

## Supplementary Information

### Development and Validation of a UPLC-ESI-MS Method for Quantitation of the Anti-Alzheimer Drug Galantamine and other Amaryllidaceae Alkaloids in Plants

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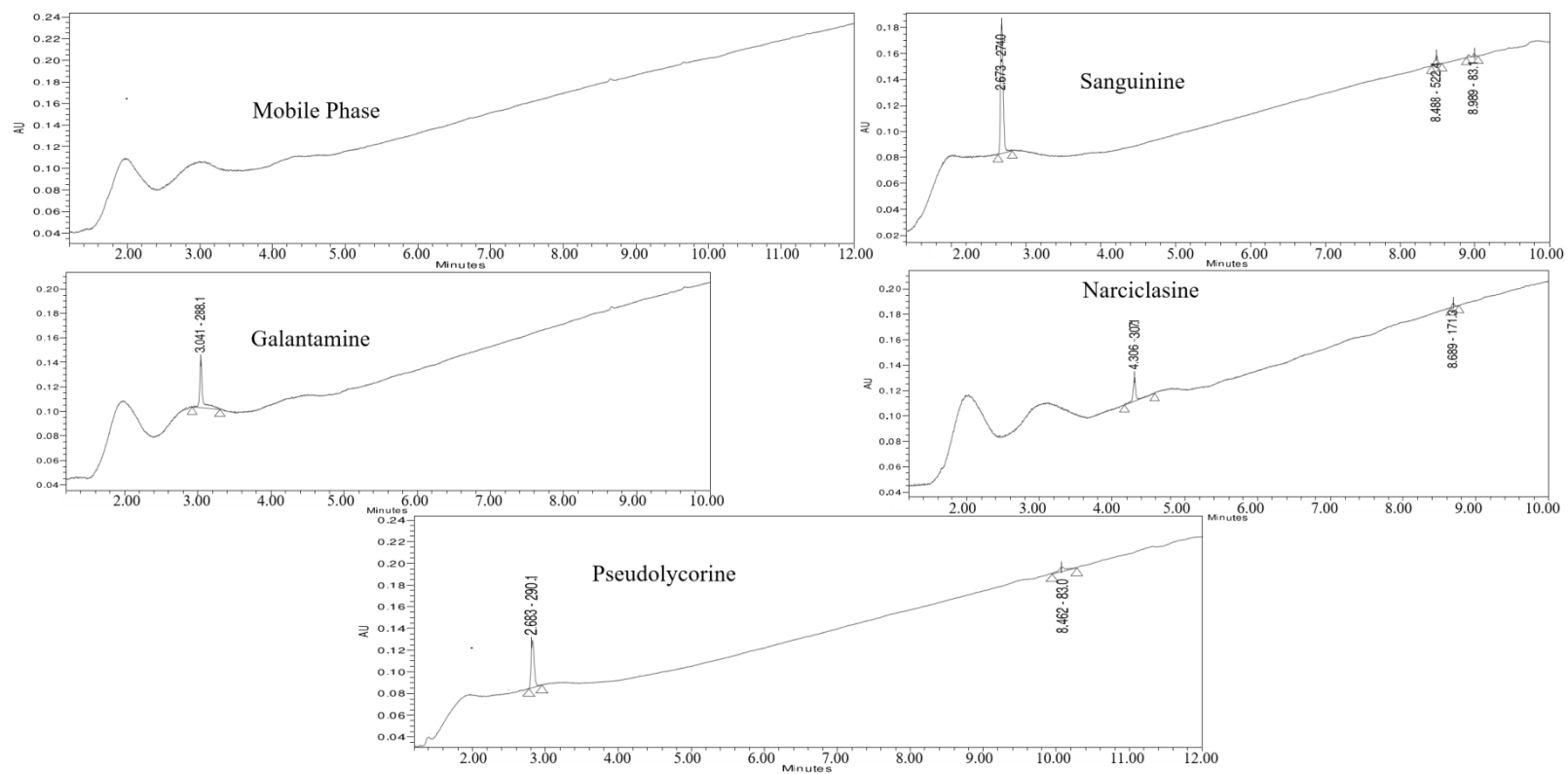
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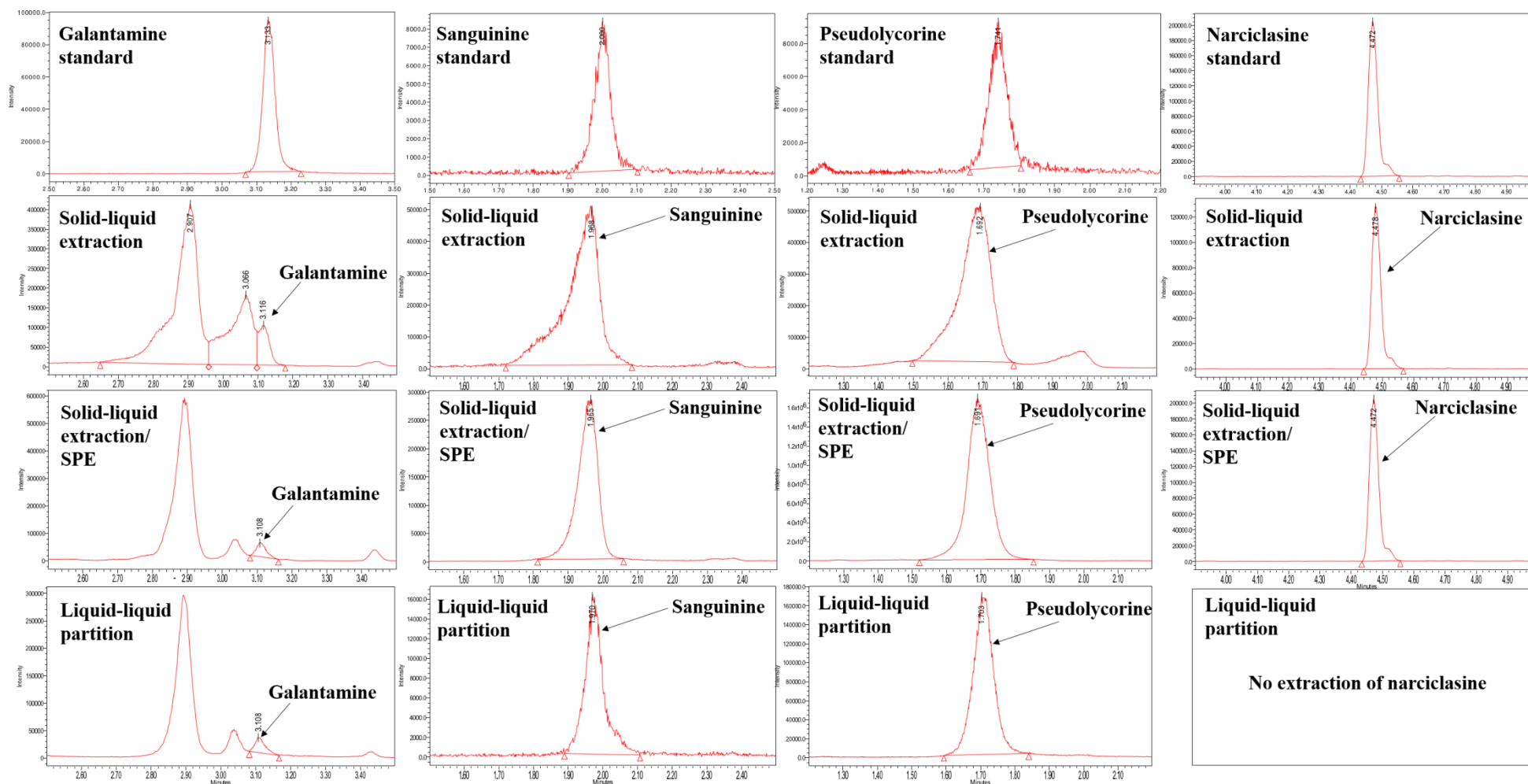
