

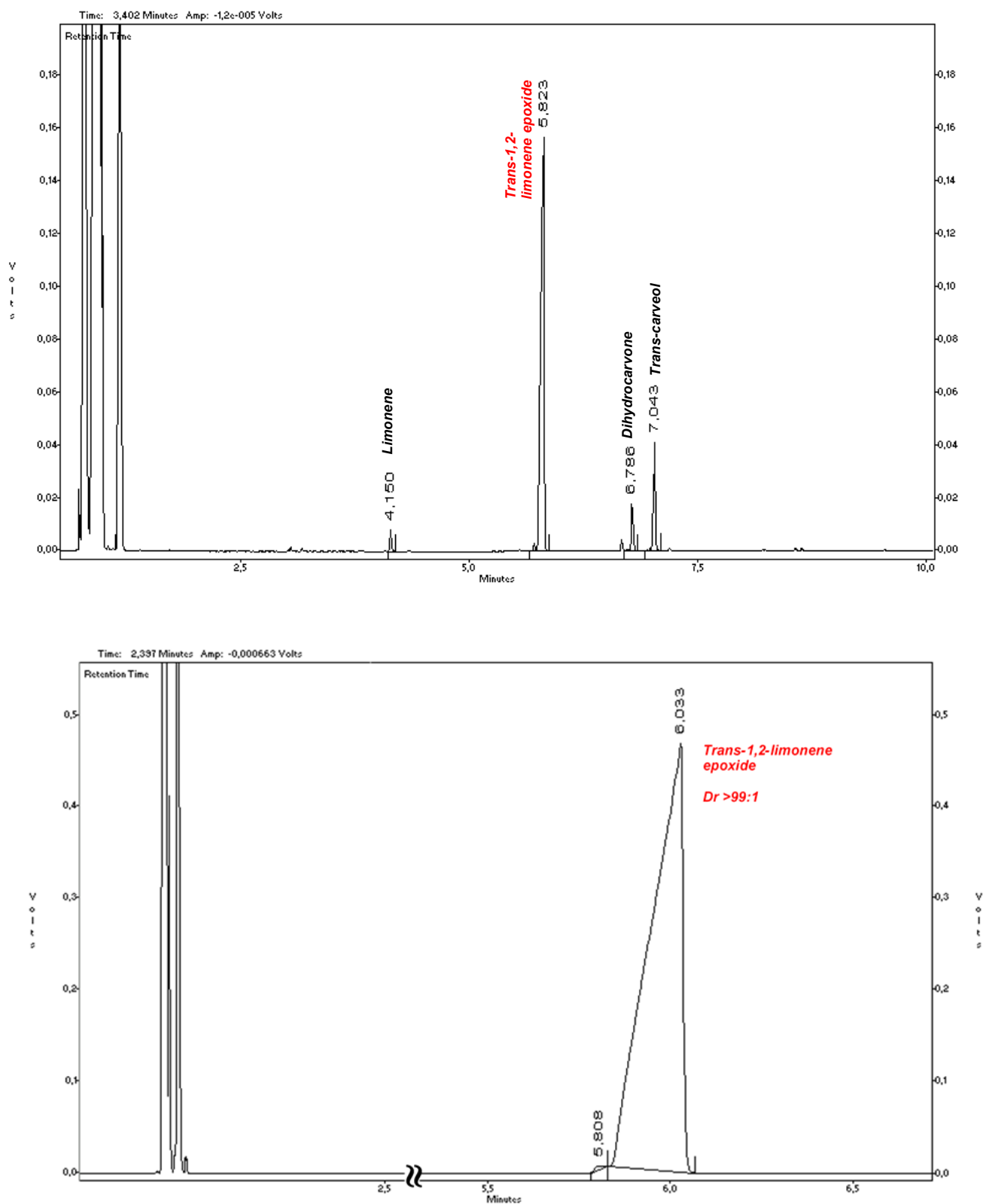
# **Stereospecific epoxidation of limonene catalyzed by peroxygenase from oat seeds**

