068
Tr	Pearson correlation	0.820109	0.624684	-0.65973	1	0.336236	0.836011	0.805355	-0.63472	0.112496	-0.50224	-0.48314	-0.49664
Tr	p-value	<0.0001	0.005579	0.002892		0.172495	<0.0001	<0.0001	0.004659	0.656731	0.033668	0.042246	0.036029
Vpd	Pearson correlation	-0.19915	-0.45087	-0.87777	0.336236	1	-0.15107	-0.17431	-0.39573	-0.69498	-0.52153	-0.37154	-0.64601
Vpd	p-value	0.428209	0.060395	<0.0001	0.172495		0.549604	0.489095	0.104039	0.001368	0.026436	0.12899	0.003776
TEMP	Pearson correlation	0.978484	0.844362	-0.21142	0.836011	-0.15107	1	0.979108	-0.56884	0.452533	-0.25019	-0.37426	-0.17221
TEMP	p-value	<0.0001	<0.0001	0.399702	<0.0001	0.549604		<0.0001	0.013757	0.059339	0.316675	0.125989	0.494426
PAR	Pearson correlation	0.973067	0.842567	-0.18765	0.805355	-0.17431	0.979108	1	-0.59245	0.469301	-0.21813	-0.42752	-0.1601
PAR	p-value	<0.0001	<0.0001	0.455898	<0.0001	0.489095	<0.0001		0.009577	0.049434	0.384544	0.076778	0.525689
IR	Pearson correlation	-0.4668	-0.14239	0.581387	-0.63472	-0.39573	-0.56884	-0.59245	1	0.326558	0.320121	0.756433	0.530697
IR	p-value	0.050823	0.573006	0.011385	0.004659	0.104039	0.013757	0.009577		0.185964	0.195302	0.00028	0.023457
MR	Pearson correlation	0.57724	0.762773	0.565626	0.112496	-0.69498	0.452533	0.469301	0.326558	1	0.200193	0.438517	0.488906
MR	p-value	0.01213	0.000232	0.014424	0.656731	0.001368	0.059339	0.049434	0.185964		0.425751	0.0687	0.039499
OVOCR	Pearson correlation	-0.2167	-0.04341	0.524888	-0.50224	-0.52153	-0.25019	-0.21813	0.320121	0.200193	1	0.267381	0.81103
OVOCR	p-value	0.387744	0.864209	0.025314	0.033668	0.026436	0.316675	0.384544	0.195302	0.425751		0.283429	<0.0001
AR	Pearson correlation	-0.29638	-0.10047	0.511022	-0.48314	-0.37154	-0.37426	-0.42752	0.756433	0.438517	0.267381	1	0.528361
AR	p-value	0.232394	0.691619	0.030209	0.042246	0.12899	0.125989	0.076778	0.00028	0.0687	0.283429		0.02419
OR	Pearson correlation	-0.10288	0.071698	0.67608	-0.49664	-0.64601	-0.17221	-0.1601	0.530697	0.488906	0.81103	0.528361	1
OR	p-value	0.684585	0.777396	0.002068	0.036029	0.003776	0.494426	0.525689	0.023457	0.039499	<0.0001	0.02419	

Table S7 The analysis of the Pearson Correlation Coefficient results for *Typha angustifolia*.

