

Supplementary Materials: Microbial Glycosylation of Daidzein, Genistein and Biochanin A. Two New Glucosides of Biochanin A

Sandra Sordon, Jarosław Popłoński, Tomasz Tronina and Ewa Huszcza

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1. NMR spectra of compounds obtained by biotransformation with the use of *Absidia coerulea* AM 93 strain indicating the mixture of products: 7-O- β -D-glucopyranosyl-5-hydroxy-4'-methoxyisoflavone (sissotrin) and 5-O- β -D-glucopyranosyl-7-hydroxy-4'-methoxyisoflavone (isosissotrin).
Figures S1–S2: ^1H -NMR (600 MHz, CD_3OD) spectra.
Figure S3: COSY (150 MHz, CD_3OD) spectra.
Figure S4: ^{13}C -NMR (150 MHz, CD_3OD) spectra.
Figures S5–S7: HSQC (150 MHz, CD_3OD) spectra.
Figures S8–S11: HMBC (150 MHz, CD_3OD) spectra.
Figure S12: ^{13}C -NMR (150 MHz, CD_3OD) superimposed spectra of sissotrin and mixture of sissotrin and isosissotrin.
2. Negative-ion HR-ESIMS spectra of mixture of 7-O- β -D-glucopyranosyl-5-hydroxy-4'-methoxyisoflavone (sissotrin) and 5-O- β -D-glucopyranosyl-7-hydroxy-4'-methoxyisoflavone (isosissotrin) obtained by biotransformation by *Absidia coerulea* AM 93.
Figure S13: HR-ESIMS spectrum.

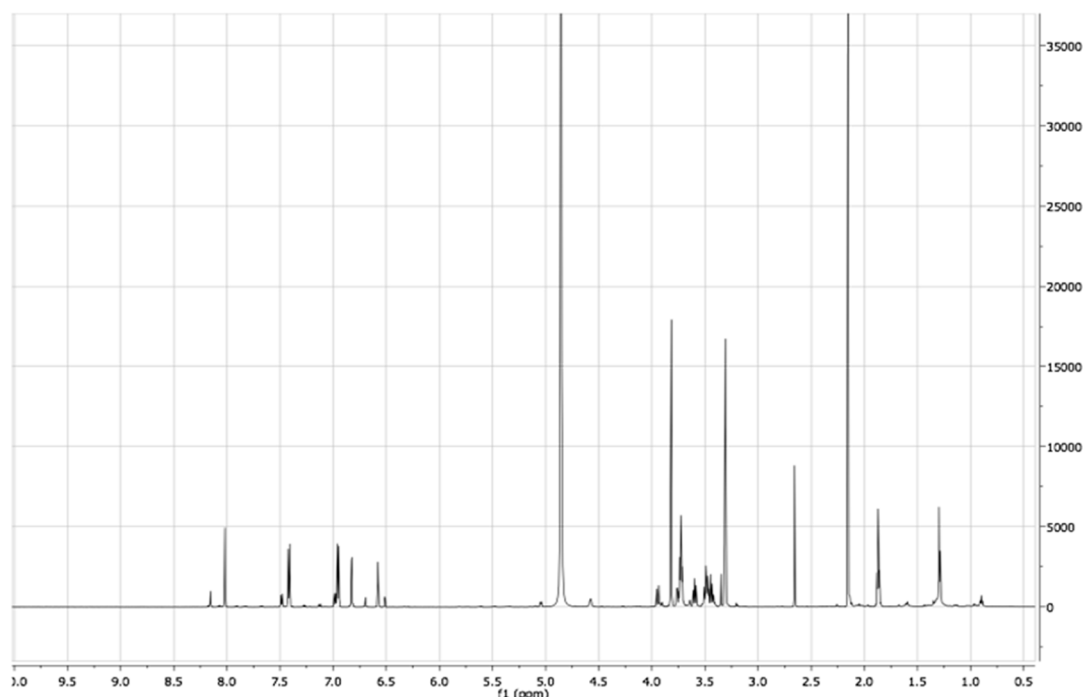


Figure S1. ^1H -NMR (600 MHz, CD_3OD) spectra of mixture of sissotrin and isosissotrin obtained by biotransformation by *Absidia coerulea* AM 93.

