

Tracing the migration and transformation of metabolites in xylem during wood growth by mass spectrometry imaging

Wenya Hu^{†, a}, Honggang Nie^{†, b}, Yinghao Wang^a, Na Li^b, Shuangshuang Di^b, Qiong Pan^a, Jikun Liu^a, Yehua Han^{*, a}

- a. State Key Laboratory of Heavy Oil Processing, China University of Petroleum-Beijing 102249, P. R. China.
- b. Beijing National Laboratory for Molecular Sciences, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China

Supporting Information

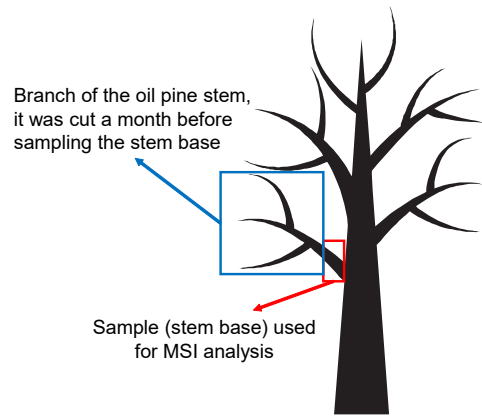


Fig. S1 Schematic diagram of sampling plan

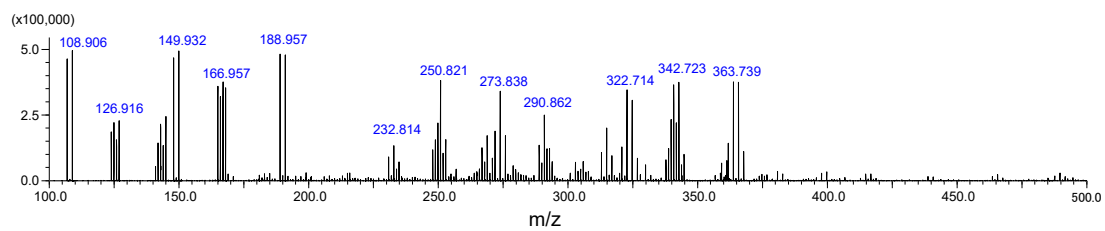


Fig. S2 Mass spectrum of AgNO₃ solution in methanol

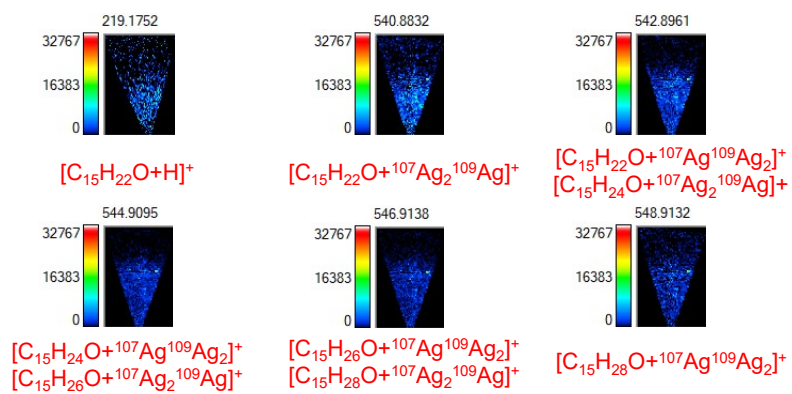


Fig. S3 Representative analyte ions images and their assigned molecular formulae using AgNO_3 as the matrix