		Pn	Gs	Ci	Tr	Vpd	TEMP	PAR	MR	OVOCR	AR	OR
Pn	Pearson correlation	1	0.698129	-0.4659	0.567194	-0.13496	0.981454	0.926287	-0.58945	-0.73335	-0.13596	-0.71189
Pn	p-value		0.001273	0.051332	0.014095	0.593393	<0.0001	<0.0001	0.010042	0.000534	0.59063	0.00092
Gs	Pearson correlation	0.698129	1	-0.77977	0.918271	0.14744	0.692758	0.687635	-0.32723	-0.30457	-0.26647	-0.62133
Gs	p-value	0.001273		0.000136	<0.0001	0.559333	0.001438	0.001612	0.185012	0.219117	0.285133	0.005917
Ci	Pearson correlation	-0.4659	-0.77977	1	-0.85448	-0.6258	-0.51195	-0.64049	-0.05445	0.009624	0.386029	0.526082
Ci	p-value	0.051332	0.000136		<0.0001	0.00547	0.02986	0.004189	0.83008	0.969766	0.113591	0.024923
Tr	Pearson correlation	0.567194	0.918271	-0.85448	1	0.424125	0.576613	0.598581	-0.06303	-0.26689	-0.4594	-0.67697
Tr	p-value	0.014095	<0.0001	<0.0001		0.079407	0.012246	0.008677	0.803763	0.284343	0.055117	0.00203
Vpd	Pearson correlation	-0.13496	0.14744	-0.6258	0.424125	1	-0.06303	0.152449	0.407376	0.201653	-0.47467	-0.31831
Vpd	p-value	0.593393	0.559333	0.00547	0.079407		0.803786	0.54591	0.093353	0.422313	0.046543	0.197985
TEMP	Pearson correlation	0.981454	0.692758	-0.51195	0.576613	-0.06303	1	0.964002	-0.59054	-0.70611	-0.13556	-0.717
TEMP	p-value	<0.0001	0.001438	0.02986	0.012246	0.803786		<0.0001	0.009871	0.001057	0.591741	0.000812
PAR	Pearson correlation	0.926287	0.687635	-0.64049	0.598581	0.152449	0.964002	1	-0.52214	-0.59344	-0.18363	-0.72739
PAR	p-value	<0.0001	0.001612	0.004189	0.008677	0.54591	<0.0001		0.026231	0.009426	0.465779	0.000624
MR	Pearson correlation	-0.58945	-0.32723	-0.05445	-0.06303	0.407376	-0.59054	-0.52214	1	0.476004	-0.18689	0.354953
MR	p-value	0.010042	0.185012	0.83008	0.803763	0.093353	0.009871	0.026231		0.045845	0.457734	0.148349
OVOCR	Pearson correlation	-0.73335	-0.30457	0.009624	-0.26689	0.201653	-0.70611	-0.59344	0.476004	1	0.088484	0.704413
OVOCR	p-value	0.000534	0.219117	0.969766	0.284343	0.422313	0.001057	0.009426	0.045845		0.726984	0.0011
AR	Pearson correlation	-0.13596	-0.26647	0.386029	-0.4594	-0.47467	-0.13556	-0.18363	-0.18689	0.088484	1	0.504419
AR	p-value	0.59063	0.285133	0.113591	0.055117	0.046543	0.591741	0.465779	0.457734	0.726984		0.032784
OR	Pearson correlation	-0.71189	-0.62133	0.526082	-0.67697	-0.31831	-0.717	-0.72739	0.354953	0.704413	0.504419	1
OR	p-value	0.00092	0.005917	0.024923	0.00203	0.197985	0.000812	0.000624	0.148349	0.0011	0.032784	

Table S8 The analysis of the Pearson Correlation Coefficient results for *Iris pseudacorus*.

		Pn	Gs	Ci	Tr	Vpd	TEMP	PAR	MR	OVOCR	AR	OR
Pn	Pearson correlation	1	0.712007	-0.81402	0.799528	0.334801	0.980151	0.964147	-0.3214	-0.56137	-0.16489	-0.65906
Pn	p-value		0.000917	<0.0001	<0.0001	0.174449	<0.0001	<0.0001	0.193418	0.015346	0.513224	0.002931
Gs	Pearson correlation	0.712007	1	-0.20754	0.6975	-0.1141	0.615247	0.683497	-0.13586	-0.3834	-0.14134	-0.44286
Gs	p-value	0.000917		0.408603	0.001291	0.652131	0.006573	0.001765	0.590894	0.116284	0.575878	0.065693
Ci	Pearson correlation	-0.81402	-0.20754	1	-0.58866	-0.60872	-0.87055	-0.81503	0.266595	0.39671	0.099664	0.468355
Ci	p-value	<0.0001	0.408603		0.010167	0.007341	<0.0001	<0.0001	0.284902	0.103109	0.693978	0.049957
Tr	Pearson correlation	0.799528	0.6975	-0.58866	1	0.626456	0.829578	0.776844	0.133973	-0.08531	0.183141	-0.17351
Tr	p-value	<0.0001	0.001291	0.010167		0.005407	<0.0001	0.000149	0.596118	0.736434	0.466975	0.491108
Vpd	Pearson correlation	0.334801	-0.1141	-0.60872	0.626456	1	0.478067	0.339115	0.34139	0.299955	0.390471	0.258075
Vpd	p-value	0.174449	0.652131	0.007341	0.005407		0.044782	0.168618	0.165597	0.226535	0.109144	0.301154
TEMP	Pearson correlation	0.980151	0.615247	-0.87055	0.829578	0.478067	1	0.954579	-0.26282	-0.46829	-0.09618	-0.57948
TEMP	p-value	<0.0001	0.006573	<0.0001	<0.0001	0.044782		<0.0001	0.292044	0.049994	0.704217	0.011723
PAR	Pearson correlation	0.964147	0.683497	-0.81503	0.776844	0.339115	0.954579	1	-0.23345	-0.42149	-0.04363	-0.53402
PAR	p-value	<0.0001	0.001765	<0.0001	0.000149	0.168618	<0.0001		0.351185	0.081496	0.863503	0.022442
MR	Pearson correlation	-0.3214	-0.13586	0.266595	0.133973	0.34139	-0.26282	-0.23345	1	0.736569	0.544688	0.684313
MR	p-value	0.193418	0.590894	0.284902	0.596118	0.165597	0.292044	0.351185		0.00049	0.019421	0.001734
OVOCR	Pearson correlation	-0.56137	-0.3834	0.39671	-0.08531	0.299955	-0.46829	-0.42149	0.736569	1	0.639687	0.903731
OVOCR	p-value	0.015346	0.116284	0.103109	0.736434	0.226535	0.049994	0.081496	0.00049		0.004252	<0.0001
AR	Pearson correlation	-0.16489	-0.14134	0.099664	0.183141	0.390471	-0.09618	-0.04363	0.544688	0.639687	1	0.525541
AR	p-value	0.513224	0.575878	0.693978	0.466975	0.109144	0.704217	0.863503	0.019421	0.004252		0.025099
OR	Pearson correlation	-0.65906	-0.44286	0.468355	-0.17351	0.258075	-0.57948	-0.53402	0.684313	0.903731	0.525541	1
OR	p-value	0.002931	0.065693	0.049957	0.491108	0.301154	0.011723	0.022442	0.001734	<0.0001	0.025099	