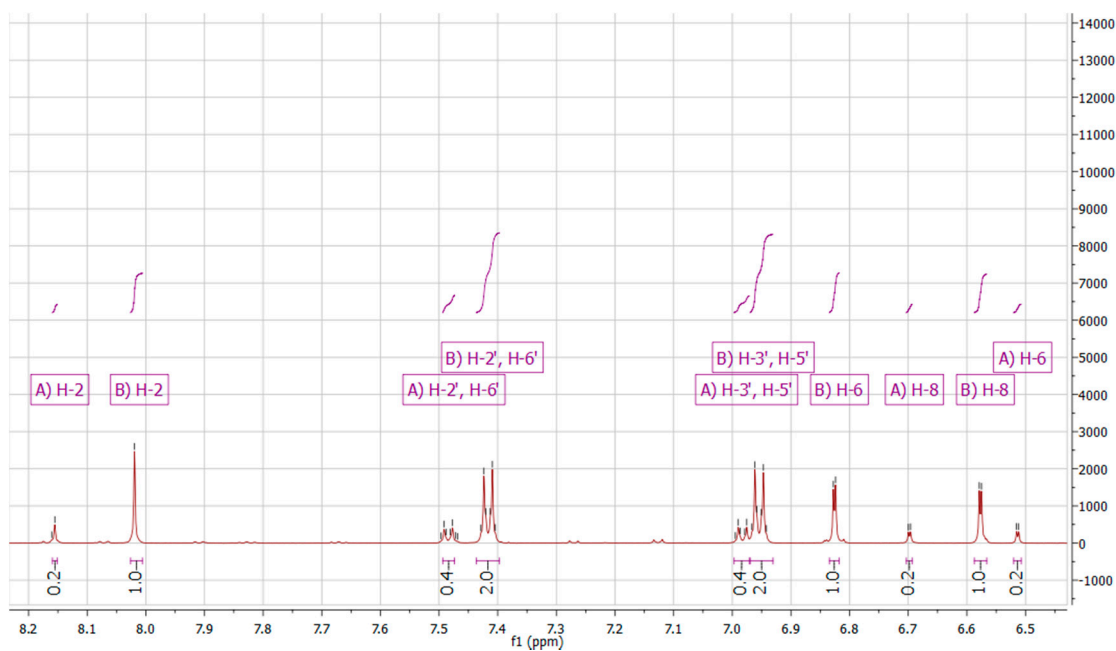


Figure S2. ^1H -NMR (600 MHz, CD_3OD) spectra of the aromatic region of sissotrin (A) and isossotrin (B) mixture obtained by biotransformation by *Absidia coerulea* AM 93.

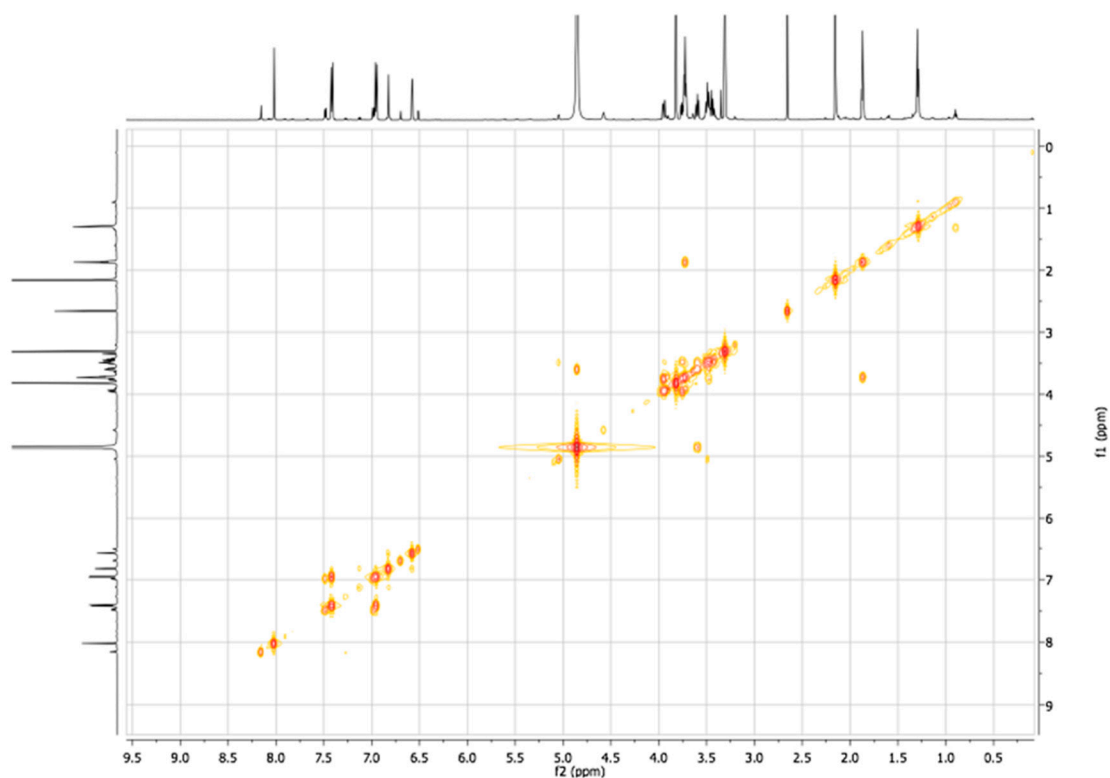


Figure S3. COSY (150 MHz, CD_3OD) spectra of mixture of sissotrin and isossotrin obtained by biotransformation by *Absidia coerulea* AM 93.

