New Phytologist

***New Phytologist* Supporting Information**

Article title: Sniffing fungi – Phenotyping of volatile chemical diversity in *Trichoderma* species
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Fig. S1 Growth curves of the *Trichoderma* species. Grey arrows indicate the time point of PTR-ToF-MS measurement initiation. The time points were chosen to lie in the exponential growth stage of the fungi and were determined in preceding experiments from the maximum of the first derivative of the growth curve. The red dash line indicates the maximum growth area (i.e., a Petri dish filled by the mycelium); tha, *T. harzianum*; thm, *T. hamatum*; tre, *T. reesei*; tve, *T. velutinum.* Data is shown as means±se, n=6.

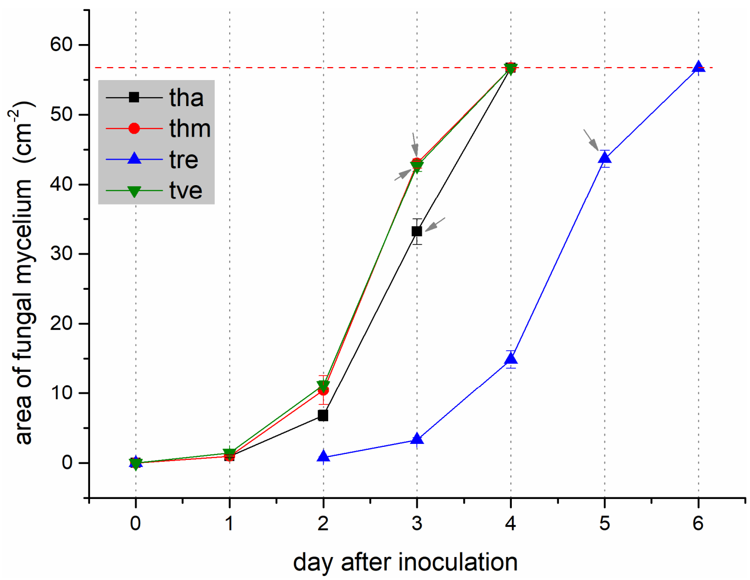


Fig. S2 Pictures of *Trichoderma* cultures at the onset and the end of the PTR-ToF-MS measurements.

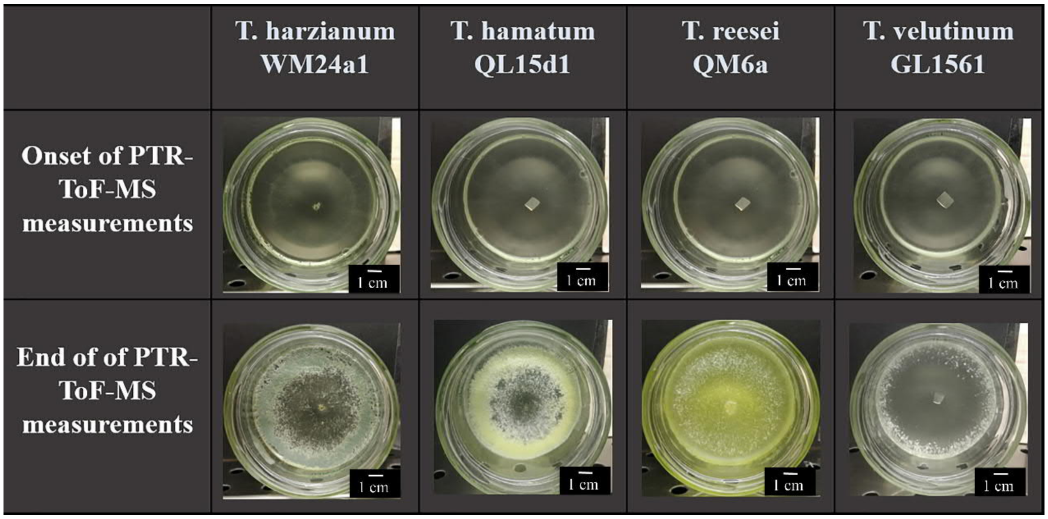


Fig. S3 Workflow. A fungal volatile organic compounds (fVOCs) screening experiment including measurements by PTR-ToF-MS and GC-MS instruments requires several working steps: fungi cultivation, fungal image photography, measurement of volatiles, raw data evaluation, background correction and further data mining. Prior to PTR-ToF-MS measurement, the entire fungal cuvettes system was sterilized with 80% of ethanol (prepared with analytical grade ethanol) and subsequently cleaned with sterile ultrapure water to avoid contamination.

