Supporting Information to:

Authentication of Medicinal Plant Botanical Identity by Amplified Fragmented Length Polymorphism Dominant DNA Marker: Inferences from the Plectranthus Genus

Helna Passinho-Soares¹,²
Durvalina Felix¹
Maria Auxiliadora Kaplan³
Marcia Margis-Pinheiro⁵
Rogério Margis¹,⁴

Affiliation
¹ Departamento de Genética, UFRJ, Rio de Janeiro, RS, Brasil
² Departamento de Medicamento, Faculdade de Farmácia, UFBa, Salvador, BA, Brasil
³ Núcleo de Pesquisas de Produtos Naturais, UFRJ, Rio de Janeiro, Brasil
⁴ Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brasil
⁵ Departamento de Genética, UFRGS, Porto Alegre, RS, Brasil

Correspondence
Dr. Rogério Margis
Universidade Federal do Rio Grande do Sul
Rua Ramiro Barcelos
2600 – Prédio anexo
Bairro Santana
Porto Alegre RS
Brasil CEP 90.035-003
Phone: +55-51-3316-7766
E-mail: rogerio.margis@ufrgs.br
The AFLP data from the individuals of the four species were further analyzed using a second clustering method. Altogether, four distinct groups were revealed along the three-dimensional PCA axes (Fig. 1S). Three groups corresponded to each one of the *Plectranthus* species and the out-group was formed by three individuals of *V. condensata*. The first principal axes accounts for 61.6% of the variation and illustrates the separation between *P. barbatus* and *P. grandis*. It also permits us to differentiate *P. ornatus* from *P. grandis*. The second coordinate accounts for 24.6% of the variation and shows that *P. ornatus* and *V. condensate* differ from *P. barbatus* and *P. grandis*. Altogether, the three axes encompass more than 96.5% of the variation and permit us to absolutely separate the three species of *Plectranthus* and the out-group *V. condensata*. The results produced by PCA were quite similar to those obtained by UPGMA confirming the pattern obtained by cluster analysis, indicating the accuracy of these analyses.

![Three-dimensional plot of the principal coordinate analysis of individuals from *P. barbatus* (15), *P. grandis* (7), *P. ornatus* (4) and *V. condensata* (3). Ellipses were draw around clusters of individuals from the same species.](image)