

## Supplementary Material

# Effects of standardized medicinal plant extracts on drug metabolism mediated by CYP3A4 and CYP2D6 enzymes

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## 1. RESULTS

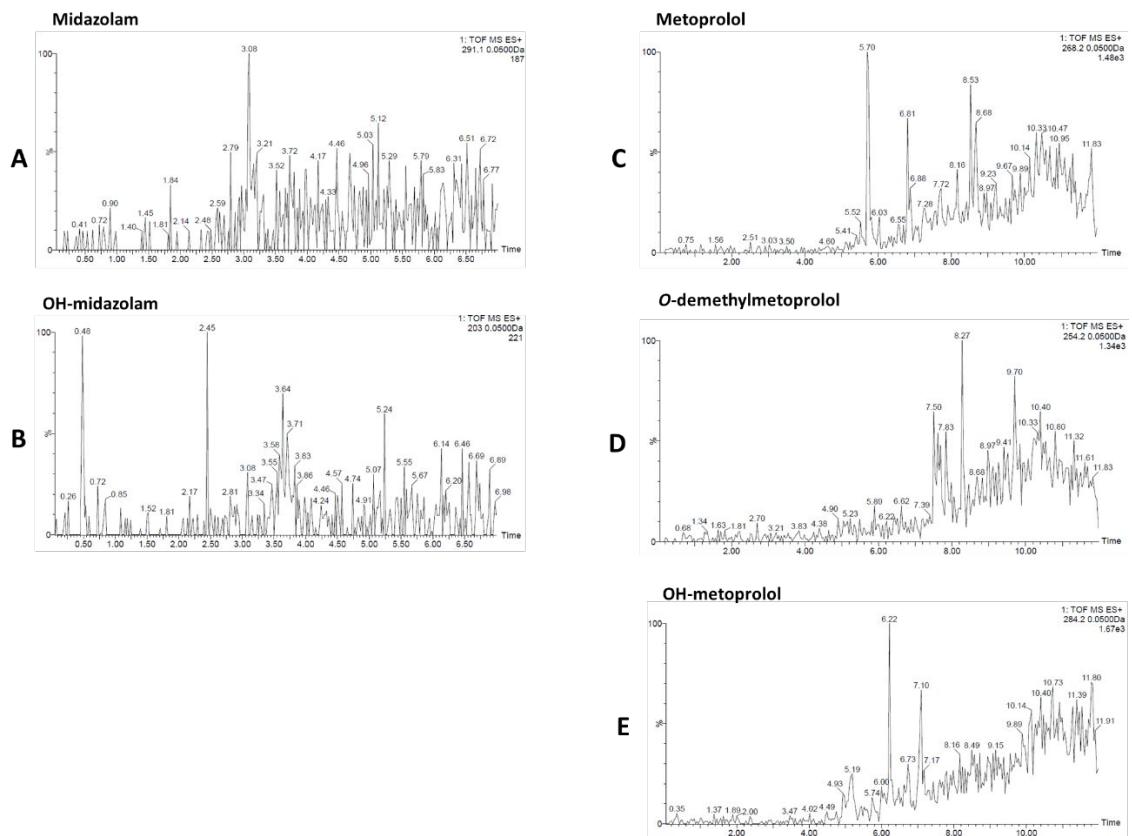
### 1.1 Characterization of drug substrates and their metabolites

**Table S1: Parameters obtained for the validation of the analytical methods.**

	Concentration ( $\mu\text{M}$ )	Precision (RSD %)*	Accuracy (%)*
<b>OH-midazolam</b>	1	11.5	84.1-117.1
	2.5	12.4	82.5-116.6
	5	9.0	88.8-116.3
<b>OH-metoprolol</b>	6.25	9.5	91.7-110.3
	50	1.2	99.0-101.4
	80	12.4	85.7-107.5
<b>O-demethylmetoprolol</b>	6.25	11.2	88.5-110.8
	50	10.8	89.2-110.7
	80	13.2	88.5-114.5

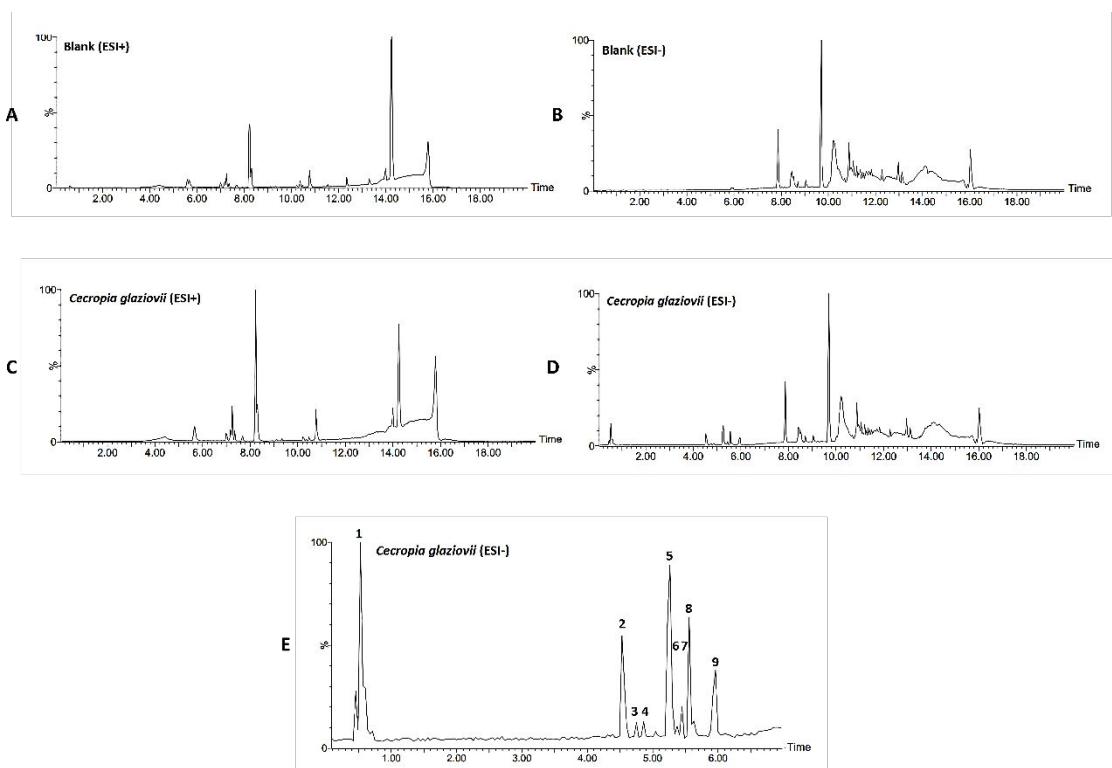
\*The data correspond to three independent analyses.