Table S9 Comparison of standard emission rates for BVOCs from trees and emergent vegetation.

Family	Genus	Species (Latin)	Standard emission rate ( $\mu\text{g}\cdot\text{g}^{-1}\text{Dw}\cdot\text{h}^{-1}$ ) <sup>a</sup>					Reference
			Isoprene	Monoterpene	Sesquiterpenes	OVOCs	Total BVOCs	
Gramineae(Poaceae)	<i>Phragmites</i>	<i>Phragmites australis</i>	63.16±27.16	2.09±2.80	nd	10.49±6.48	78.45±35.53	This work
Typhaceae	<i>Typha</i> Linn.	<i>Typha angustifolia</i>	nd	0.69±0.84	nd	5.40±2.39	10.38±7.19	This work
Iridaceae	<i>Iris</i> L.	<i>Iris pseudacorus</i> L	nd	0.43±0.21	nd	6.28±4.87	11.14±8.28	This work
Pinaceae	<i>Pinus</i> L.	<i>Pinus tabulaeformis</i>	0.99 ±0.35	3.83 ±2.61	0.06 ±0.04	0.03 ±0.03	5.21 ±2.63	(Jing et al., 2020)
		<i>Pinus tabulaeformis</i>	1.54±0.65	16.36±0.45	nr	nr	nr	(Chen et al., 2020)
		<i>Pinus tabuliformis</i>	nr	32.20 ±5.70	nr	nr	nr	(Wu et al., 2021)
		<i>Pinus tabulaeformis</i>	0.40	19.00	nr	nr	nr	(Wang et al., 2003)
		<i>Pinus armandii</i>	0.01 ±0.00	7.42 ±0.33	0.19 ±0.23	0.14 ±0.11	7.87 ±0.42	(Jing et al., 2020)
		<i>Pinus griffithii</i>	nd	23.11 ±2.34	8.13±1.05	2.83 ±1.22	37.82 ±3.14	(Jing et al., 2020)
		<i>Larix principis</i>	0.10	0.20	nr	nr	nr	(Wang et al., 2003)
Taxaceae	<i>Taxus</i>	<i>Taxus cuspidata</i>	5.86 ±0.86	nd	nd	0.05 ±0.07	5.93 ±0.86	(Jing et al., 2020)
Cupressaceae	<i>Sabina</i> Mill.	<i>Sabina chinensis</i>	0.002 ±0.00	5.49 ±1.44	0.004 ±0.00	0.61 ±0.06	6.13 ±1.44	(Jing et al., 2020)

