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Supplementary Information

Spatial Chemometric Analyses of Essential Oil Variability in *Eugenia dysenterica*

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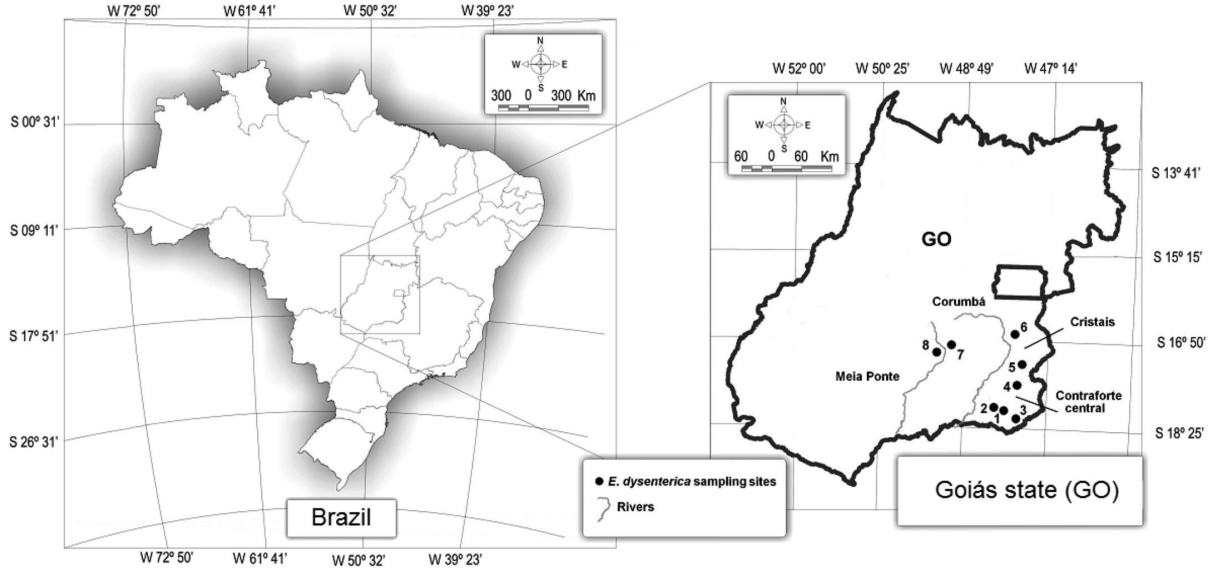

Figure S1. Map of Goiás State showing Corumbá and Meia Ponte River basins separating *E. dysenterica* populations **1**-**6** and **7** from **8**, respectively. Cristais and Contraforte Central mountain ridges help to isolate populations **4** and **5**. Populations: **1** = Catalão-1, **2** = Catalão-2, **3** = Três Ranchos, **4** = Campo Alegre de Goiás, **5** = Cristalina, **6** = Luziânia, **7** = Senador Canedo, **8** = Goiânia.

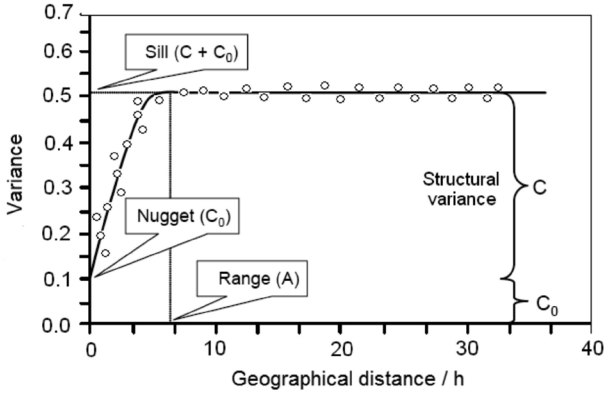

Figure S2. Generalized variogram model showing estimate parameters for sill, nugget and effective range. The spatially structured variance is represented by fraction C.