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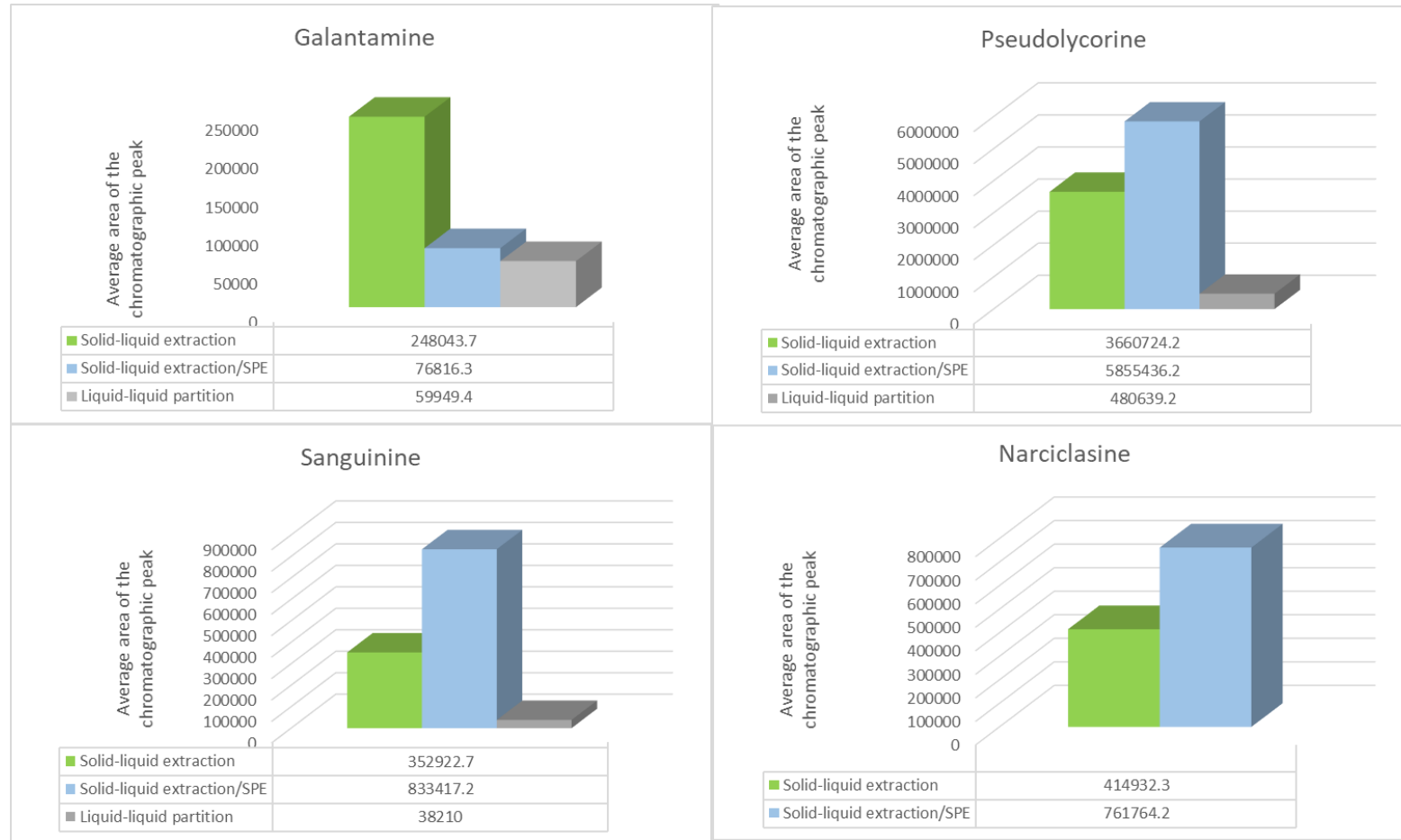
\*e-mail: kirley.canuto@embrapa.br



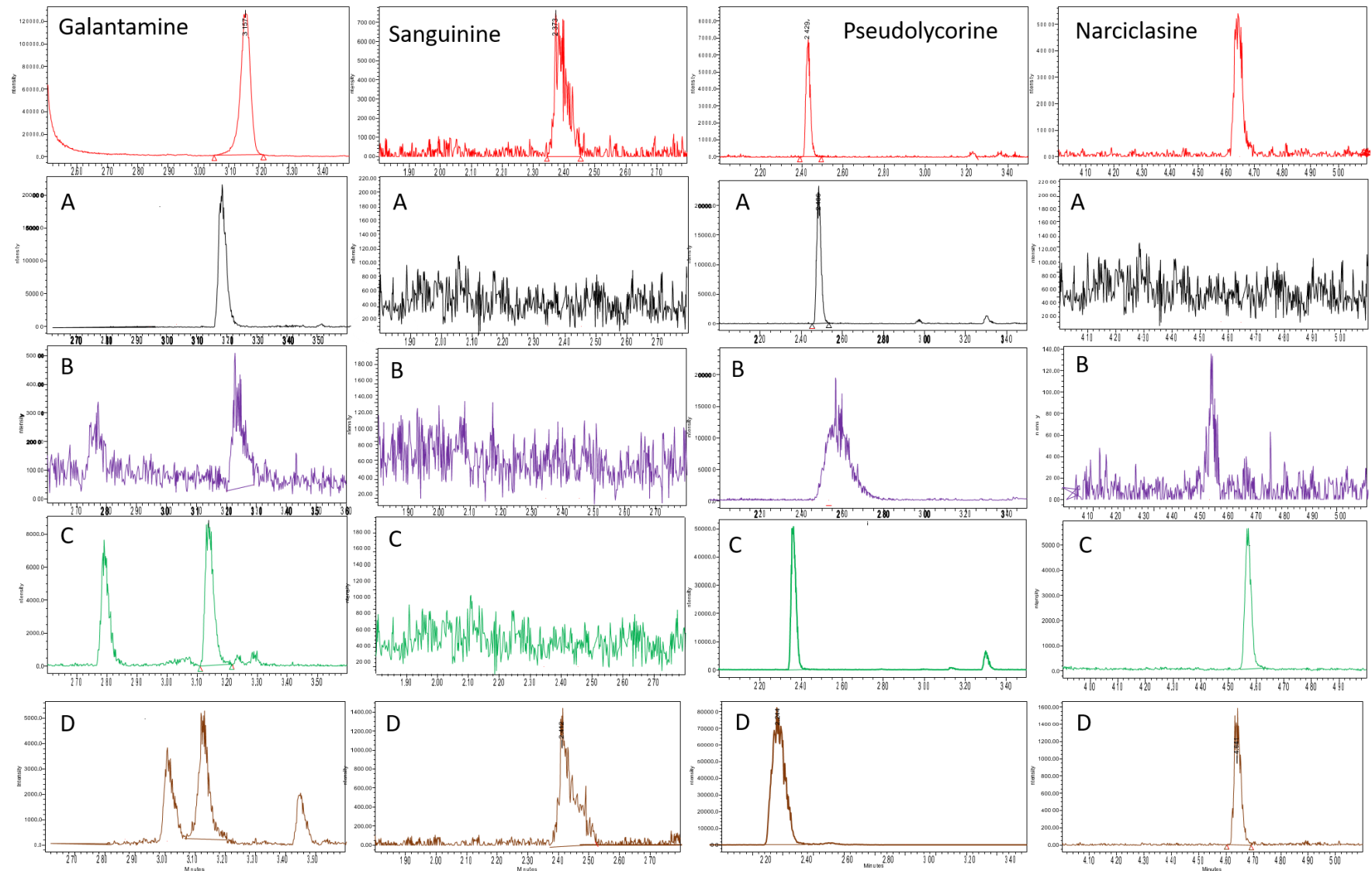
**Figure S1.** PDA chromatograms (210-600 nm) for galantamine ( $\lambda_{\max} = 288$  nm), sanguinine ( $\lambda_{\max} = 288$  nm), narciclasine ( $\lambda_{\max} = 252$  nm) and pseudolycorine ( $\lambda_{\max} = 282$  nm).