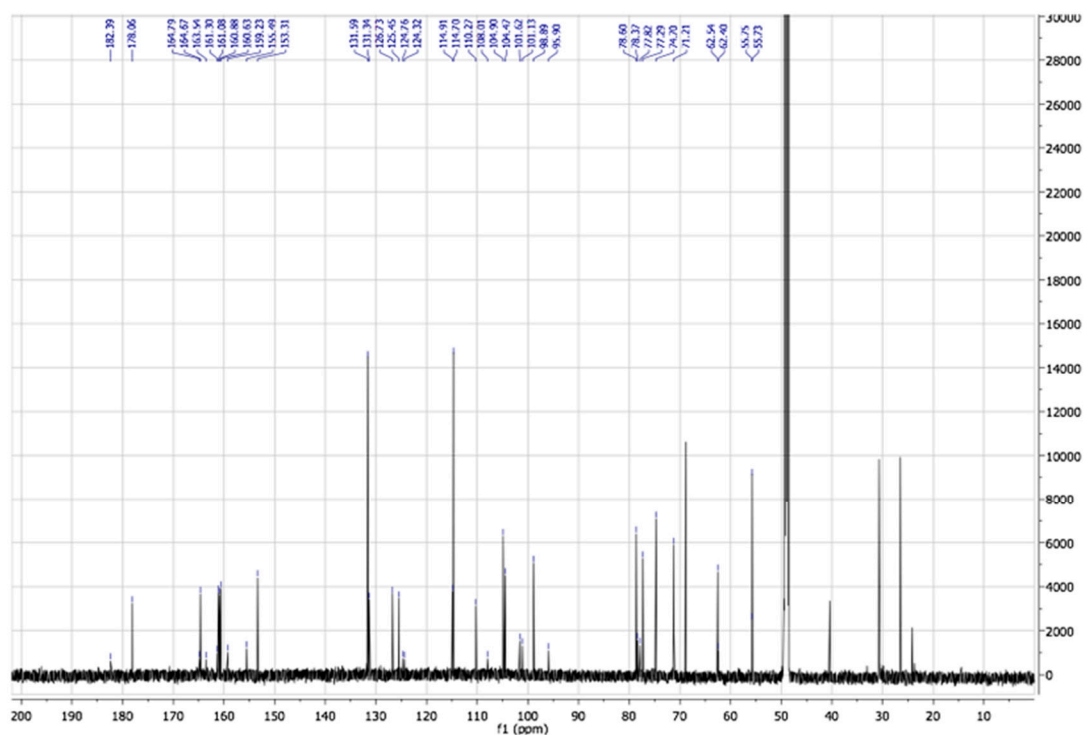


Figure S4. ^{13}C -NMR (150 MHz, CD_3OD) spectra of mixture of sissotrin and isosissotrin obtained by biotransformation by *Absidia coerulea* AM 93.