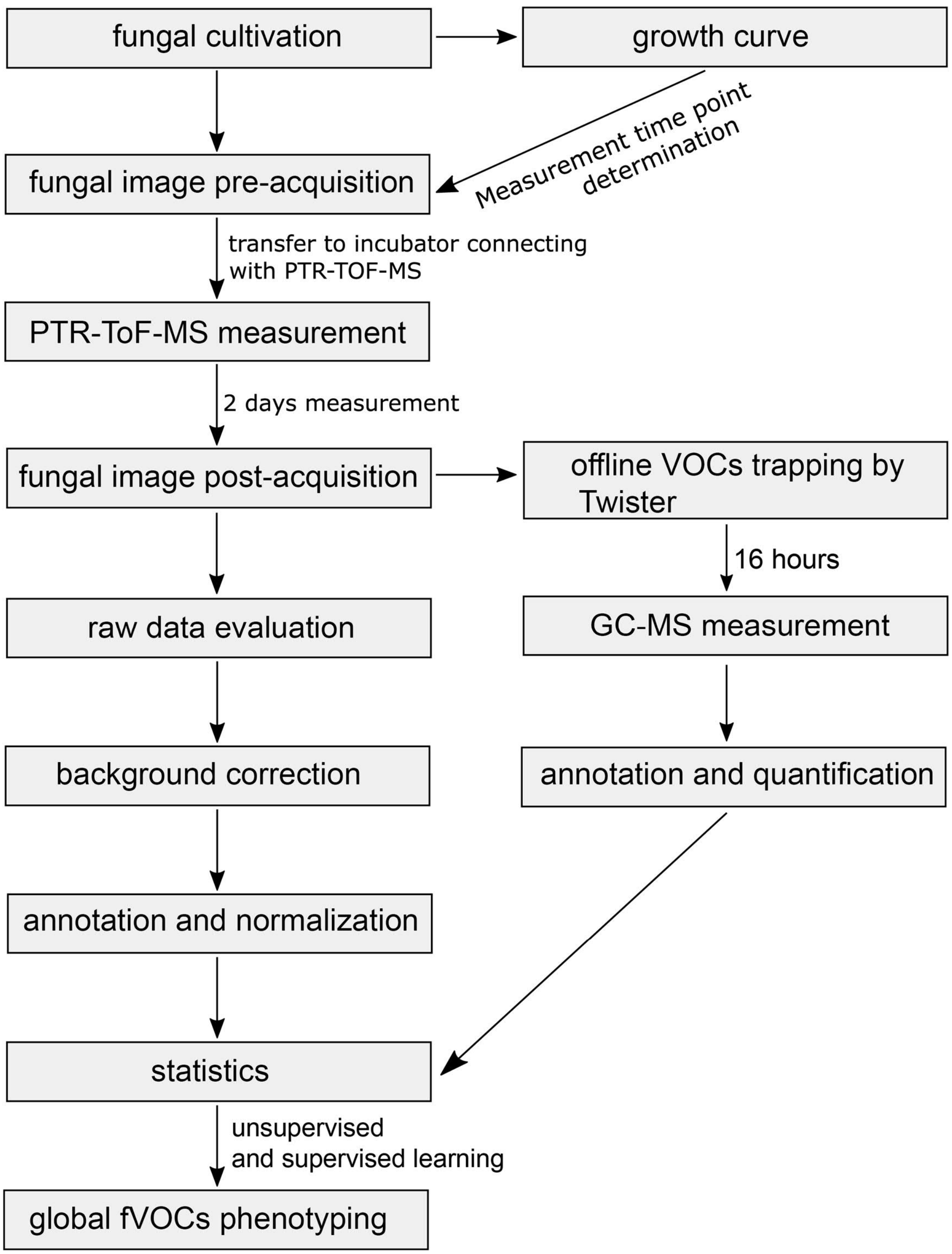


Fig. S4 Total emission intensity of sesquiterpenes detected by PTR-ToF-MS. Sesquiterpenes (m/z 205.196) detected by PTR-ToF-MS from *T. harzianum* (tha), *T. hamatum* (thm), *T. reesei* (tre) and *T.velutinum* (tve). Data are means±se, n= 4. Different letters on the bar plot indicate significant difference of their emission (one-way ANOVA Duncan's test, $p < 0.05$).

