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Seasonal Influence on the Essential Oil Variability of *Eugenia dysenterica*

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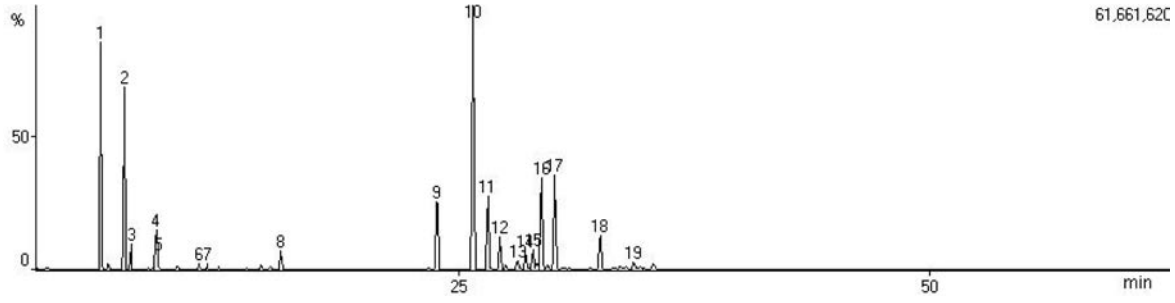

Figure S1. Total ion chromatogram (TIC) of essential oil from *E. dysenterica* leaves cultivated from seeds from Senador Canedo (SC) and collected during winter.

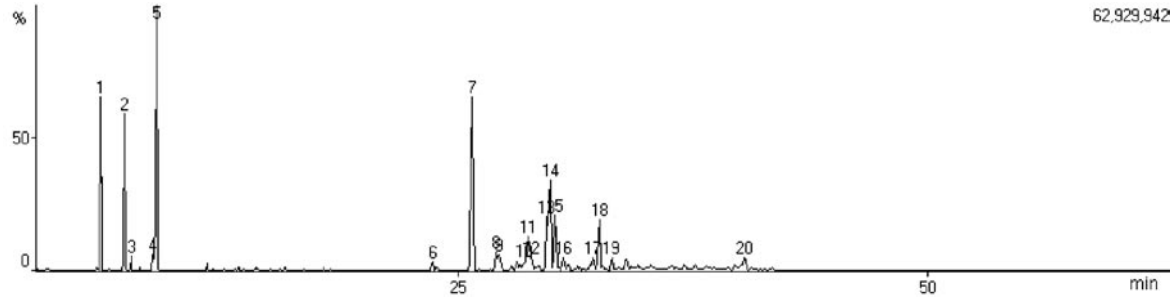

Figure S2. Total ion chromatogram (TIC) of essential oil from *E. dysenterica* leaves cultivated from seeds from Senador Canedo (SC) and collected during summer.

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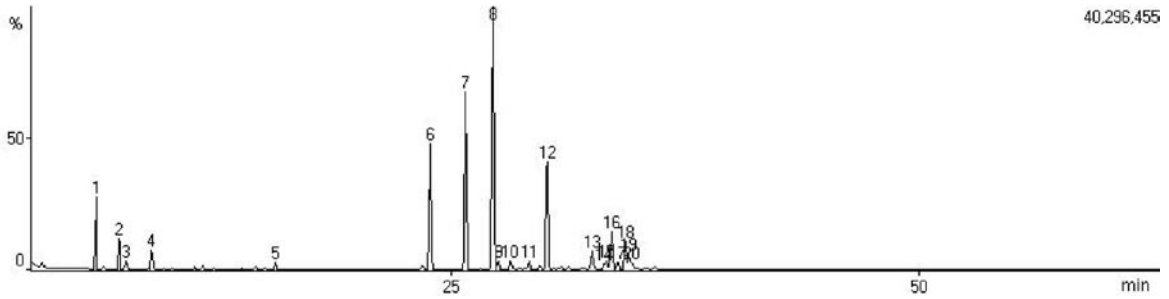

Figure S3. Total ion chromatogram (TIC) of essential oil from *E. dysenterica* leaves cultivated from seeds from Campo Alegre de Goiás (CA) and collected during winter.