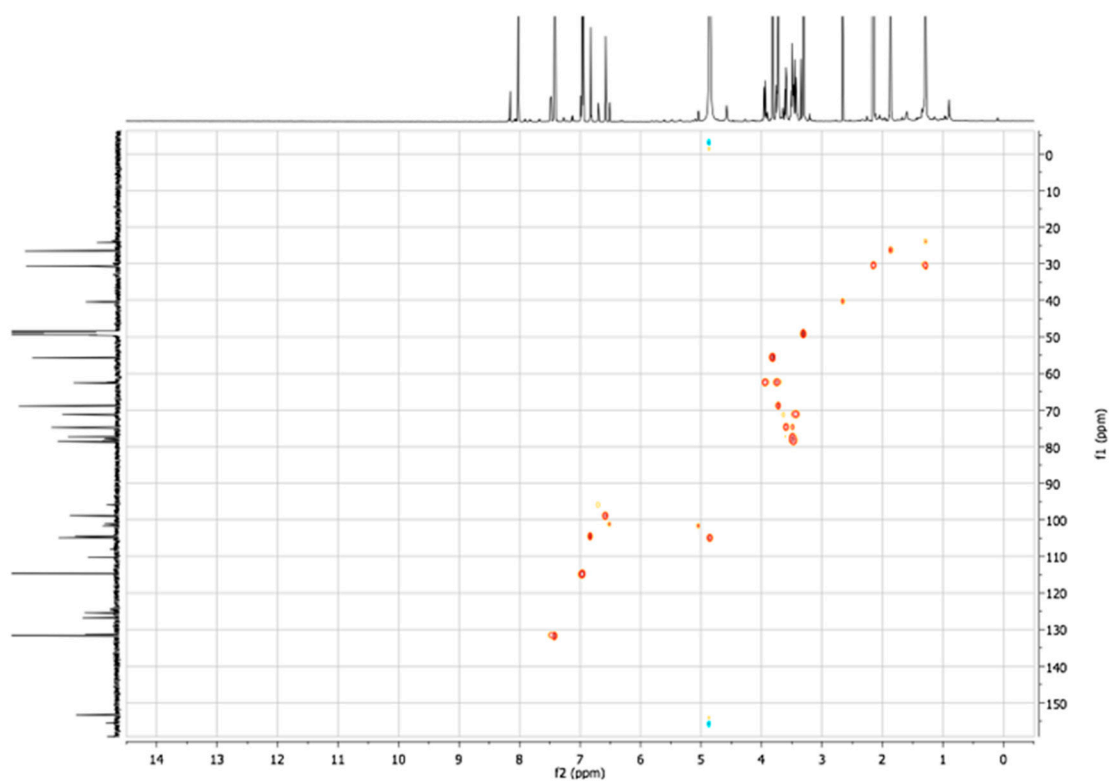


Figure S5. HSQC (150 MHz, CD_3OD) spectra of mixture of sissotrin and isosissotrin obtained by biotransformation by *Absidia coerulea* AM 93.

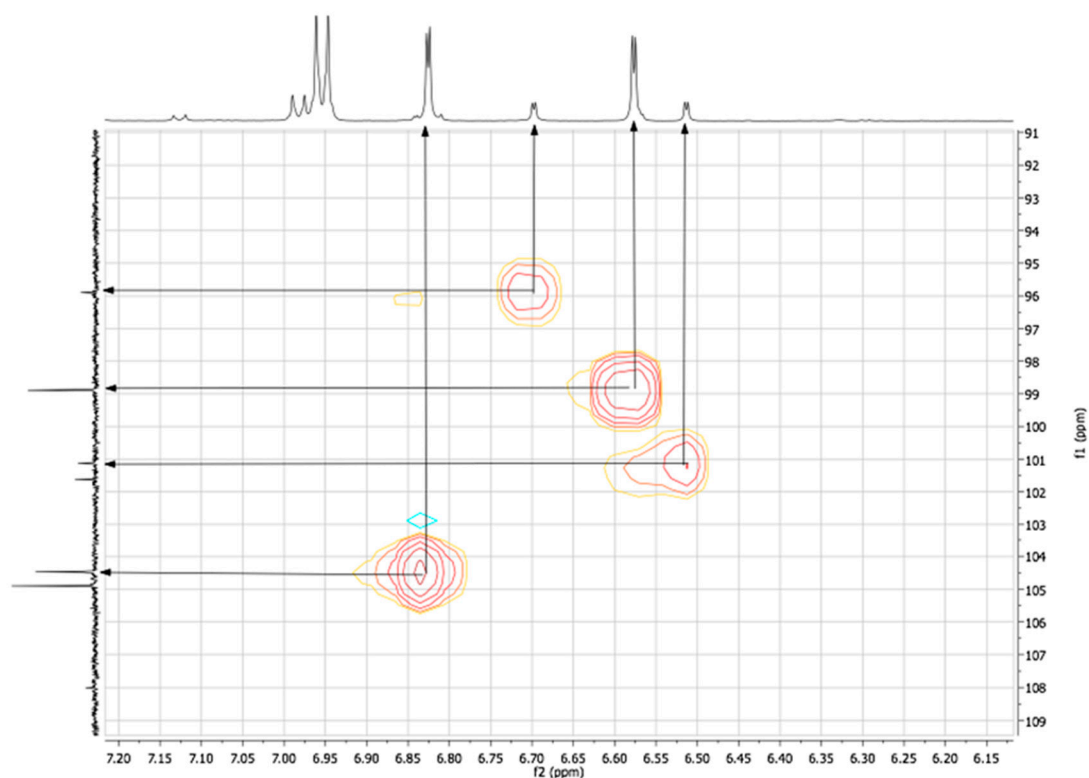


Figure S6. HSQC (150 MHz, CD₃OD) spectra of mixture of sissotrin and isosissotrin (correlations of aromatic A-ring protons: H-6 and H-8) obtained by biotransformation by *Absidia coerulea* AM 93.

