## **Electronic Supplementary Information**

## Development of an adaptable headspace sampling method for metabolic profiling of the fungal volatome

Waqar M. Ahmed, Pavlos Geranios, Iain R. White, Oluwasola Lawal<sup>1</sup>, Tamara M. Nijsen<sup>3</sup>, Michael J. Bromley<sup>1</sup>, Royston Goodacre<sup>2</sup>, Nick D. Read<sup>1</sup>, Stephen J. Fowler<sup>1, 4 #</sup>

VOC standards mix	Average retention time (min)	External standards	Average retention time (min)
Acetone	1.83 (co-elutes)	α-pinene	6.83
Isoprene	1.83	Camphene	7.25
Benzene	2.48	Longifolene	18.40
3-pentanone	2.71	α-bergamotene	19.31
1,4-dioxane	2.84	Humulene	19.77
Toluene	3.54	Valencene	20.58
Octane	4.00		
Butyl acetate	4.22		
p-xylene	5.36		
Nonane	5.95		
Benzaldehyde	7.55		
1-heptanol	7.62		
Decane	8.39		
3-carene	8.63		
Limonene	9.22		
Undecane	10.99		
Nonanal	11.21		
Tetralin	12.65		
Dodecane	13.56		
Methyl indole	15.30		
Tridecane	16.04		
Tetradecane	18.40		
Pentadecane	20.63		

**Table S1.** A List of QC compounds and external standards with retention times



**Figure S1.** Typical headspace chamber material chromatgrams showing glass chamber (black), plastic chamber (red), sorbent only (green), and the internal standard highlighted (grey arrow)



**Figure S2.** Examples of TIC chromatograms of A. fumigatus CEA10, showing a) actively sampled headspace, b) passively sampled headspace from 12 to 24 h, and c) media-only control. Each peak is annotated with the retention time and integrated peak area. Monoterpenes and sesquiterpene compound peaks are annotated with blue lines.