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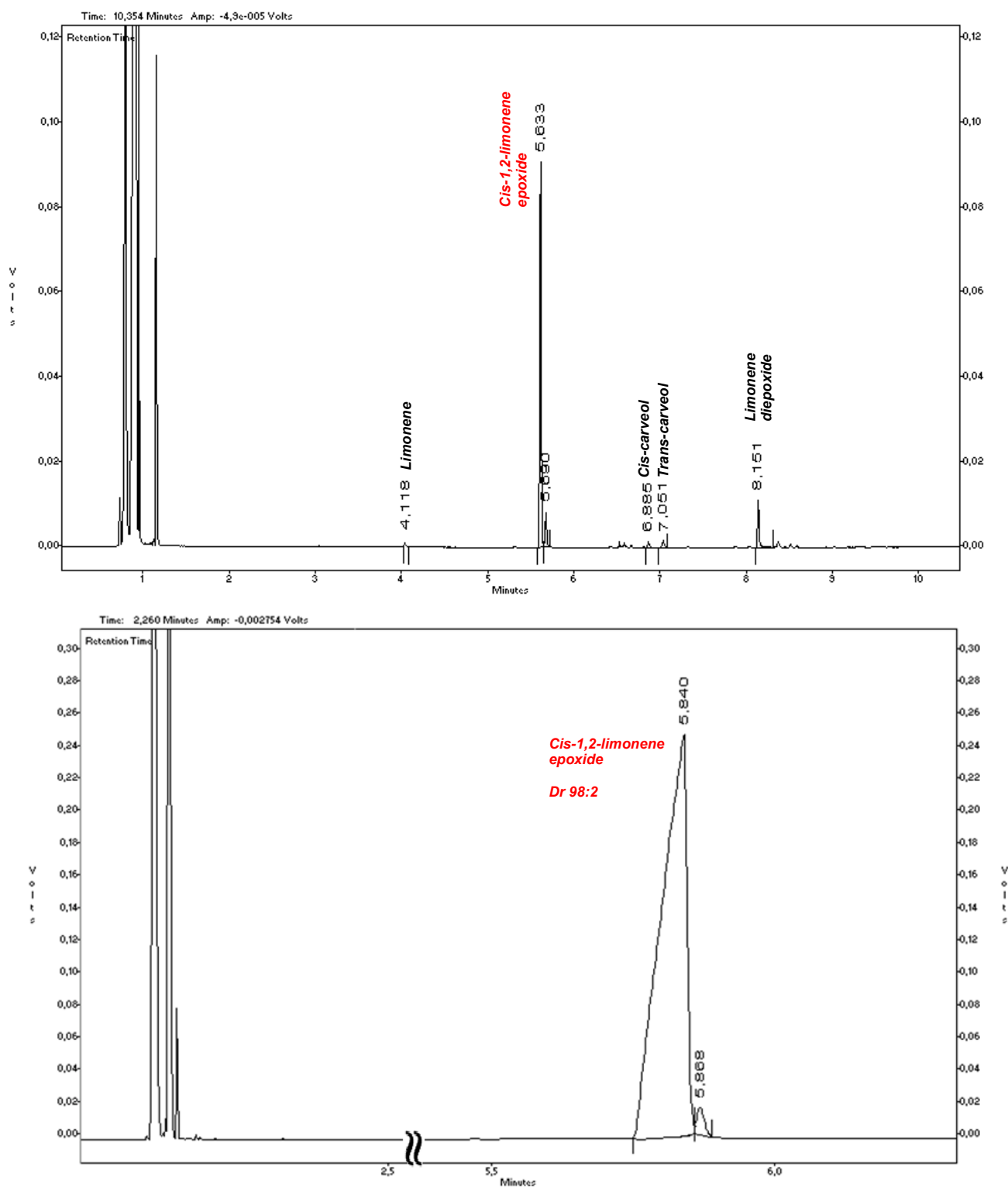
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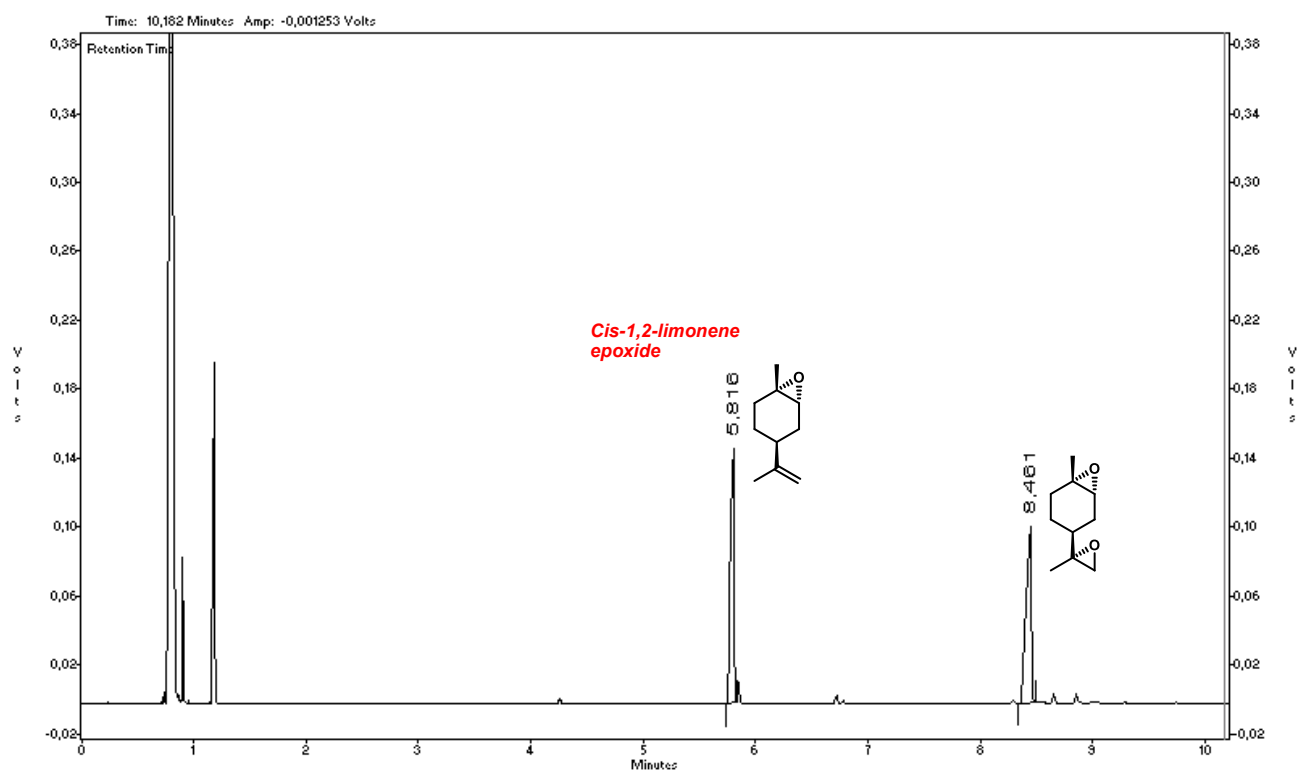
GC profile of the biocatalyzed epoxidation of ( <i>R</i> )-limonene	Page	SI-1
GC profile of the biocatalyzed epoxidation of ( <i>S</i> )-limonene		SI-2
GC profile of the biocatalyzed epoxidation of ( <i>S</i> )-limonene-1,2-epoxide		SI-3
NMR spectra of ( <i>S</i> )-limonene-diepoxide obtained by biocatalyzed epoxidation		SI-4