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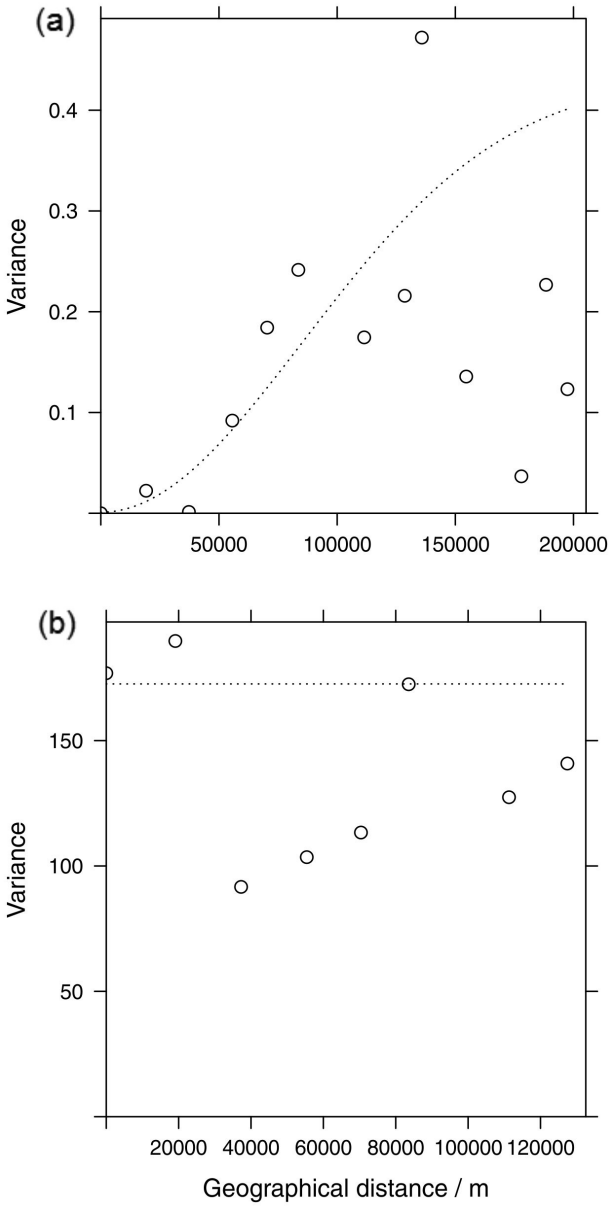

Figure S3. Variograms for essential oils from eight *E. dysenterica* populations represented by oil constituent data set (a) and for the sesquiterpene hydrocarbon content (b) along the separation distance of sampling sites. Fitted models show spatially structured variance (a) and nugget effect only (b), with no spatial structure in the data.