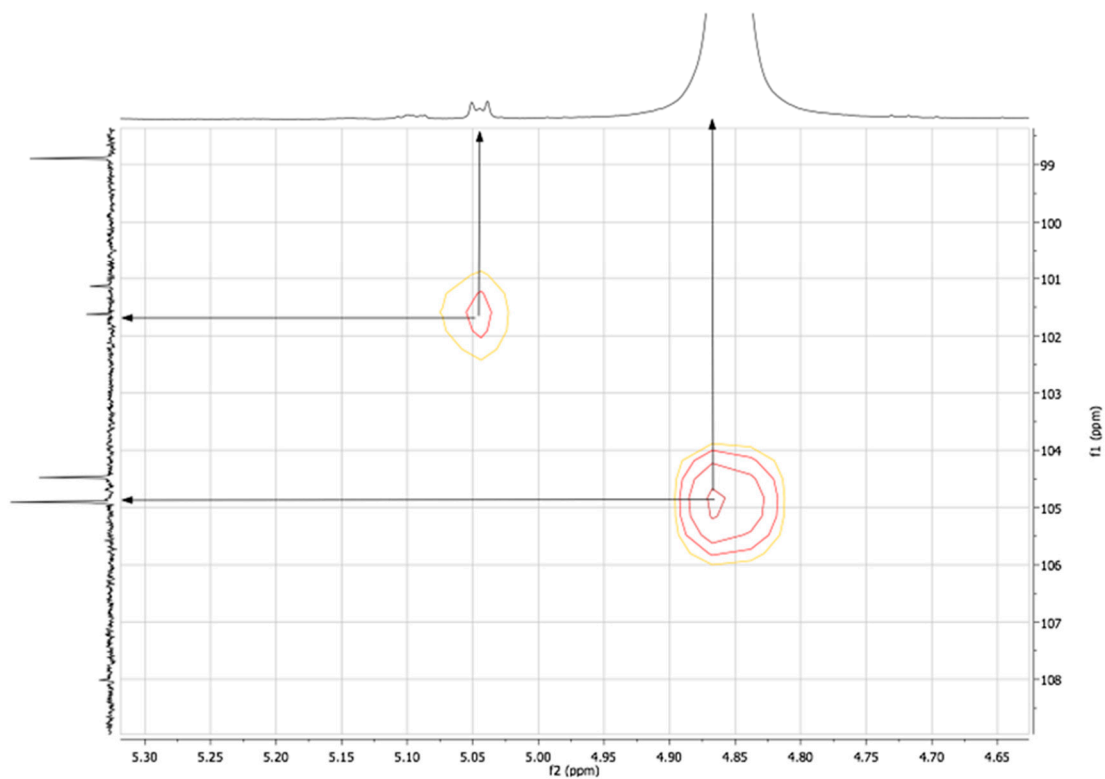


Figure S7. HSQC (150 MHz, CD₃OD) spectra of mixture of sissotrin and isosissotrin (correlations of H-1' protons) obtained by biotransformation by *Absidia coerulea* AM 93.

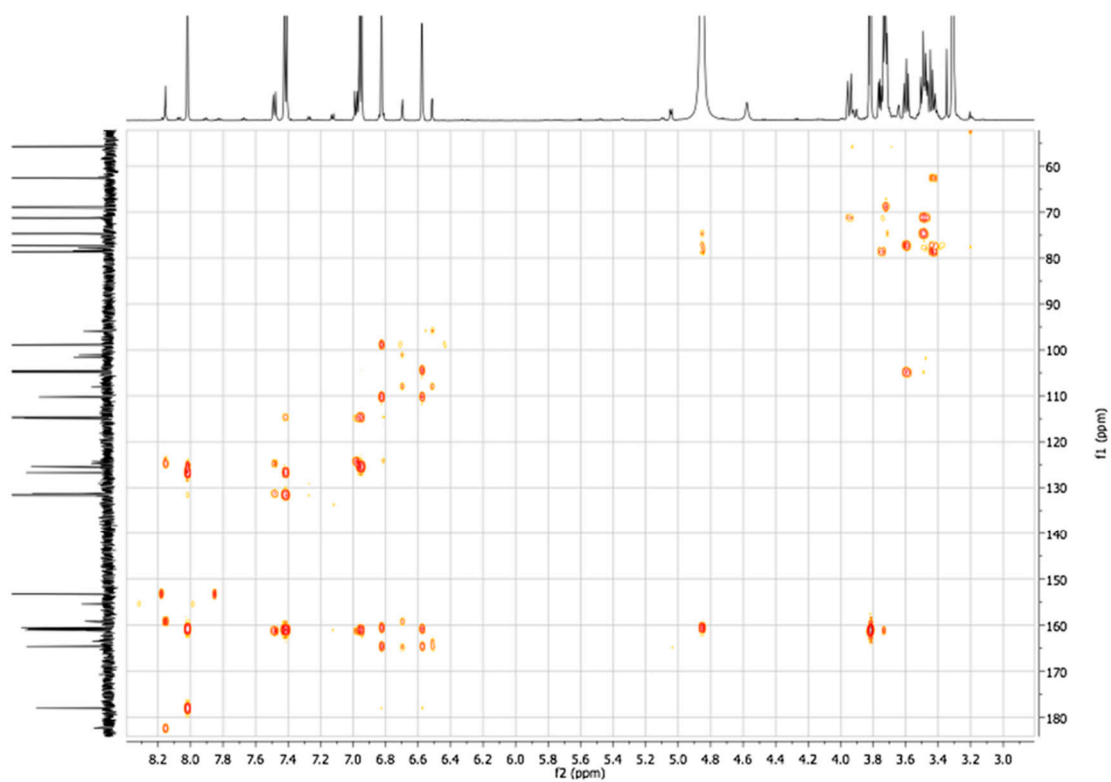


Figure S8. HMBC (150 MHz, CD₃OD) spectra of mixture of sissotrin and isosissotrin obtained by biotransformation by *Absidia coerulea* AM 93.