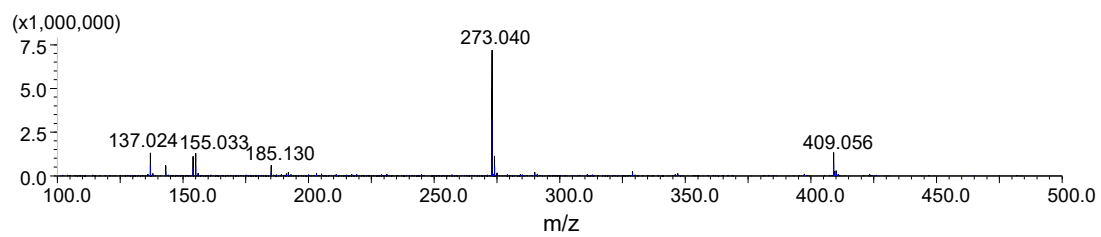


Fig. S4 MALDI MS spectrum of DHB blank in m/z 100-500

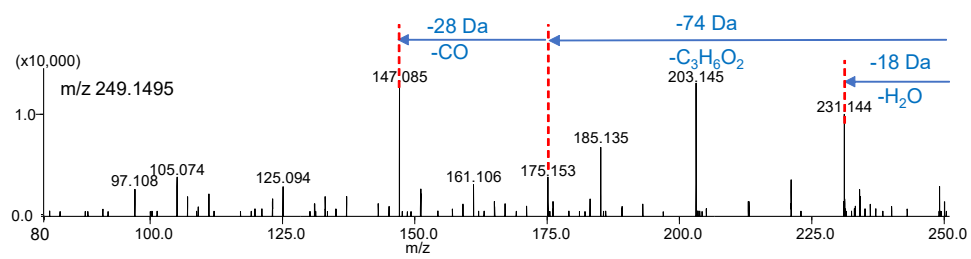


Fig. S5 MS/MS spectrum of m/z 249.1495

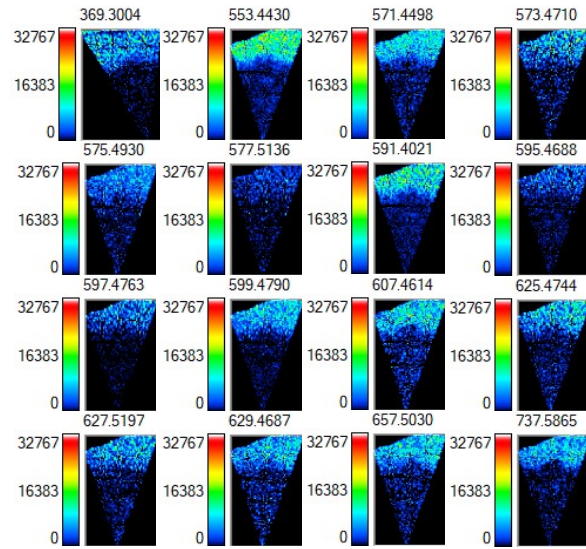


Fig. S6 Ion images of sapwood compounds in cedar

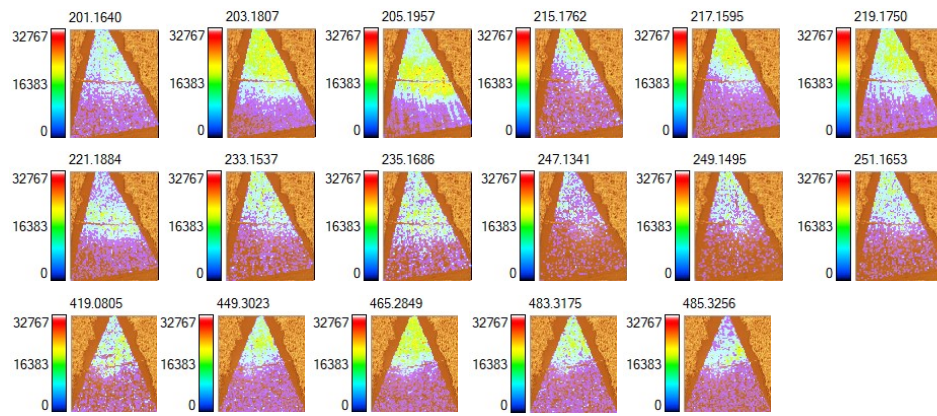


Fig. S7 Ion images of the heartwood compounds in cedar (the sample slice was taken from the same section as used in Fig. 3).

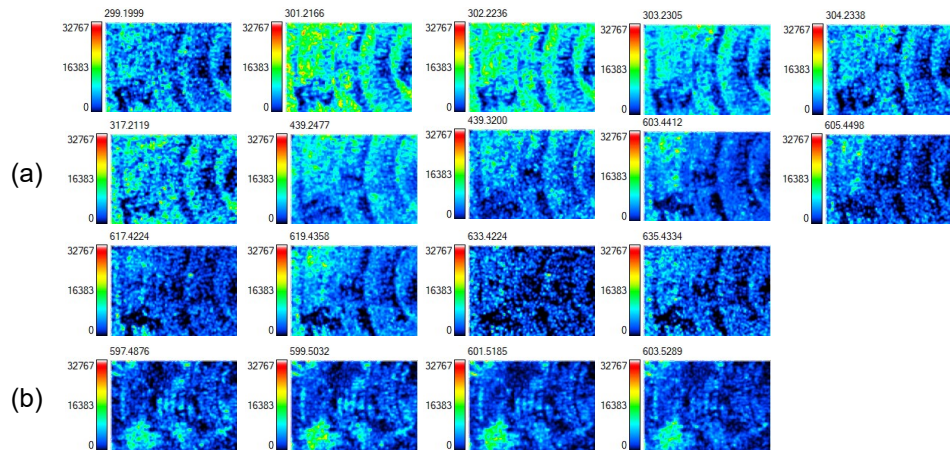


Fig. S8 Ion images of normal resin and traumatic resin in oil pine (the sample slice was taken from the same section as used in Fig. 4).