		<i>Sabina vulgaris</i>	nr	18.90 ±0.50	nr	nr	nr	(Wu et al., 2021)
		<i>Platycladus orientalis</i>	1.60 ±1.20	27.18 ±4.95	0.05 ±0.01	0.01 ±0.01	29.35 ±5.11	(Jing et al., 2020)
		<i>Platycladus Spach</i> <i>orientalis</i>	2.32±0.13	11.40±0.58	nr	nr	nr	(Chen et al., 2020)
		<i>Platycladus orientalis</i>	nd	2.20	nr	nr	nr	(Wang et al., 2003)
Rosaceae	<i>Prunus L</i>	<i>Amygdalus triloba</i>	nd	0.11 ±0.04	nd	0.61 ±0.24	1.16 ±0.47	(Jing et al., 2020)
	<i>Rosa L.</i>	<i>Rosa xanthina</i>	nr	0.11 ±0.01	nr	nr	nr	(Wu et al., 2021)
Ulmaceae	<i>Ulmus L.</i>	<i>Ulmus pumila</i>	0.05±0.06	0.05 ±0.00	nd	0.10 ±0.03	0.69 ±0.40	(Jing et al., 2020)
Buxaceae	<i>Buxus L</i>	<i>Buxus megistophylla</i>	nd	13.07 ±2.80	nd	2.61 ±0.82	28.23 ±4.71	(Jing et al., 2020)
Caprifoliaceae	<i>Lonicera L.</i>	<i>Lonicera maackii</i>	9.17±2.73	nd	nd	0.14 ±0.08	9.65 ±2.74	(Jing et al., 2020)
	<i>Ligustrum L.</i>	<i>Ligustrum vicaryi</i>	nd	5.74 ±1.96	2.07 ±0.57	3.24 ±1.80	17.72 ±3.01	(Jing et al., 2020)
Oleaceae		<i>Syringa reticulata</i>	nr	0.21 ±0.01	nr	nr	nr	(Wu et al., 2021)
	<i>Syringa Linn.</i>	<i>Syringa oblata</i>	nr	0.28 ±0.01	nr	nr	nr	(Wu et al., 2021)
Gramineae(Poaceae)	<i>Phyllostachys Siebold &amp; Zucc.</i>	<i>Phyllostachys propinqua</i>	6.31±1.56	0.08 ±0.06	0.10 ±0.05	0.12 ±0.00	6.97 ±1.58	(Jing et al., 2020)

Tiliaceae	<i>Tilia</i>	<i>Tilia japonica</i>	nd	0.98 ±0.54	nd	0.09 ±0.07	1.57 ±0.67	(Jing et al., 2020)
Magnoliaceae	<i>Yulania Spach</i>	<i>Magnolia biondii</i>	3.44±1.16	0.25 ±0.14	0.01 ±0.00	0.10 ±0.03	3.89 ±1.16	(Jing et al., 2020)
	<i>Liriodendron L.</i>	<i>Liriodendron chinense</i>	nd	3.73 ±1.61	nd	0.12±0.33	4.31 ±1.65	(Jing et al., 2020)
		<i>Quercus aliena</i>	2.46 ±1.16	0.12±0.12	nd	0.12±0.04	3.00 ±1.17	(Jing et al., 2020)
		<i>Quercus variabilis</i>	5.63±1.14	35.60±1.82	nr	nr	nr	(Chen et al., 2020)
Fagaceae	<i>Quercus L.</i>	<i>Quercus variabilis</i>	65.50	4.00	nr	nr	nr	(Wang et al., 2003)
		<i>Quercus liaotungensis</i>	98.90	0.10	nr	nr	nr	(Wang et al., 2003)
		<i>Quercus dentate</i>	32.10	7.80	nr	nr	nr	(Wang et al., 2003)
Sapindaceae	<i>Acer L.</i>	<i>Acer truncatum</i>	0.05 ±0.03	2.29 ±1.30	0.06 ±0.03	0.32 ±0.07	4.14 ±1.37	(Jing et al., 2020)
	<i>Koelreuteria Laxm.</i>	<i>Koelreuteria paniculata</i>	nd	1.76 ±0.38	0.49 ±0.31	2.03 ±1.48	9.46 ±1.70	(Jing et al., 2020)
Betulaceae	<i>Carpinus L.</i>	<i>Carpinus turczaninowii</i>	0.26 ±0.02	nd	0.14 ±0.17	0.09 ±0.09	0.48 ±0.19	(Jing et al., 2020)
Salicaceae	<i>Salix.</i>	<i>Salix matsudana</i>	6.75 ±1.23	nd	nd	0.11 ±0.00	6.95 ±1.23	(Jing et al., 2020)
	<i>Populus</i>	<i>Populus tomentosa</i>	13.40±1.26	6.23±0.31	nr	nr	nr	(Chen et al., 2020)

		<i>Populus davidiana</i>	105.80	0.20	nr	nr	nr	(Wang et al., 2003)
		<i>Robinia pseudoacacia</i>	11.55 ±0.91	0.45 ±0.41	0.38 ±0.31	0.93 ±0.30	16.24 ±1.65	(Jing et al., 2020)
Fabaceae.	<i>Robinia L</i>	<i>Robinia pseudoacacia</i>	7.52±0.31	7.52±0.31	nr	nr	nr	(Chen et al., 2020)
	<i>Styphnolobium Schott</i>	<i>Sophora japonica</i>	3.76 ±1.83	0.03 ±0.00	0.01 ±0.00	0.09 ±0.05	3.97 ±1.83	(Jing et al., 2020)
Platanaceae	<i>Platanus L.</i>	<i>Platanus occidentalis</i>	21.36±4.20	4.38 ±0.53	3.91 ±0.97	11.51 ±2.07	48.65 ±4.94	(Jing et al., 2020)

Note: a. standard emission rate refers to emission rate under standard conditions (temperature=30 °C, PAR=1000  $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ ); b. nr: not reported; nd: not detected