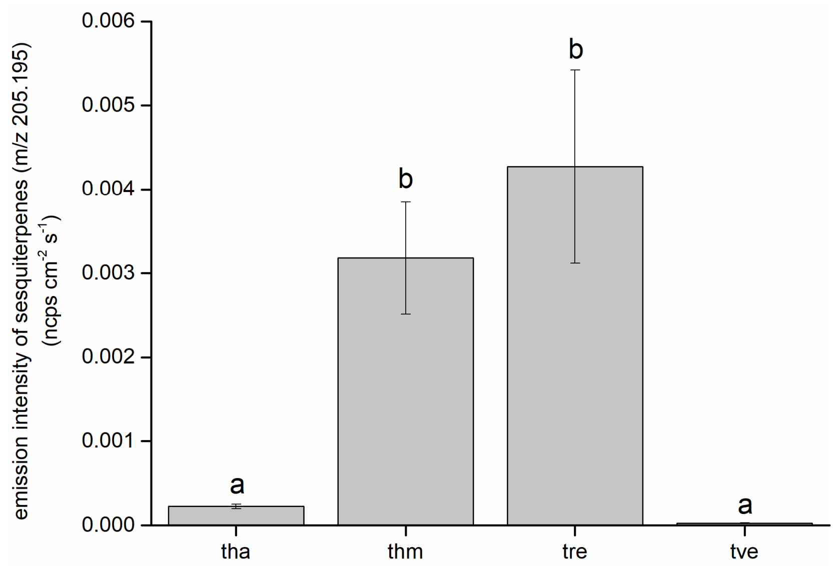
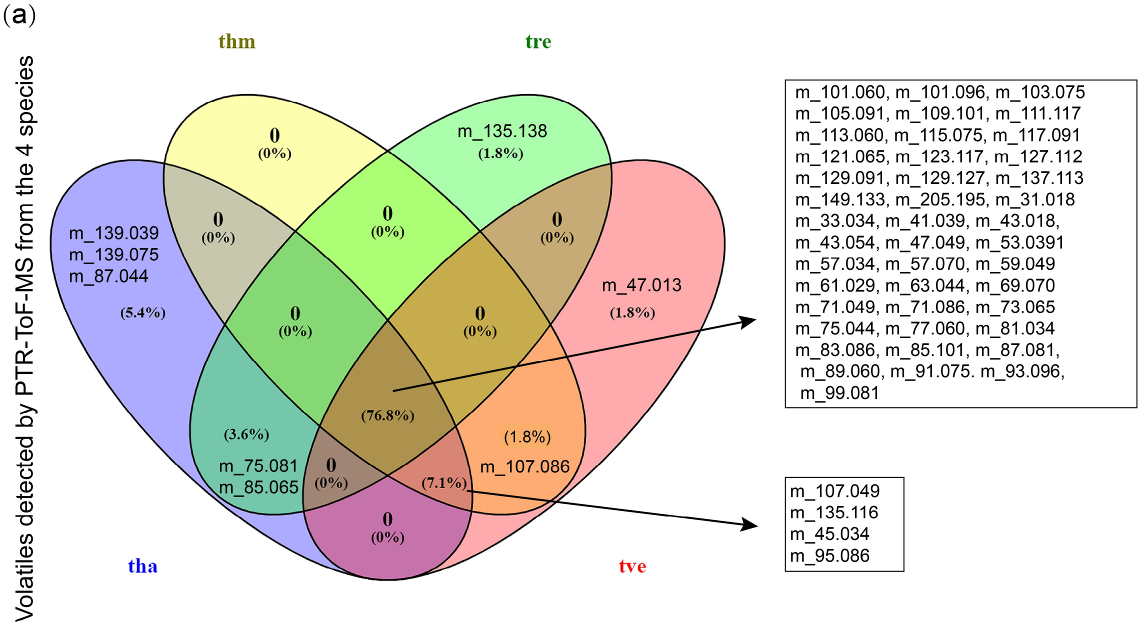


Fig. S5 Comparison of the volatile compounds emitted by the four *Trichoderma species*. Venn diagrams show volatiles detected by PTR-ToF-MS (a) and GC-MS (b) from *T. harzianum* (tha), *T. hamatum* (thm), *T. reesei* (tre) and *T.velutinum* (tve). Numbers in (b) refer to Supporting Information Table S3.

