

Supplemental Table S3: Up- and downregulation of VOCs produced by *S. plymuthica* HRO-C48 due to the incubation with volatiles of *R. solani* AG2, *L. maculans* MB 158 and *V. longisporum* ELV 43.

RT [min]	Predicted compound	Regulation following interaction with			Predicted function
		<i>L. maculans</i> MB 158 ¹⁾	<i>R. solani</i> AG2 ¹⁾	<i>V. longisporum</i> ELV 43 ¹⁾	
	Substances with predicted antimicrobial properties				
1,48	Methanethiol	↓10%	↓4%	↑322%	Antimicrobial (especially against <i>C. albicans</i>) (Lewis, 1985; Chen et al., 2016)
1,52	Ethanol	↓44%	↓40%	↑166%*	Antimicrobial and negative impact on biofilm formation (Morton, 1950; Audrain et al., 2015b)
2,12	Ethyl Acetate	↑4% ^{a)}	↓OFF	↑182% ^{a)}	Antimicrobial (Saksena and Tripathi, 1987; Fredlund et al., 2004; Toffano et al., 2017)
2,19	Acetic acid	↑ON	↑ON	↑ON	Antifungal (Pimenta et al., 2012)
2,94	Methylthiolacetate	↑ON	↑ON	↑ON	Antifungal, especially against <i>R. solani</i> (Ossowicki et al., 2017)
3,53	2-methyl-1-Butanol	↑8%	↓8%	↓42%	Antimicrobial; partially active against wood-decaying fungi (Saksena and Tripathi, 1987; Linton and Wright, 1993; Humphris et al., 2001; Toffano et al., 2017)
6,47	Isovaleric acid (3-methylbutanoic acid)	↑29%	↑160%	↓OFF	Putatively antifungal (Hayashida-Soiza et al., 2008)
6,69	2-methylbutanoic acid	↑41% ^{a)}	↑227%	↑370% ^{a)}	Putatively antifungal (Hayashida-Soiza et al., 2008)
6,73	Isoamyl acetate (3-methylacetate-1-Butanol)	↑ON	-	↑ON	Antimicrobial (Strobel et al., 2001; Ando et al., 2015)
7,08	2-Heptanone	↑13%	↓34%	↑466%*	Antibacterial (Popova et al., 2014; Farh and Jeon, 2020)
12,51	1-Octanol	↓18%	↓43%*	↑162%*	Antimicrobial (Kato and Shibasaki, 1980; Kubo et al., 1995; Togashi et al., 2007)
13,14	2-Nonanone	↑27%	↓39%	↑419%*	Antimicrobial (Popova et al., 2014)
13,39	2-Nonanol	↑40%	↓23%	↑730%	Antimicrobial (Kubo et al., 1995; Reese et al., 2020)

13,80	Phenylethyl Alcohol	↑54%	↑179%	↓OFF	Antimicrobial (Reese et al., 2020)
16,27	Octanoic acid, ethyl ester	-	-	↑ON	Antifungal (Fialho et al., 2011; Toffano et al., 2017)
18,07	1-Decanol	-	-	↑ON	Antimicrobial (Kato and Shibasaki, 1980; Kubo et al., 1995; Togashi et al., 2007)
18,51	2-Undecanone	-	-	↑ON	Antimicrobial (Popova et al., 2014)
VOCs with predicted mixed functions (antimicrobial, effect on bacterial mobility and/or on plants)					
2,20	Isobutanol (2-methyl-1-Propanol)	↓4% ^{a)}	↓OFF	↑105% ^{a)}	Antibacterial and plant growth promoting (PGP) (Akpata and Akinrimisi, 1977; Naznin et al., 2013; Farh and Jeon, 2020)
2,54	1-Butanol	↓43% ^{a)}	↓OFF	↑211%	Antibacterial effect and a species-specific effect on biofilm formation in some bacteria and fungi (Létoffé et al., 2014; Audrain et al., 2015a)
2,80	2-Pentanone	↑22%	↓36%	↑459%*	Interferes with plants (Kanchiswamy et al., 2015)
3,12	Acetoin	↑9%	↑1%	↑63%*	Negative effect on biofilm formation (enhances motility) in bacteria. Triggers induced systemic resistance (ISR) and PGP, regulates auxin homeostasis. Product of the fermentation of glucose under low-oxygen conditions (Ryu et al., 2003, 2004; Han et al., 2006; Audrain et al., 2015a)
3,48	Isoamyl alcohol (3-methyl-1-Butanol)	↑4%	↑15%	↓5%	Antimicrobial, may inhibit fungal spore germination, negative effect on biofilm formation, phytotoxic (Wright et al., 1991; Linton and Wright, 1993; Ando et al., 2015)
4,62	2,3-Butanediol	↑62%*	↑103%*	↑422%*	Increases virulence factor production, antimicrobial activity, and biofilm formation of <i>P. aeruginosa</i> . Triggers ISR & PGP regulates auxin homeostasis. Product of the fermentation of glucose under low-oxygen conditions (Ryu et al., 2003, 2004; Zhang et al., 2007; Venkataraman et al., 2014; Audrain et al., 2015a)
6,53	1-Hexanol	↓13% ^{a)}	↓OFF	↑565% ^{a)}	Antimicrobial, phytotoxic activity, induce plant responses (Kubo et al., 1995; Splivallo et al., 2007)
7,37	2-Heptanol	-	-	↑ON	Interferes with plants (Kanchiswamy et al., 2015)

1,38	Dimethyl ether	↓14%	↓22%	↑154%*	N/a
6,23	2-methyl-3-hexanol	-	↑ON	-	N/a
18,19	Hexyl-pentyl Ether	↑ON	↑ON	-	N/a

- 1) In order to assign the regulation of *S. plymuthica* HRO-C48 volatiles, the controls were subtracted from the detected substances as explained in the methods section. An asterix (*) indicates that a substance was significantly up- or downregulated; values which are strongly (significant or over 100% compared to the control) upregulated are highlighted in green, substances which are strongly (significant or over 100% compared to the control) downregulated in red. ^{a)} Indicates that no significance could be determined because the substance was only detected in 2 out of 3 samples. “–” means that the substance was produced neither by *S. plymuthica* HRO-C48 with the respective fungi nor in the control. The complete up or downregulation of a substance compared to the untreated control is signified with the signs “ON” or “OFF”. “ON” means that the substance was not detected in the control of *S. plymuthica* HRO-C48 but was found in the samples incubated with the respective fungi. “OFF” means that the substance was detected in the untreated control of *S. plymuthica* HRO-C48 but not found within the volatiles of the bacterium that was incubated with the respective fungus. The VOCs highlighted in bold letters were also detected in the volatilomes of six other *Serratia* species as stated by Weise and colleagues (Weise et al., 2014). N/a means that no function was identified. Please see Supplementary Table S1 for complete data on the identified substances.

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