RSD: Relative Standard Deviation

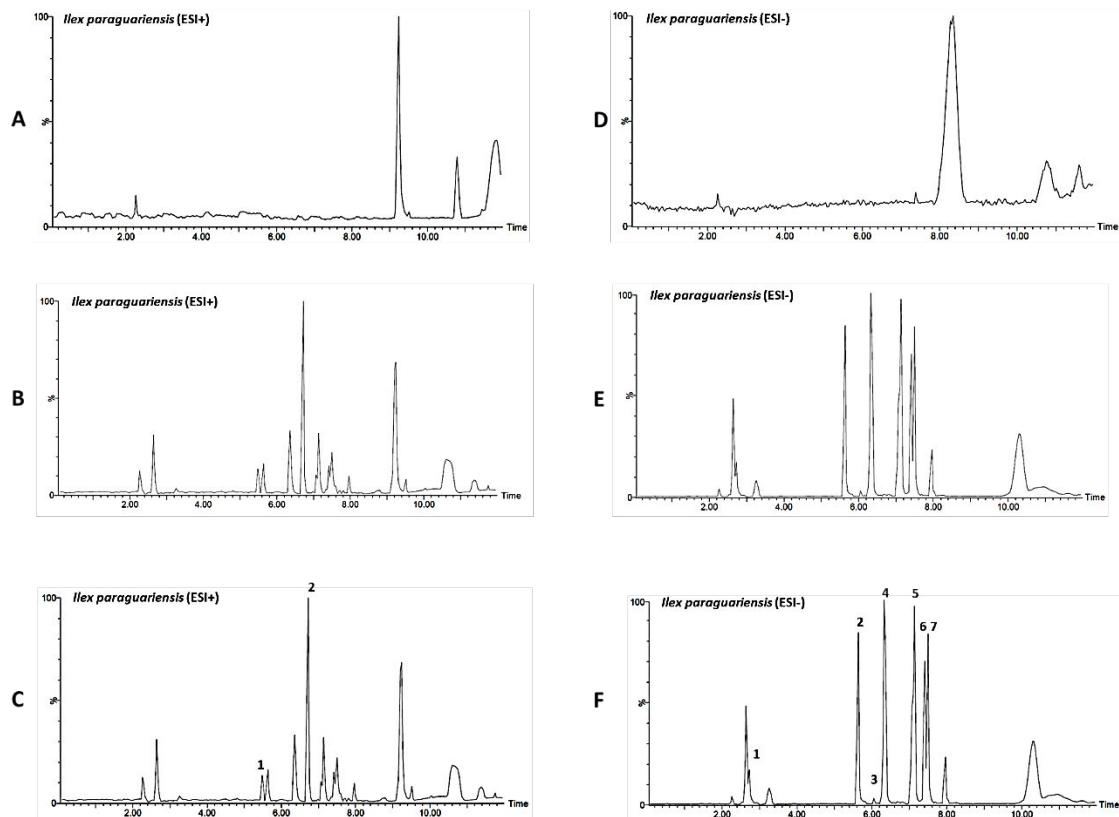


**Figure S1:** Specificity of the chromatographic method - Blank of the reaction mix. **A.** midazolam, **B.** OH-midazolam, **C.** metoprolol, **D.** *O*-demethylmetoprolol, **E.** OH-metoprolol.

**1.2 Identification of the major phytoconstituents of *Cecropia glaziovii* and *Ilex paraguariensis* by UPLC-MS/MS**



**Figure S2:** **A.** ESI+ and **B.** ESI-: solvent chromatograms; **C.** ESI+ and **D.** ESI-: complete chromatograms of *Cecropia glaziovii*; **E.** ESI-: chromatogram with numerical indications of peaks corresponding to the major compounds identified in *C. glaziovii* extract; all obtained by UHPLC-MS/MS. The identification of each numbered peak can be seen in Table 3 of the manuscript.



**Figure S3:** **A.** ESI+ and **D.** ESI -: solvent chromatograms; **B.** ESI+ and **E.** ESI-: complete chromatograms of *Ilex paraguariensis*; **C.** ESI+ and **F.** ESI-: chromatograms with numerical indications of peaks corresponding to the major compounds identified in the *I. paraguariensis* extract; all obtained by UHPLC-MS/MS. The identification of each numbered peak can be seen in Table 4 of the manuscript.