(a)



(b)

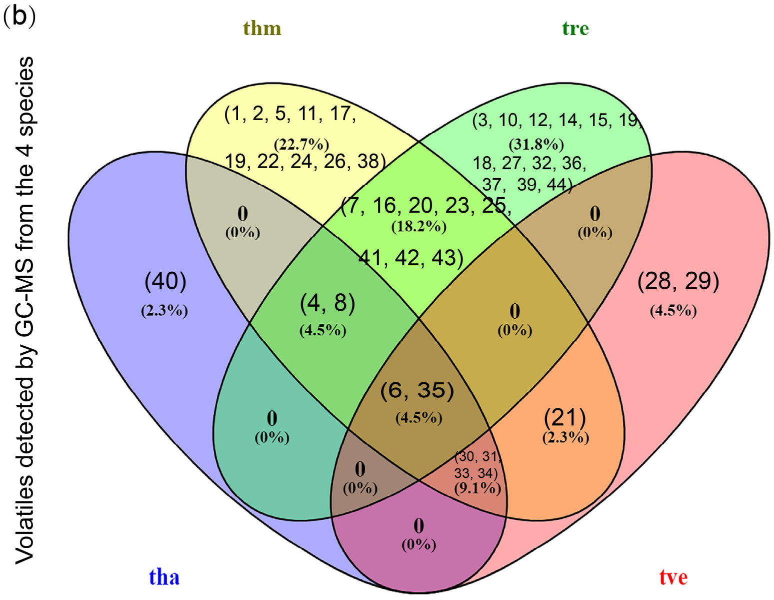


Table S1 The compounds **(**mass to charge ratios (m/z)) detected by Proton Transfer Reaction Time-of-Flight Mass Spectrometry (PTR-ToF-MS) and corresponding tentative annotations. Isotopes and known common fragments were omitted. Same background colors in the "mass" column indicates the signals have strong correlations (R^2 >0.9). The tentatively assigned compounds in red bold font are those detected previously in *Trichoderma* species and described in the literature. Footnotes refer to: [1](Mancuso *et al.*, 2015); [2](Asensio *et al.*, 2007); [3](Infantino *et al.*, 2017); [4](Seewald *et al.*, 2010); [5](Misztal *et al.*, 2018); [6](Ladygina *et al.*, 2006); [7](Brilli *et al.*, 2011); [8](Bunge *et al.*, 2008); [9](Aprea *et al.*, 2015); [10](Mayrhofer *et al.*, 2006); [11](Bäck *et al.*, 2010); [12](Lippolis *et al.*, 2014); [13](Morath *et al.*, 2012); [14](Maleknia *et al.*, 2007); [15](Demarcke *et al.*, 2009); [16](Kim *et al.*, 2009); [17](Minerdi *et al.*, 2009). The references are studies that investigated soil and fungal volatile emission using PTR-ToF-MS.

mass (m/z)	sum formula	tentatively assigned compound	chemical class
31.018	CH_2O+H^+	formaldehyde[1, 2, 3]	aldehyde
33.034	CH_4O+H^+	methanol[1, 3, 4, 5]	alcohol
41.038	$C_3H_4+H^+$	alkyl fragment[3]	n.i
43.018	$C_2H_2O+H^+$	**acetic acid fragment**[3]	acid
43.054	$C_3H_6+H^+$	alkyl fragment[3, 6]	n.i
45.034	$C_2H_4O+H^+$	acetaldehyde[1, 3, 7, 8]	aldehyde
47.013	$CH_2O_2+H^+$	formic acid[3]	acid
47.049	$C_2H_6O+H^+$	**ethanol**[1, 2, 3, 5]	alcohol
53.039	$C_4H_4+H^+$	alkyl fragment[3]	n.i
57.034	$C_3H_4O+H^+$	prop-2-enal[3]	aldehyde
57.070	$C_4H_8+H^+$	Fragment[9]	n.i
59.049	$C_3H_6O+H^+$	**acetone**[1, 3, 4]	ketone
61.029	$C_2H_4O_2+H^+$	**acetic acid**[1, 8, 9]	acid
63.044	$C_2H_6O_2+H^+$	ethane-1,2-diol	alcohol
69.070	$C_5H_8+H^+$	isoprene[1, 10]	acyclic alkene
71.049	$C_4H_6O+H^+$	butyric acid, dihydro-furan	acid
71.086	$C_5H_{10}+H^+$	cyclopentane/ pentene[9]	alkane/acyclic alkene
73.065	$C_4H_8O+H^+$	**butan-2-one/**butyraldehyde[5, 9]	ketone/aldehyde
75.044	$C_3H_6O_2+H^+$	propanoic acid[3, 9, 13]	acid
75.081	$C_4H_{10}O+H^+$	**Butanol**	alcohol
77.060	$C_3H_8O_2+H^+$	e.g. **acetone**-H30+ cluster/ 2-methoxyethanol	ketone/alcohol