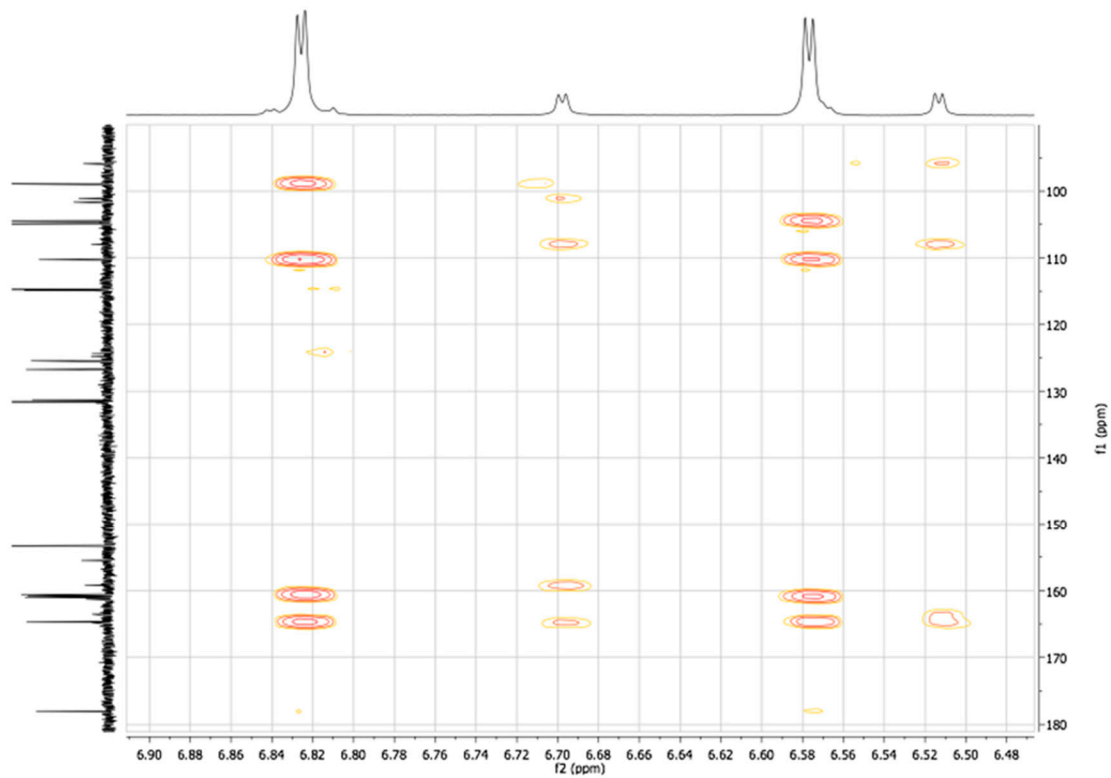


Figure S9. HMBC (150 MHz, CD₃OD) spectra of mixture of sissotrin and isosissotrin (correlations of aromatic A-ring protons-H-6 and H-8) obtained by biotransformation by *Absidia coerulea* AM 93.