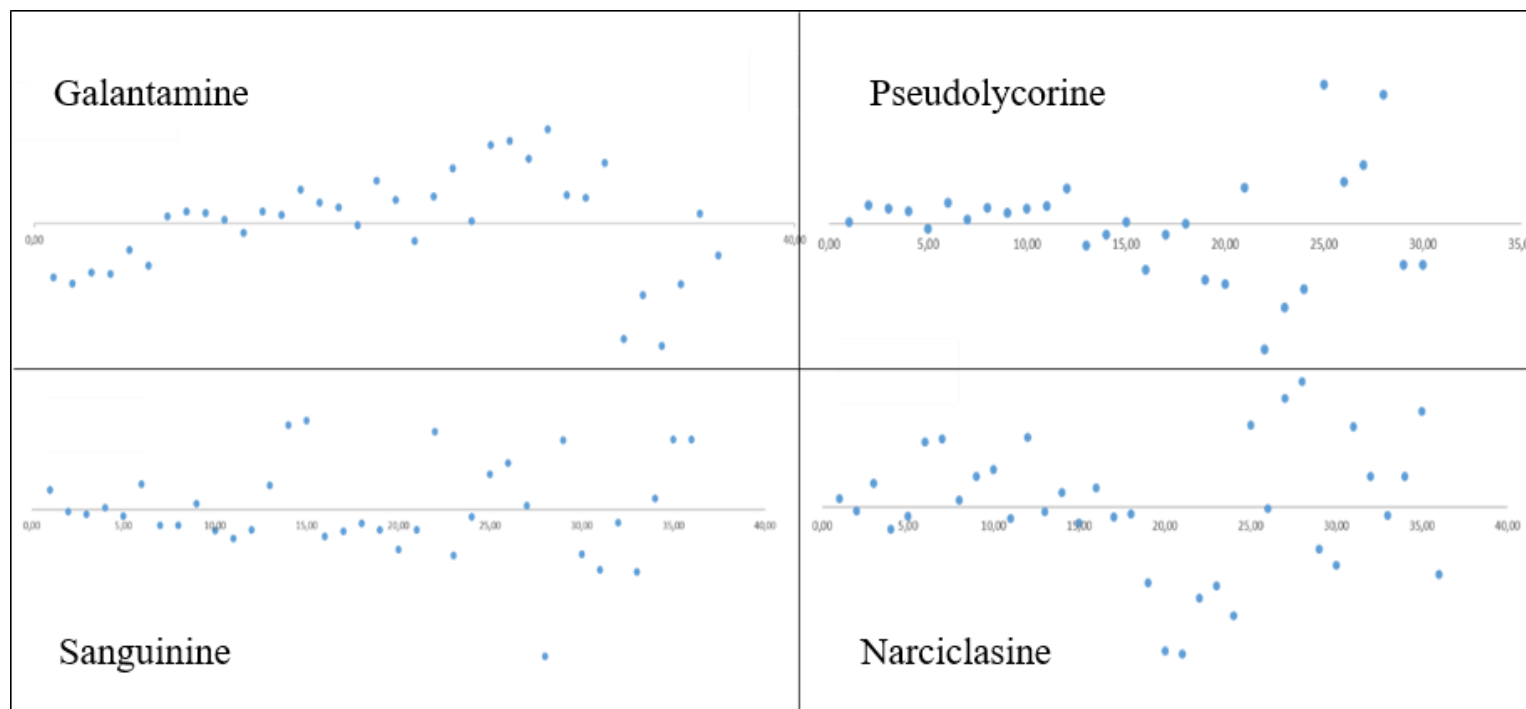
**Figure S2.** UPLC-QDA-SIM chromatograms of alkaloids extracted from *Hippeastrum elegans* bulbs using three extraction methods.



**Figure S3.** Peak areas of alkaloids extracted from *Hippeastrum elegans* bulbs using three extraction methods.



**Figure S4.** UPLC-MS-SIM chromatograms of the alkaloid standards and samples exhibited according to their respective quantitative ions ( $m/z$  and time interval): (A) *Habranthus cf. irwinianus* Ravenna; (B) *Hymenocallis littoralis* (Jacq.) Salisb.; (C) *Griffinia nocturna* Ravenna and (D) *Hippeastrum elegans*.



**Figure S5.** Residual plots of the calibration curves of the alkaloid standards: galantamine, pseudolycorine, sanguinine and narciclasine.