81.034	$C_5H_4O+H^+$	e.g. fragment/ cyclopenta-2,4-dien-1-one	n.i./ ketone
83.086	$C_6H_{10}+H^+$	hexanal fragment/ 2,3-dimethyl-1,3-bytadiene[9]	aldehyde/ acyclic alkene
85.065	$C_5H_8O+H^+$	pentenal/ pent-1-en-3-one/ cyclopentanone[1, 3]	aldehyde/ketone
85.101	$C_6H_{12}+H^+$	hexanol fragment[9]	alcohol
87.044	$C_4H_6O_2+H^+$	butane-2,3-dione/ butyrolactone[9]	ketone
87.081	$C_5H_{10}O+H^+$	pentanal/ pentenol[9, 12]	aldehyde/alcohol
89.060	$C_4H_8O_2+H^+$	butanoic acid[9, 13]	acid
91.075	$C_4H_{10}O_2+H^+$	e.g. butanediol/ 2-ethoxyethanol	alcohol
93.091	$C_7H_8+H^+$	e.g. toluene/ bicyclo[3.2.0]hepta-2,6-diene	acyclic alkene
95.086	$C_7H_{10}+H^+$	2-norbornene/ bicyclo[2.2.1]hept-2-ene[3, 14]	acyclic alkene
99.081	$C_6H_{10}O+H^+$	hexenal isomeres[9]	aldehyde
101.060	$C_5H_8O_2+H^+$	oxo-pentanal/ pentane-2,3-dione/ γ-valerolactone[3, 9]	aldehyde/ketone
101.096	$C_6H_{12}O+H^+$	(3Z)-3-hexen-1-ol/ hexanal	alcohol/aldehyde
103.075	$C_5H_{10}O_2+H^+$	e.g. pentanoic acid/ 3-methylbutanoic acid/ valeric acid[3, 9]	acid
105.091	$C_5H_{12}O_2+H^+$	1,5-pentanediol/ 3-ethoxypropan-1-ol[9]	alcohol
107.049	$C_7H_6O+H^+$	benzaldehyde/ 2,4,6-cycloheptatrien-1-one[3, 5, 9]	aldehyde/ketone
107.086	$C_8H_{10}+H^+$	ethylbenzene/ xylene[3, 9]	benzenoid
109.065	$C_7H_8O+H^+$	benzy alcohol/ methyl phenol/ phenylmethanol[5, 9]	alcohol
109.101	$C_8H_{12}+H^+$	4-ethenylcyclohexene[9, 14], 2-octenal / octenol/l-octen-3-one [9] fragment	acyclic alkene
111.117	$C_8H_{14}+H^+$	1-ethylcyclohexene[9], octanal/ l-octen-3-ol/ 3-octanone[9] fragment	acyclic alkene
113.060	$C_6H_8O_2+H^+$	cyclohexanedione isomere/ 2-ethyl-2H-furan-5-one	ketone
115.070	$C_6H_{10}O_2+H^+$	hexanedione isomer/ (Z)-4-hydroxyhex-3-en-2-one	ketone
117.091	$C_6H_{12}O_2+H^+$	hexanoic acid/ ethylbutanoate[9]	acid/ester
121.065	$C_8H_8O+H^+$	2-phenylacetaldehyde /acetophenone[5]	aldehyde/ketone
123.117	$C_9H_{14}+H^+$	2,3-dimethylbicyclo[2.2.1]hept-2-ene[3, 15]	acyclic alkene

127.112	$C_8H_{14}O+H^+$	2-octenal/ octenol/l-octen-3-one [9]	aldehyde/ketone/alcohol
129.091	$C_7H_{12}O_2+H^+$	2-buten-1-ol-3-methyl-acetate/ butyl acrylate	ester
129.127	$C_8H_{16}O+H^+$	octanal/ l-octen-3-ol/ 3-octanone[9]	aldehyde/ketone/alcohol
135.116	$C_{10}H_{14}+H^+$	p-cymene/ o-cymene[3, 9, 14]	benzenoid
135.138	$C_7H_{18}O_2+H^+$	n.i	n.i
137.113	$C_{10}H_{16}+H^+$	various monoterpenes[9]	monoterpene
139.039	$C_7H_6O_3+H^+$	salicylic acid	acid
139.075	$C_8H_{10}O_2+H^+$	2-phenoxyethanol/tyrosol[5]	benzenoid/alcohol
149.133	$C_{11}H_{16}+H^+$	pentylbenzene[3, 16]	benzenoid
205.195	$C_{15}H_{24}+H^+$	various sesquiterpenes[3, 17]	sesquiterpene

