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Supplementary Information

Chemical Composition Similarity between the Essential Oils Isolated from Male and Female Specimens of Each Five *Baccharis* Species

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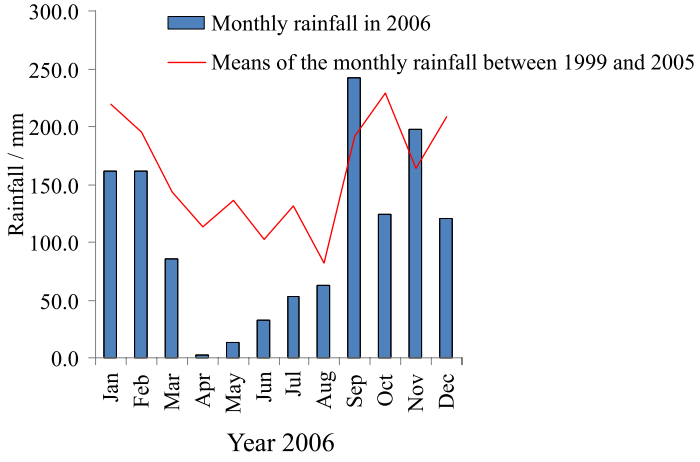

Figure S1. Mean monthly pluviometric precipitation between 1999 and 2005, and mean monthly rainfall during 2006 near the place where the botanical materials were collected. These data were provided by the Meteorological Station of the Farm School from the State University of Ponta Grossa (Paraná State, Brazil), supplement the discussion about the influence of rainfall on the composition of essential oils obtained from female and male specimens, and refer to the case of *B. dracunculifolia*.

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Table S1. Rainfall data for the months in which the sample collections were made, showing that all collections occurred by dry weather. Plant collections: *B. dracunculifolia*[a] at 2 p.m., *B. coridifolia*[b] at 4 p.m., *B. semiserrata* var. *elaegnoides*[c] at 5 p.m., *B. caprariaefolia*[d] at 4 p.m. and *B. pentaptera*[e] at 11 a.m. The data below supplement the information given in the Experimental section of the printed version

Day	Rainfall / mm			
	August, 2006	April, 2007	September, 2007	February, 2009
1	0	0	0	0
2	0	0	0	0
3	0	11	13	28
4	0	0	0	10
5	0	0	0	0
6	0	0	0	0
7	0	0	0	15
8	0[a]	9	0	70
9	0	0	0	0
10	0	0	0	0
11	0	0	0	9
12	0	0	0	0[f]
13	0	0	0	0
14	0	0	0[c]	0
15	0	0	0	0
16	15	0	0	89
17	10	0	0[d]	0
18	30	0	0	0
19	0	0	3	0
20	0	0[b]	8	0
21	0	0	0	21
22	0	0	8	0
23	0	12	0	0
24	0	8	0	0
25	0	8	0	0
26	8	44	0	17
27	0	0	0	0
28	0	0	0	17
29	0	0	0	–
30	0	0	0	–
31	0	–	–	–

Table S2. Data found in the literature that show quantitative differences (%) in some of the main components of essential oils from female (♀) and male (♂) specimens of *B. articulata* (Bar), *B. caprariaefolia* (Bca), *B. dracunculifolia* (Bdr), *B. erioclada* (Ber), *B. semiserrata* (Bss) and *B. trimera* (Btr).[1-4] This table refers to all information available in the literature and supplements the data discussed in the Introduction

Components	Bar♀	Bar♂	Bca♀	Bca♂	Bdr♀	Bdr♂	Ber♀	Ber♂	Bss♀	Bss♂	Btr♀	Btr♂
α-Pinene							8.5	0.3			6.1	2.1
β-Pinene	14.7	0.1					21.4	1.2				
Limonene					4.7	0.9	15.2	2.7				
α-Terpineol			0.0	5.9								
Aromadendrene									9.6	2.3		
α-Humulene											0.0	20.3
α-Muurolene									8.9	2.4		
Germacrene D											0.0	12.3
Bicyclogermacrene											7.8	3.0
Germacrene A											0.0	7.8
δ-Cadinene									9.5	3.9		
α-Cadinene											11.6	0.0
(E)-Nerolidol			8.9	0.4	20.8	12.0						
Spathulenol							6.6	12.6				
α-Cadinol											8.5	0.2

Table S3. Relative composition and distribution of the components that could not be identified in the analyses of the essential oils obtained from leaves of female (♀) and male (♂) specimens of *B. caprariaefolia* (Bca), *B. dracunculifolia* (Bdr), *B. semiserrata* var. *elaegnoides* (Bse), *B. coridifolia* (Bco) and *B. pentaptera* (Bpe). The data presented here supplement those appearing in the Table 1 for the identified components (main text)