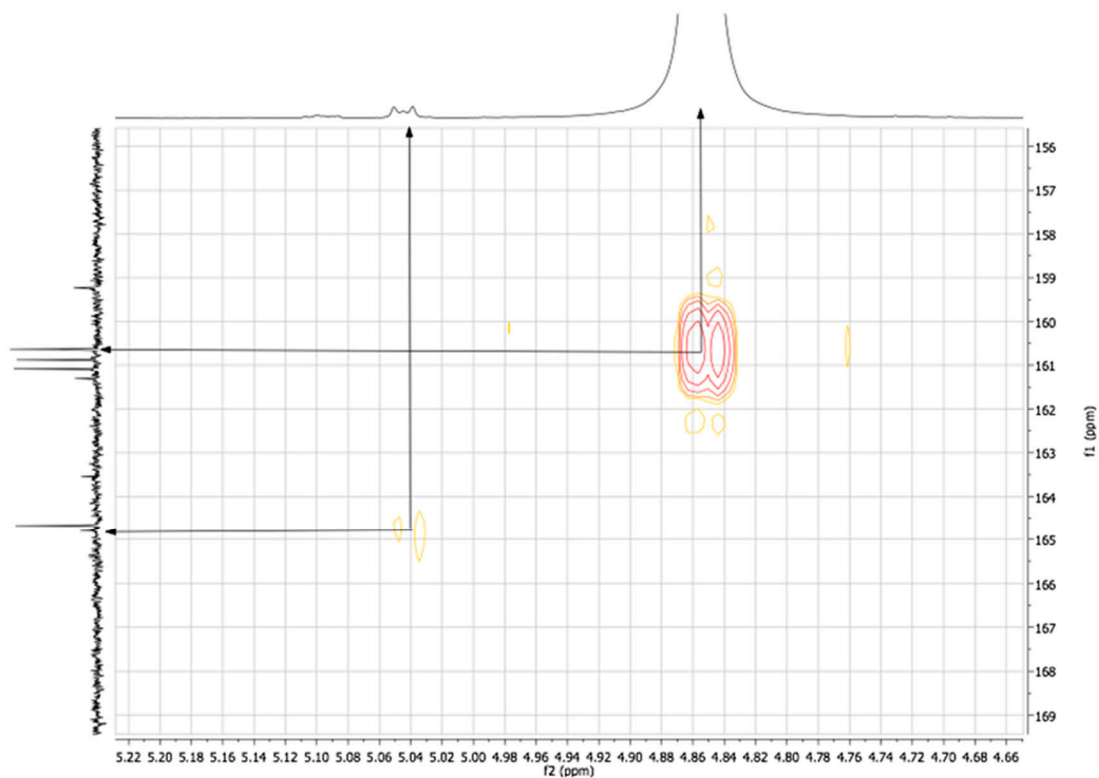


Figure S10. HMBC (150 MHz, CD₃OD) spectra of mixture of sissotrin and isosissotrin (correlations of H-1'' protons) obtained by biotransformation by *Absidia coerulea* AM 93.

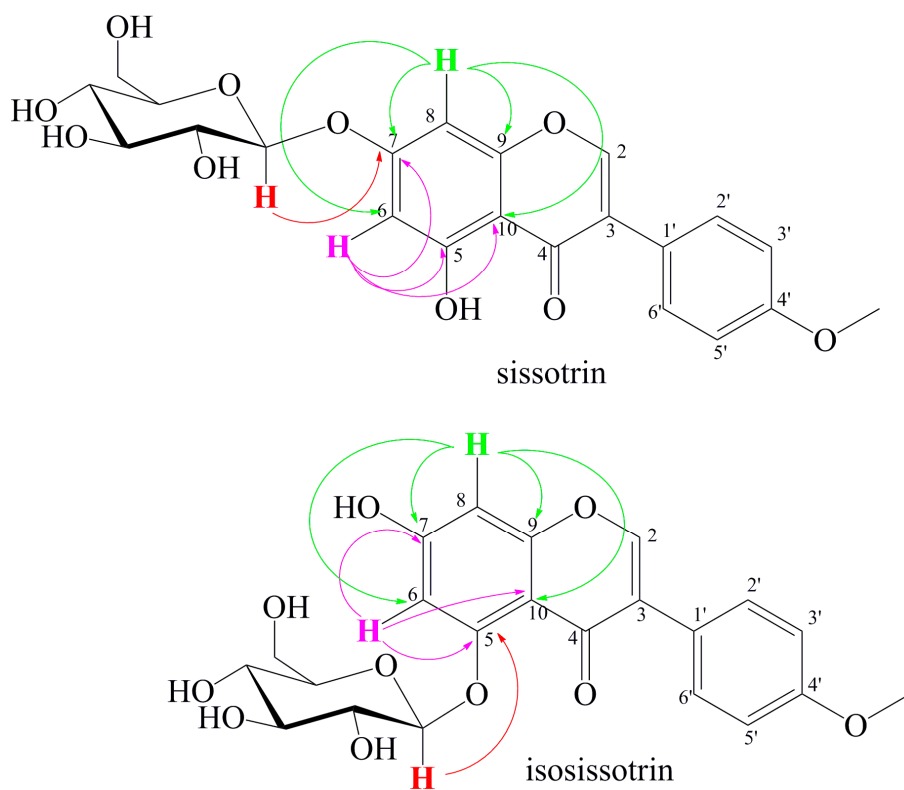


Figure S11. HMBC correlations for sissotrin and isosissotrin obtained by biotransformation by *Absidia coerulea* AM 93.