Table S2 Limit of detection (LOD) of individual compounds related to potential emission rate that may be detected from fungi using the VOC platform (normalized to cm^{-2} mycelium area). The LOD was estimated based on standard error of estimate approach during the experimental background measurements and using 3σ of the signal intensities (PTR-ToF-MS) or of the peak-to-peak noise of the baseline around the analyte retention time (GC-MS). For PTR-ToF-MS, LOD indicates the average (± se) of multiple estimations during the whole experiment; the numbers (*) may be converted from ncps to ppbv (cm^{-2} s^{-1}) knowing the sensitivity (ncps/ppbv) of the specific compounds (cf. Table S1). PTR-ToF-MS sensitivities calculated from calibration curves and obtained from measurements of VOC standards passing through the whole system and an empty cuvette were: methanol (m/z = 33.034): 7.3, acetaldehyde (m/z = 45.034): 40.5, ethanol (m/z = 47.050): 1.09, isoprene (m/z = 69.0705): 10.2, butan-2-one (m/z = 73.065): 30, benzene (m/z = 79.055): 14.5, toluene, (m/z = 93.070): 12.82, p-xylene (m/z = 107.086): 11.04, α-pinene (m/z = 137.133): 2.97.

mass detected by PTR-ToF-MS (m/z)	LOD* (ncps cm^{-2} s^{-1})	se* (ncps cm^{-2} s^{-1})	Compounds detected by GC-MS	LOD (pmol cm^{-2} h^{-1})
33.034	1.36E-06	4.36E-07	β-elemene	0.17E-02
41.039	5.11E-06	1.67E-06	unknown SQT#3	2.45E-05
31.018	4.42E-05	2.2E-05	phenol, 3-(1-methylethyl)-	0.75E-03
43.018	5.69E-06	1.46E-06	β-bisabolene	0.50E-03
43.055	1.69E-05	8.35E-06	selina-4(15),7(11)-diene	1.81E-06
45.034	1.49E-05	4.86E-06	zingiberene	6.72E-05
47.013	2.55E-06	4.12E-07	α-muurolene	0.17E-03
47.050	4.69E-06	1.06E-06	α-selinene	6.79E-06
53.039	2.41E-07	5.43E-08	3-octanene	0.46E-03
57.034	7.27E-07	9.98E-08	germacrene d	0.11E-02
57.070	7.92E-07	2.26E-07	β-curcumene	7.97E-05
61.029	3.86E-06	7.47E-07	trans-α-bisabolene	0.31E-03
63.045	2.73E-07	4.04E-08	dodecyl acrylate	0.57E-02
69.071	3.03E-07	5.77E-08	α-gurjunene	0.42E-03
71.086	2.56E-07	3.57E-08	β-caryophyllene	0.17E-03
73.065	1.47E-06	4.23E-07	epsilon-muurolene	9.71E-06
75.045	1.29E-05	1.09E-05	epizonarene	3.66E-05
75.081	3.65E-07	4.67E-08	butylhydroxytoluene	0.46E-03

