

Background & Aims

Two spiritual retreat centers in the Walloon Region were suspected of massive use of illegal substances. Samples were seized and submitted to the laboratory for identification.

Several thin dark brown liquids



Sometimes labeled as "patina vegetal"

Powders identified as "Rapé"



Capsules



Vegetal samples in raw form (leaves, cork)



Results & Discussion

AYAHUASCA

Misleading label

Dimethyltryptamine (DMT), 5-OH-DMT, harmine, harmaline and tetrahydroharmine

Liana *Banisteriopsis caapi*, sometimes in combination with other plants, most commonly *Psychotria viridi*



→ Psychotropic & purgative effects

NICOTINE

Preparations made of tobacco powder mixed with other plants

Insufflated in the nose during rituals

→ Purifying, energizing & therapeutic properties



PSYCHOTROPIC SUBSTANCES

5-OH-DMT: as in Ayahuasca

Ibogaïne: in the African rainforest shrub *Tabernanthe Iboga*

Mescaline: mainly in the *Peyotl* cactus



UNPREPARED VEGETAL SAMPLES

1: White sage: calmative

2: Palo Santo: incense ("Sacred wood")
Clear negative energy

3: Senna leaves and pods: laxative

4: Boldo: hepatoprotector, cholagogue, choleric



Methods

Raw plant samples: macro- and microscopic analysis
 Powders and liquids: dilution before chromatographic analysis

UHPLC-TOF-MS (Sciex)

Eksigent LC 100 XL + TripleTOF[®] 4600
 Column: Kinetex 2.6 C18, 100 Å, 50 x 3.00 mm (Phenomenex)
 Mobile Phase A: 10 mM NH₄ formate
 Mobile Phase B: ACN/MeOH (50/50)



Conclusion

Samples were successfully identified and represent a range of available plants intended for "purification of soul and body". Perhaps more widespread in other parts of the world such as South America, these botanicals are not traditional in Europe, representing a small challenge. This challenge was met with the invaluable help of plant specialist colleagues.