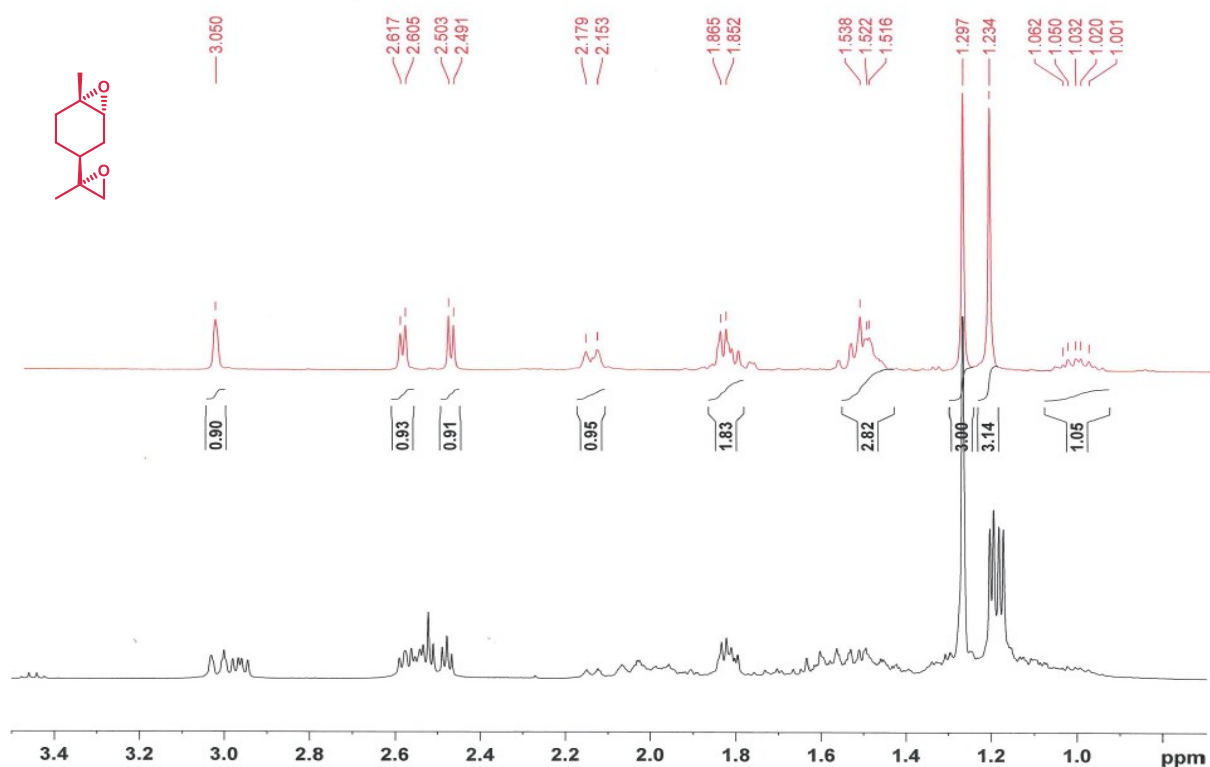
**Figure S1.** GC profile of the biocatalyzed epoxidation of (R)-limonene (top) and diastereoisomeric purity of the isolated (R)-limonene-1,2-epoxide (bottom)