77.060	1.91E-07	3.72E-08	α-cedrene	0.17E-03
81.034	7.85E-07	1.74E-07	α-copaene	6.52E-06
83.086	2.21E-07	4.1E-08	β-sesquiphellandrene	0.59E-03
85.065	2.18E-07	3.1E-08	trans-γ-bisabolene	3.67E-06
85.102	1.4E-07	2.42E-08	nerolidol	6.39E-06
87.045	4.9E-07	8.01E-08	unknown o-SQT#1	4.58E-06
87.081	3.79E-07	1.22E-07	unknown o-SQT#2	0.37E-03
89.060	6.25E-07	2.49E-07	unknown o-SQT#3	0.42E-03
91.076	2.32E-07	2.65E-08	unknown o-SQT#4	0.29E-03
93.092	3.74E-07	6.56E-08	Tetrahydrocarvone	0.21E-03
95.086	1.77E-07	1.88E-08	β-patchoulene	0.16E-03
99.081	2.14E-07	2.41E-08	dodecane	0.57E-03
101.060	2.61E-07	5E-08	α-himachalene	7.75E-06
101.097	1.82E-07	3.7E-08	β-himachalene	9.75E-07
103.076	2.04E-07	3.56E-08	α-amorphene	4.26E-06
105.092	1.11E-07	9.25E-09	2-isopropyl-5-methyl-9-methylene[4.4.0]dec-1-ene	3.80E-06
107.050	1.51E-07	2.46E-08	β-cedrene	8.48E-06
107.086	4.28E-07	1.31E-07	cyclohexanol,1-acetyl-2-ethylidene	0.24E-02
109.065	2.25E-07	5.47E-08	γ-muurolene	3.26E-05
109.102	1.77E-07	2.58E-08	palustrol	5.05E-06
111.117	1.38E-07	1.77E-08	isoledene	2.40E-06
113.060	2.84E-07	3.25E-08	spiro[4.5]dec-8-en-7-ol, 4,8-dimethyl-1-(1-methylethyl)-	0.1E-03
115.071	1.92E-07	3.01E-08	(3Z,5E,7E)-nonatetra-1,3,5,7-ene	0.24E-03
117.092	1.33E-07	2.26E-08	γ-cadinene	4.97E-05
121.065	1.31E-07	2.28E-08	tridecane	0.22E-02
123.117	1.37E-07	2.05E-08	undecane	0.76E-02
127.112	1.9E-07	5.24E-08		
129.092	8.42E-08	8.06E-09		
129.128	1.75E-07	3.4E-08		
135.116	1.75E-07	3.37E-08		
135.139	9.83E-08	4.25E-08		
137.113	2.64E-07	3.44E-08		
139.040	1.36E-07	3.79E-08		
139.075	1.82E-07	5.98E-08		
149.133	1.65E-07	3.41E-08		
205.195	1.97E-07	3.48E-08		

Table S3 Chemical identification and chromatographic characteristics of detected VOCs by Gas Chromatography Mass Spectrometry (GC-MS) analysis. RT, Retention time; RI, Kovats retention index. Compounds in red font were reported from *Trichoderma* spp. using GC-MS in previous studies: [1](Nieto-Jacobo *et al.*, 2017); [2](Guo *et al.*, 2019); [3](Lee *et al.*, 2016); [4](Müller *et al.*, 2013a) ; [5](Contreras-Cornejo *et al.*, 2014); [6](Kumar *et al.*, 2018); [7](Polizzi *et al.*, 2012); [8](Stoppacher *et al.*, 2010); [9](Srinivasa *et al.*, 2017); [10](Shahiri Tabarestani *et al.*, 2016); [11](Hung *et al.*, 2013); [12](Siddiquee *et al.*, 2012).

Nr.	VOC	RT (min)	RI	Chemical class	CAS registry number
1	β-elemene[1,2]	19.434	1406.56	SQT	515-13-9
2	α-gurjunene[1,2]	19.915	1430.796	SQT	489-40-7
3	unknown SQT	20.025	1436.249	SQT	-
4	α-cedrene[2,3]	20.104	1440.145	SQT	469-61-4
5	β-caryophyllene[1]	20.22	1445.836	SQT	87-44-5
6	β-curcumene[2]	20.269	1447.351	SQT	451-56-9
7	α-copaene[2]	20.379	1453.58	SQT	3856-25-5
8	β-cedrene[3]	20.416	1455.372	SQT	546-28-1
9	α-amorphene[4,5]	20.483	1458.61	SQT	483-75-0
10	β-patchoulene[6]	20.812	1474.34	SQT	514-51-2
11	ε-muurolene	20.876	1477.369	SQT	30021-46-6
12	γ-muurolene[2]	20.911	1479.021	SQT	30021-74-0
13	zingiberene[2]	21.087	1487.284	SQT	495-60-3
14	α-himachalene	21.121	1488.871	SQT	3853-83-6
15	γ-cadinene[1]	21.221	1493.525	SQT	1460-97-5
16	α-muurolene[5]	21.343	1499.17	SQT	10208-80-7
17	germacrene d[1,2]	21.495	1506.019	SQT	23986-74-5
18	trans-α-bisabolene[7]	21.568	1509.281	SQT	17627-44-0
19	α-selinene[2]	21.745	1517.141	SQT	473-13-2
20	β-bisabolene[2,3]	21.776	1518.511	SQT	495-61-4
21	selina-4(15),7(11)-diene[1,2]	21.855	1521.991	SQT	103827-22-1
22	2-isopropyl-5-methyl-9-methylene[4.4.0]dec-1-ene	21.951	1526.203	SQT	150320-52-8
23	β-sesquiphellandrene[2,3,8]	22.166	1535.563	SQT	20307-83-9
24	trans-γ-bisabolene	22.221	1537.941	SQT	495-62-5
25	epizonarene[9,10]	22.318	1542.121	SQT	41702-63-0
26	isoledene[2]	22.361	1543.968	SQT	95910-36-4
27	β-himachalene[2,3,11]	22.679	1557.507	SQT	1461-03-6
28	3-octanone[1,2,8]	10.887	983.9965	ketone	106-68-3
29	(3Z,5E,7E)-nonatetra-1,3,5,7-ene	12.2	1049.361	alkene	81129-96-6
30	undecane[3,12]	13.428	1103.045	alkane	1120-21-4