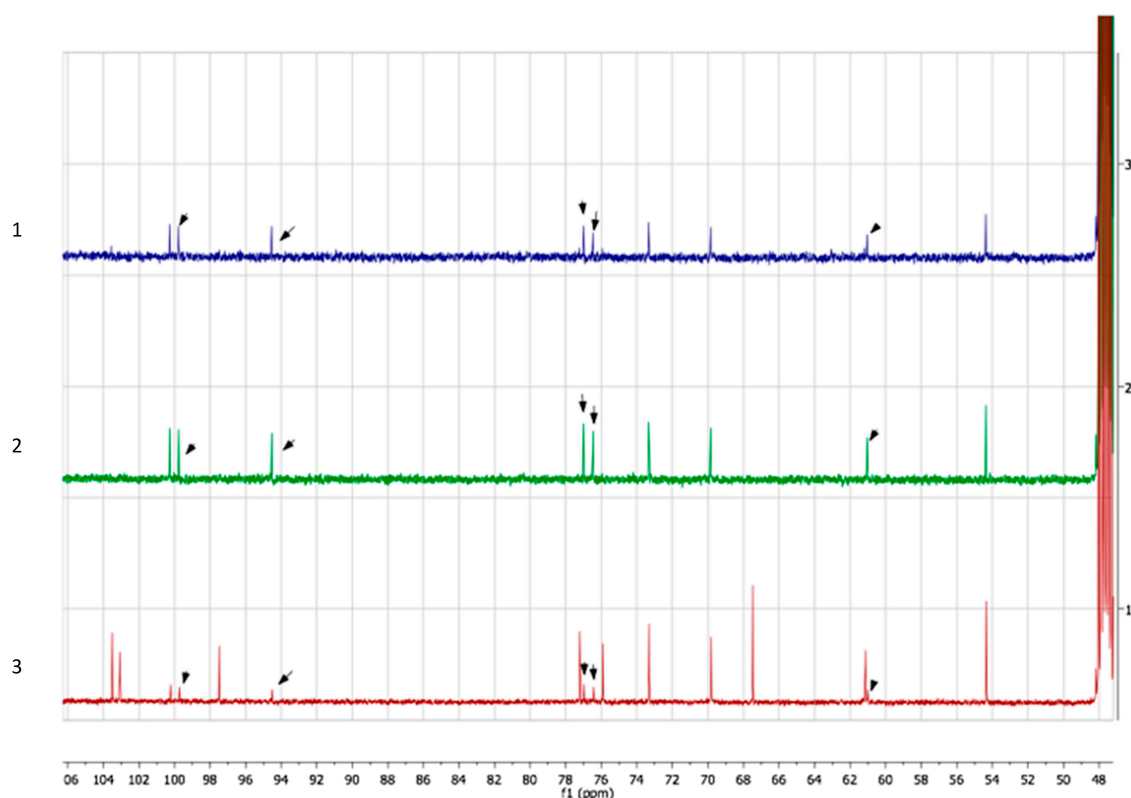


Figure S12. ^{13}C -NMR (150 MHz, CD_3OD) spectra of sissotrin (obtained by biotransformation by *Absidia glauca* AM 177 (1) and by *Rhizopus nigricans* UPF 701 * (2)) and mixture of sissotrin and isosissotrin obtained by biotransformation by *Absidia coerulea* AM 93 (3). Arrows indicated selected carbon signals of sissotrin. On the NMR spectra of products obtained by biotransformation by *Absidia coerulea* AM 93 those carbon signals are doubled. * Result not included in this paper.

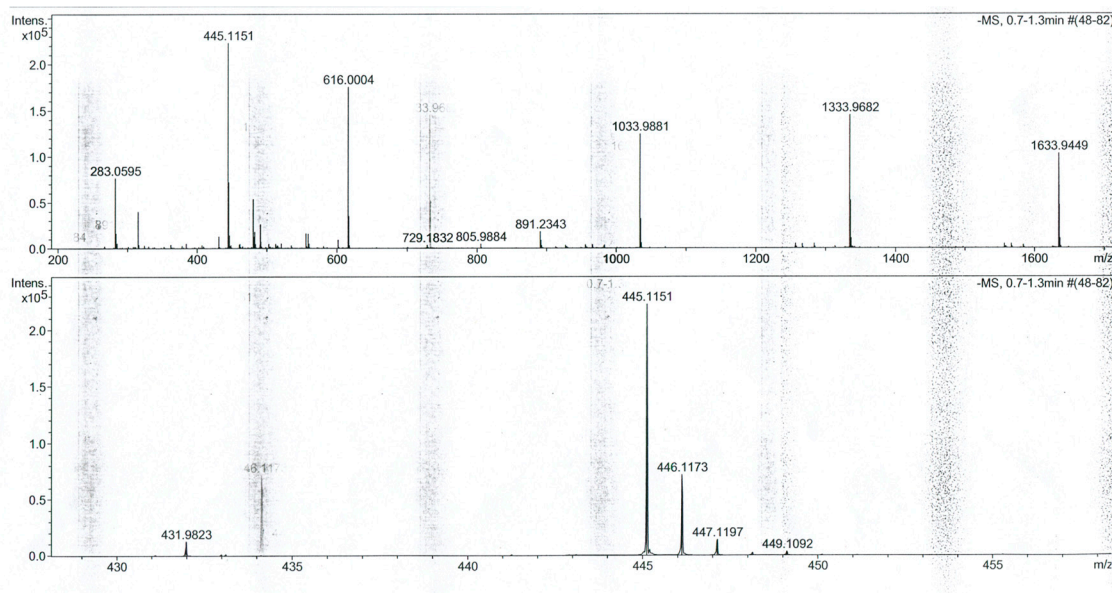


Figure S13. Negative-ion HR-ESIMS spectra of mixture of sissotrin and isosissotrin obtained by biotransformation by *Absidia coerulea* AM 93.