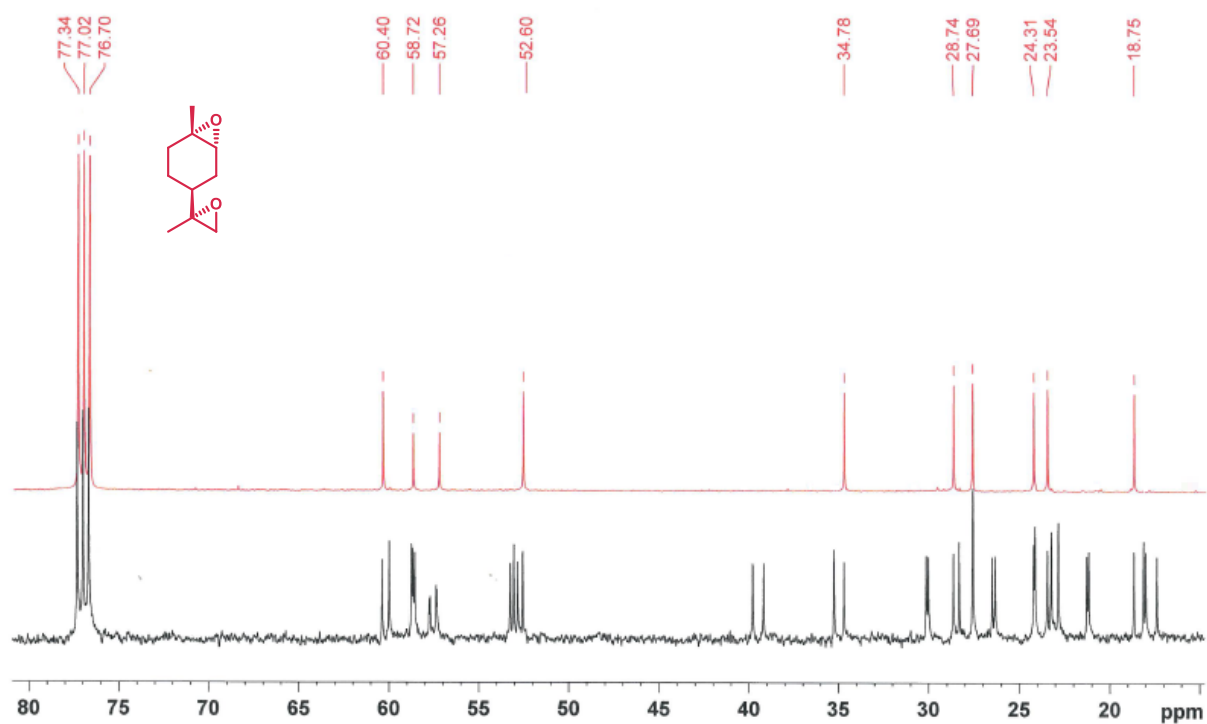
**Figure S2.** GC profile of the biocatalyzed epoxidation of (*S*)-limonene (top) and diastereoisomeric purity of the isolated (*S*)-limonene-1,2-epoxide (bottom)



**Figure S3.** GC profile of the biocatalyzed epoxidation of *cis*-1,2-limonene epoxide from (*S*)-limonene to diepoxide at reaction time 2.5 h (about 50% conversion)



**Figure S4.** <sup>1</sup>H-NMR spectra of the mixture of diepoxides obtained by chemical epoxidation of (*S*)-limonene (black trace) and diepoxide obtained by biocatalyzed epoxidation of (*S*)-limonene (red trace)



**Figure S5.** <sup>13</sup>C-NMR spectra of the mixture of diepoxides obtained by chemical epoxidation of (*S*)-limonene (black trace) and diepoxide obtained by biocatalyzed epoxidation of (*S*)-limonene (red trace)