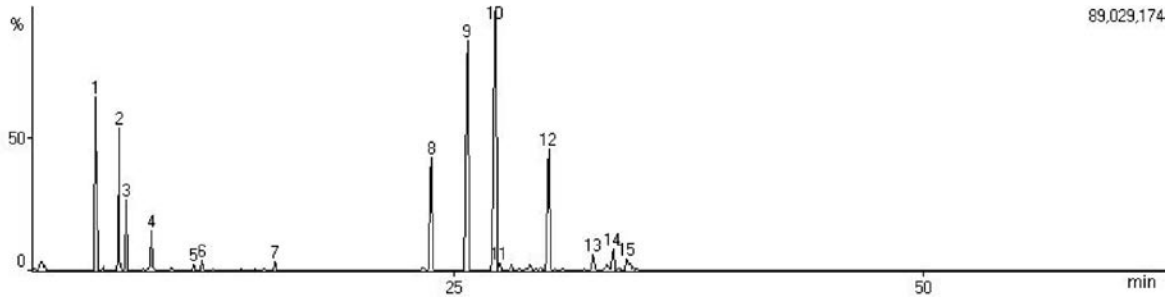

Figure S4. Total ion chromatogram (TIC) of essential oil from *E. dysenterica* leaves cultivated from seeds from Campo Alegre de Goiás (CA) and collected during summer.

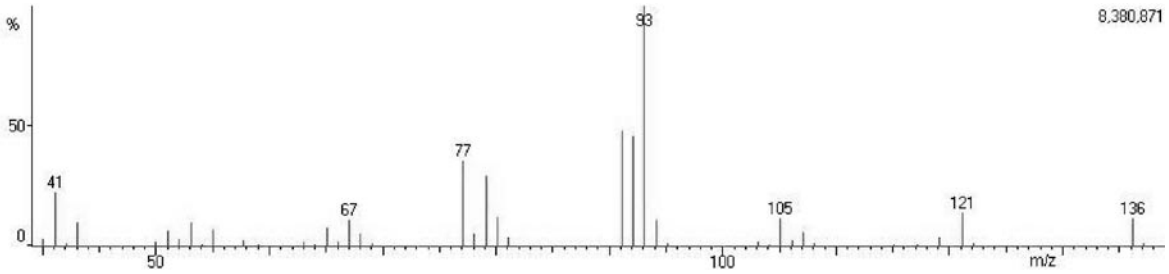

Figure S5. Mass spectrum of α-pinene.

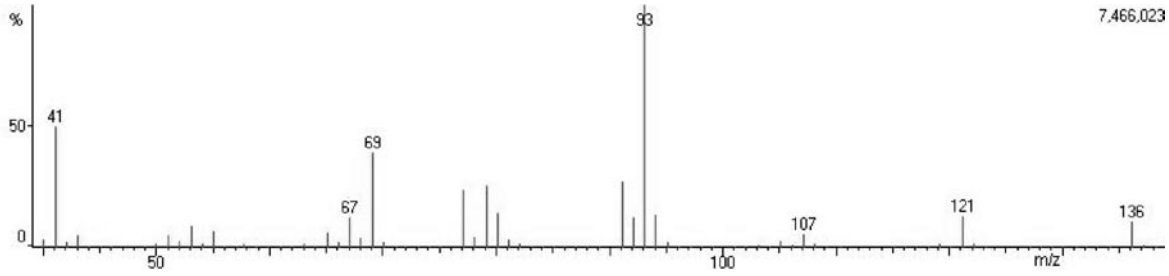

Figure S6. Mass spectrum of β-pinene.

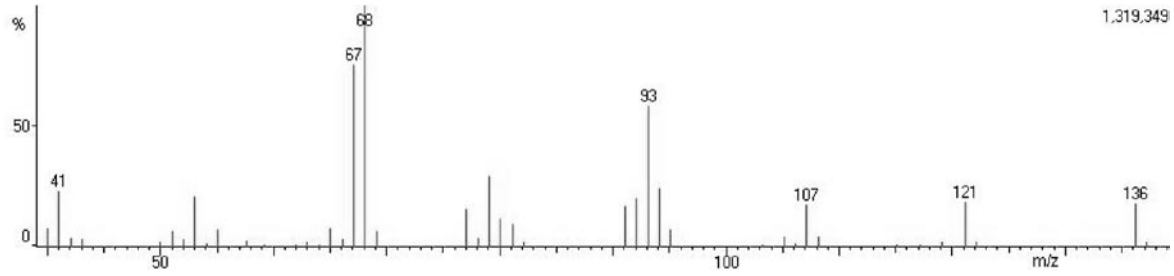

Figure S7. Mass spectrum of limonene.