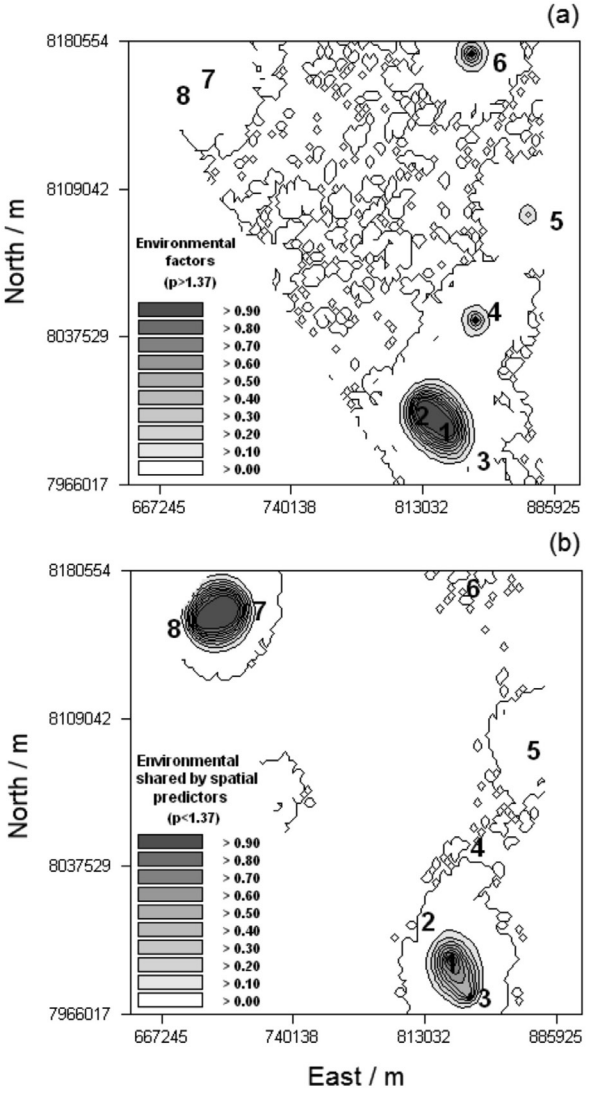

Figure S4. Distribution of environmental predictors (leaf nutrients: P, K^{+}, Mg^{2+}, Cu^{2+}) of oil constituent variations in the leaves from eight *E. dysenterica* populations from Central Brazilian Cerrado: pure environmental influence (a) and environmental factors shared by spatial predictors (b). The maps show the probability of finding a value higher than the mean content.

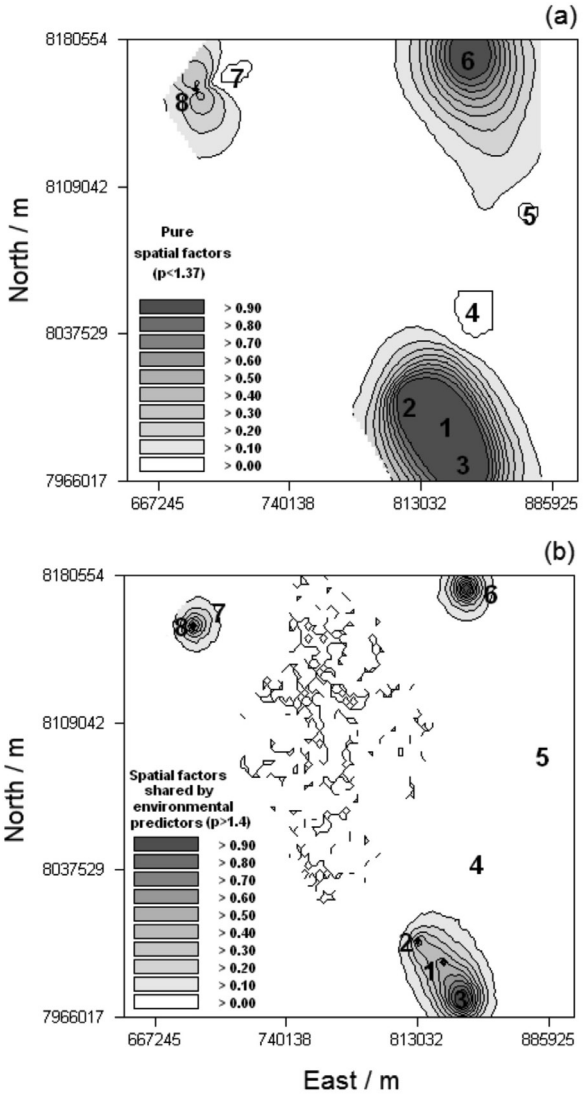

Figure S5. Distribution of spatial predictors of oil constituent variations in the leaves from eight *E. dysenterica* populations from Central Brazilian Cerrado: pure spatial influence (a) and spatial factors shared by environmental predictors (b). The maps show the probability of finding a value higher than the mean content.