

Differentiation of ayahuasca samples according to the origin, religious groups, and botanical varieties using multivariate statistical analysis of UHPLC-MS qualitative data

Taynara Simão Matos^a, Flávia S. Zandonadi^a, Alex Ap. Rosini Silva^b, Andreia M. Porcari^b, [Alessandra Sussulini](mailto:sussulini@unicamp.br)^{a*}

^a Laboratory of Bioanalytics and Integrated Omics (LaBIOmics), Institute of Chemistry, University of Campinas (UNICAMP), 13083-970, Campinas, SP Brazil

^b MS4Life Laboratory of Mass Spectrometry, Health Sciences Postgraduate Program, São Francisco University, 12916-900, Braganca Paulista, SP Brazil

^c Instituto Nacional de Ciência e Tecnologia em Bioanalítica (INCTBio), Institute of Chemistry, University of Campinas (UNICAMP), 13083-970, Campinas, SP, Brazil

*Corresponding author: sussulini@unicamp.br

Sample preparation

Ayahuasca samples (N=126) were collected from ceremonies held in different countries (Estonia, Finland, Greece, USA, Brazil, and Italy) of different group's specifications (Santo Daime, Shamanic, Neoshamanic, and União do Vegetal). The samples were stored, after collection, in 1 mL tubes in a biofreezer at -80 °C until analysis. The ayahuasca samples were thawed, conditioned at room temperature (around 25°C), and then centrifuged for 10 min at 10,000 rpm at 25 °C. The supernatants were then diluted in a 1:1 (v/v) methanol solution (40 µL sample + 360 µL methanol solution) and filtered in a 0.22 µm microporous polyvinylidene fluoride membrane.