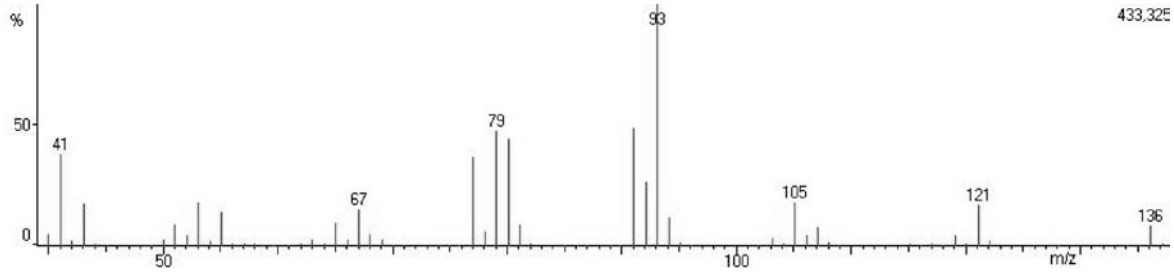

Figure S8. Mass spectrum of (Z)-β-ocimene.

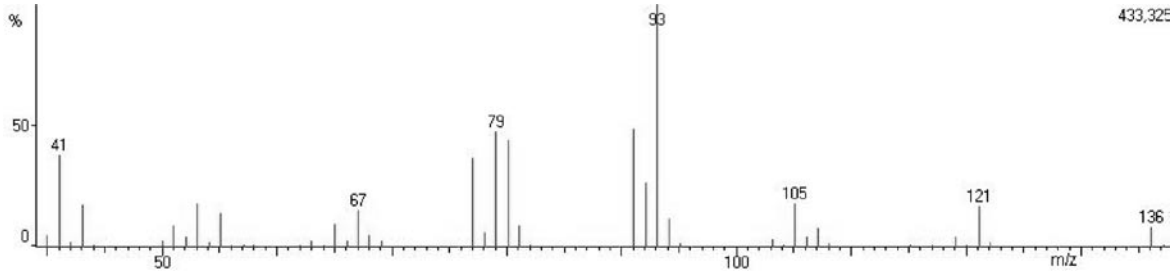

Figure S9. Mass spectrum of α-copaene.

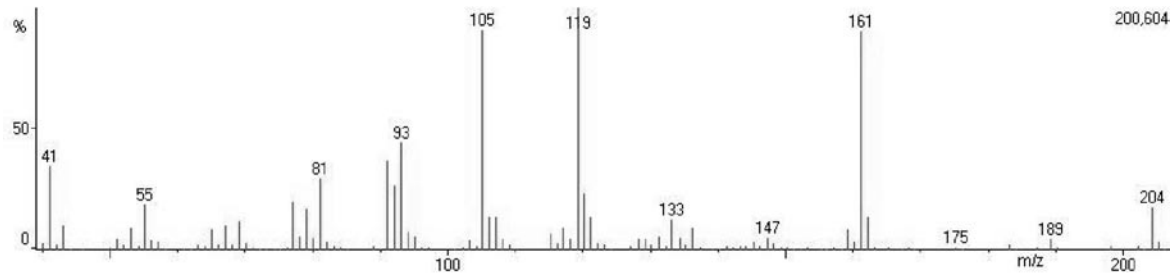

Figure S10. Mass spectrum of β-caryophyllene.

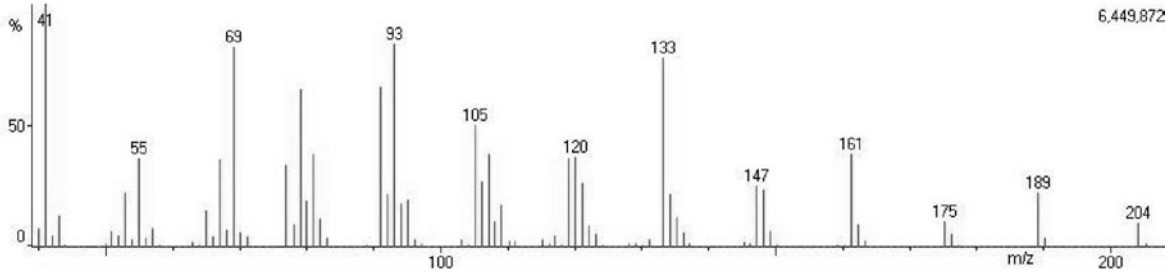

Figure S11. Mass spectrum of α-humulene.