Components	[a]RI	Bca♀	Bca♂	Bdr♀	Bdr♂	Bse♀	Bse♂	Bco♀	Bco♂	Bpe♀	Bpe♂
$C_{10}H_{16}$ $M^{+\cdot}$, *m/z* 136	1022	nd	nd	0.23	0.12	nd	nd	nd	nd	nd	nd
$C_{15}H_{24}$ $M^{+\cdot}$, *m/z* 204	1360	nd	nd	0.76	0.99	nd	nd	nd	nd	nd	nd
$C_{15}H_{24}$ $M^{+\cdot}$, *m/z* 204	1392	nd	nd	nd	nd	nd	nd	nd	nd	2.31	1,99
$C_{15}H_{24}$ $M^{+\cdot}$, *m/z* 204	1530	nd	nd	nd	0.85	nd	nd	nd	nd	nd	nd
$C_{15}H_{24}$ $M^{+\cdot}$, m/z 204	1541	nd	nd	nd	nd	nd	nd	nd	nd	0.74	0.62
$C_{15}H_{24}O$ $M^{+\cdot}$, m/z 220	1586	2.74	1.45	0.23	0.43	4.68	1.05	nd	nd	nd	nd
$C_{15}H_{24}O$ $M^{+\cdot}$, *m/z* 220	1593	0.76	0.23	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{22}$ $M^{+\cdot}$-18, m/z 204	1606	nd	nd	nd	nd	nd	nd	1.32	1.09	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1610	nd	nd	nd	nd	nd	nd	nd	nd	2.18	1.26
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1617	nd	nd	nd	nd	nd	nd	nd	nd	6.06	3.49
$C_{15}H_{22}$ $M^{+\cdot}$-18, m/z 204	1622	nd	nd	nd	nd	nd	nd	3.21	2.79	nd	nd
$C_{15}H_{24}O$ $M^{+\cdot}$, *m/z* 220	1626	nd	nd	nd	nd	nd	2.05	2.27	2.91	nd	nd
$C_{15}H_{22}$ $M^{+\cdot}$-18, m/z 204	1636	0.41	0.64	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{24}O$ $M^{+\cdot}$, *m/z* 220	1640	nd	nd	nd	nd	nd	nd	3.53	0.95	nd	nd
$C_{15}H_{24}O$ $M^{+\cdot}$, *m/z* 220	1644	nd	nd	nd	nd	nd	nd	4.08	1.57	nd	nd
$C_{15}H_{23}$ $M^{+\cdot}$-17, m/z 205	1650	1.84	2.42	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1668	nd	nd	nd	nd	2.99	nd	nd	nd	nd	nd
$C_{14}H_{24}O$ $M^{+\cdot}$, *m/z* 208	1674	0.69	0.85	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1681	1.63	0.34	1.24	0.22	nd	nd	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1683	0.7	0.47	nd	nd	nd	nd	nd	nd	nd	nd
$C_{13}H_{22}O$ $M^{+\cdot}$, *m/z* 194	1686	0.21	0.11	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1690	1.97	0.76	nd	nd	nd	nd	nd	nd	4.47	2.88
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1697	0.54	0.79	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{22}O$ $M^{+\cdot}$, *m/z* 218	1699	nd	nd	nd	nd	3.20	2.43	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 220	1703	nd	0.82	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1704	nd	nd	nd	nd	0.36	0.12	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 220	1706	nd	1.56	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1708	nd	nd	nd	nd	0.96	0.77	nd	nd	nd	nd
$C_{15}H_{26}O$ $M^{+\cdot}$, *m/z* 222	1714	1.18	2.28	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{22}O$ $M^{+\cdot}$, *m/z* 218	1726	nd	nd	nd	1.20	nd	1.03	nd	nd	nd	nd
$C_{15}H_{26}O_2$ $M^{+\cdot}$, *m/z* 238	1730	0.22	0.65	nd	nd	nd	nd	nd	nd	nd	nd
$C_{15}H_{22}O$ $M^{+\cdot}$, *m/z* 218	1732	nd	nd	nd	0.35	nd	nd	nd	nd	nd	nd
$C_{16}H_{22}O_4$ $M^{+\cdot}$, *m/z* 278	1760	nd	nd	nd	nd	nd	1.75	nd	nd	nd	nd
Total notIdentified [b] / %		12.89	13.37	2.46	4.16	12.19	9.20	14.41	9.31	15.76	10.24

[a]RI: means of calculated relative retention indices using the apolar columns CP-Sil-8 (GC-MS) and OV-5 (GC-FID), and the n-alkane series C10-C30; [b]relative areas smaller than 0.10% were not considered in the GC-FID analyses and were taken as "not detected" (nd).

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