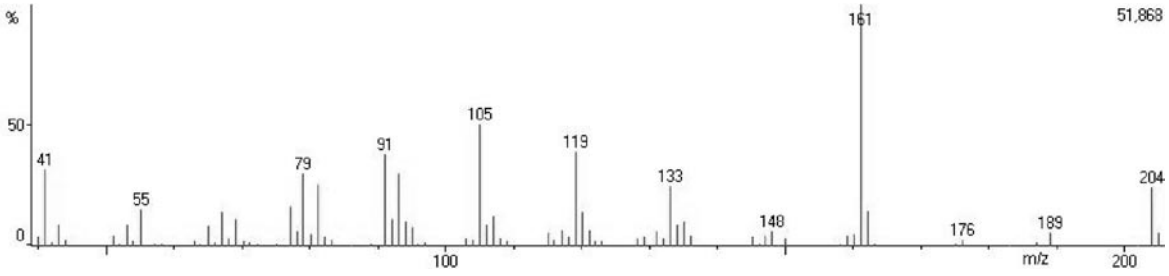

Figure S12. Mass spectrum of γ-cadinene.

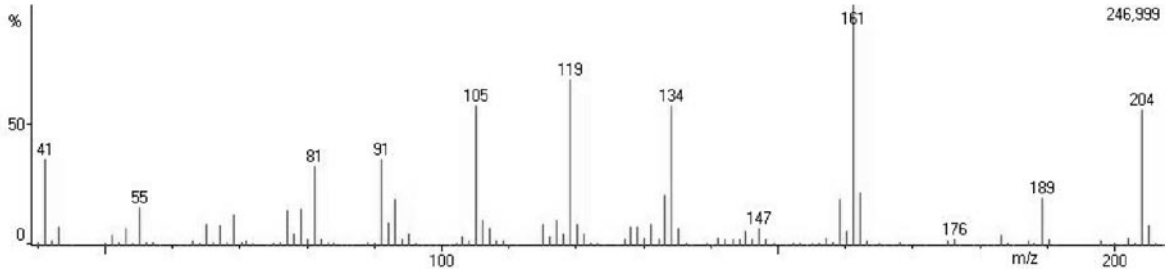

Figure S13. Mass spectrum of δ-cadinene.

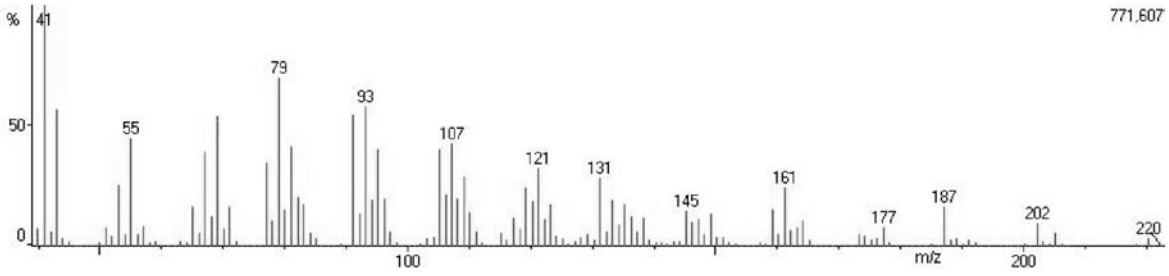

Figure S14. Mass spectrum of caryophyllene oxide.

Table S1. Percentages[a] of essential oil constituents in clustered samples of *E. dysenterica* from seeds obtained from two different sites and collected during dry and wet seasons in the Brazilian Cerrado.

	Constituent	Clusters		
	IA	IB	II	
1	α-Pinene	9.0 ± 2.3 a	7.8 ± 3.9 ab	5.5 ± 3.1 b
2	β-Pinene[b]	9.3 ± 2.6 a	8.6 ± 5.4 a	3.7 ± 2.1 b
3	Myrcene[b]	1.0 ± 0.5 a	2.9 ± 4.8 a	0.80 ± 0.80 a
4	Limonene[b]	7.8 ± 5.9 a	14 ± 9 a	1.5 ± 1.3 b
5	(Z)-β-Ocimene	5.9 ± 4.2 a	t	2.1 ± 2.9 b
6	(E)-β-Ocimene[c]	1.9 ± 1.0 a	0.56 ± 0.42 b	0.48 ± 0.64 b
7	Linalool[b]	0.50 ± 0.15 a	0.27 ± 0.32 a	0.27 ± 0.32 a
8	α-Terpineol[b]	0.27 ± 0.24 ab	0.09 ± 0.22 a	0.57 ± 0.66 b
9	α-Copaene[b]	2.3 ± 1.3 a	0.17 ± 0.51 b	8.1 ± 4.0 c
10	β-Caryophyllene[c]	18 ± 7 a	20 ± 12 a	32 ± 15 b
11	α-Guaiene[b]	0.40 ± 0.44 a	0.40 ± 0.99 a	1.3 ± 2.2 a
12	6,9-Guaiadiene	1.6 ± 1.0 a	1.3 ± 0.9 a	0.34 ± 0.90 b
13	α-*neo*-Clovene	1.9 ± 0.8 a	3.2 ± 2.1 a	0.52 ± 0.94 b
14	α-Humulene	11 ± 5 a	8.7 ± 7.7 a	12 ± 10 a
15	γ-Muurolene[c]	0.47 ± 0.30 a	0.06 ± 0.15 b	0.64 ± 0.64 a
16	α-Amorphene[b]	0.02 ± 0.05 a	0.27 ± 0.65 a	0.09 ± 0.35 a
17	β-Selinene[c]	0.74 ± 1.2 a	0.26 ± 0.424 a	0.32 ± 0.58 a
18	δ-Selinene	2.1 ± 2.7 a	2.1 ± 3.0 a	1.4 ± 3.7 a
19	α-Selinene	0.63 ± 1.1 a	0.37 ± 0.74 a	0.49 ± 073 a
20	Bicyclogermacrene	0.53 ± 0.20 a	0.19 ± 0.45 a	t
21	α-Muurolene	2.6 ± 2.4 a	t	0.54 ± 0.45 a
22	α-Bulnesene[b]	0.18 ± 0.20 a	0.53 ± 1.3 a	1.9 ± 3.5 a
23	δ-Amorphene	0.12 ± 0.13 a	0.21 ± 0.35 a	-
24	γ-Cadinene	11 ± 5 a	17 ± 11 a	0.80 ± 1.6 b
25	7-*epi*-α-Selinene	0.87 ± 1.4 a	0.71 ± 2.6 a	0.73 ± 1.9 a
26	δ-Cadinene[c]	4.4 ± 1.9 a	2.0 ± 1.5 a	13 ± 6 b
27	Caryophyllene oxide[b]	1.6 ± 0.7 a	1.4 ± 1.2 a	4.8 ± 4.4 b
28	Humulene epoxide II	0.82 ± 0.42 a	0.46 ± 0.74 a	1.7 ± 1.8 b
29	Muurola-4,10(14)-dien-1β-ol	0.51 ± 0.62 a	-	1.4 ± 1.2 a
	Monoterpenes	36 ± 8 a	34 ± 12 a	15 ± 7 b
	Monoterpene hydrocarbons[c]	35 ± 8 a	34 ± 12 a	14 ± 6 b
	Oxygenated monoterpenes	0.77 ± 0.28 a	0.36 ± 0.41 a	0.83 ± 0.82 a
	Sesquiterpenes	62 ± 8 a	60 ± 11 a	82 ± 7 b
	Sesquiterpene hydrocarbons	59 ± 8 a	58 ± 11 a	74 ± 8 b
	Oxygenated sesquiterpenes[b]	2.9 ± 1.3 a	1.9 ± 1.3 a	7.9 ± 5.2 b

[a] Average based on original data ± standard deviation. [b] Rank- and [c] arcsine-transformed in ANOVA analysis. t: trace. IA: only SC seed origin-dry season samples; IB: majority SC seed origin-wet season samples; II: all samples from CA seed origin regardless of season (see text). Averages followed by the same letter in a row did not share significant differences at 5% probability by Tukey's test.