31	tetrahydrocarvone[2]	14.237	1142.657	ketone	59471-80
32	cyclohexanol,1-acetyl-2-ethylidene	14.741	1166.074	alkene	-
33	dodecane[12]	15.532	1201.414	alkane	112-40-3
34	tridecane[12]	17.409	1301.05	alkane	629-50-5
35	butylhydroxytoluene	21.635	1512.264	benzoid	128-37-0
36	phenol, 3-(1-methylethyl)-	22.081	1531.874	alcohol	618-45-1
37	nerolidol	22.904	1566.964	SQT-alcohol	7212-44-4
38	palustrol[1]	23.691	1599.275	SQT-alcohol	5986-49-2
39	spiro[4.5]dec-8-en-7-ol, 4,8-dimethyl-1-(1-methylethyl)-	26.131	1689.562	SQT-alcohol	61050-89-3
40	dodecyl acrylate	26.192	1691.702	ester	2156-97-0
41	unknown-o-SQT-1	27.912	1750.825	SQT-alcohol	-
42	unknown-o-SQT-2	28.345	1765.135	SQT-alcohol	-
43	unknown-o-SQT-3	28.439	1768.211	SQT-alcohol	-
44	unknown-o-SQT-4	28.869	1782.146	SQT-alcohol	-

Table S4 Mean emission intensities of all the compounds detected by PTR-ToF-MS (ncps cm^{-2} s^{-1}) and GC-MS (pmol cm^{-2} h^{-1}) from *T. harzianum* (tha), *T. hamatum* (thm), *T. reesei* (tre) and *T. velutinum* (tve). The numbers can be converted into ppbv cm^{-2} s^{-1} by dividing them with the PTR-ToF-MS' sensitivities towards the related compounds (cf. Table S1). Sensitivities of some selected, calibrated compounds are: methanol: 7.3 ncps/ppbv, acetaldehyde: 40.5 ncps/ppbv, acetone: 39.2 ncps/ppbv, isoprene: 10.2 ncps/ppbv, butan-2-one: 30 ncps/ppbv, benzene: 14.5 ncps/ppbv. Values are mean±se (n=4), n.d denotes not detected.

Emission intensities of compounds detected by PTR-ToF-MS (ncps cm^{-2} s^{-1})								
mass (m/z)	tha	se	thm	se	tre	se	tve	se
31.018	3.69E-02	3.48E-03	6.46E-02	2.45E-03	8.57E-02	4.35E-03	5.85E-02	6.20E-03
33.034	5.15E-02	5.70E-03	1.83E-01	1.17E-02	6.19E-03	8.16E-04	1.12E-01	1.74E-02
41.039	4.46E-01	6.25E-02	1.81E-01	1.07E-02	7.92E-02	1.65E-02	2.58E-01	3.55E-02
43.018	6.32E-02	3.18E-03	1.68E-01	9.85E-03	1.24E-01	8.68E-03	1.91E-01	3.03E-02
43.054	4.01E-01	5.73E-02	1.36E-01	9.67E-03	5.91E-02	8.35E-03	2.04E-01	3.13E-02
45.034	9.59E-01	6.49E-02	1.97E+00	8.70E-02	n.d	n.d	6.41E-01	1.12E-01
47.013	n.d	n.d	n.d	n.d	n.d	n.d	9.49E-03	5.41E-03
47.049	1.32E+00	1.63E-01	2.36E+00	1.73E-01	4.62E+00	2.91E-01	1.62E+00	3.74E-01
53.039	4.60E-04	4.69E-05	3.42E-04	2.13E-05	5.19E-04	8.31E-05	2.93E-04	4.06E-05
57.034	1.01E-02	1.32E-03	6.06E-03	2.95E-04	2.37E-03	5.06E-04	8.16E-03	9.84E-04
57.07	1.39E-02	7.79E-04	3.01E-02	8.49E-04	7.96E-02	1.13E-02	2.39E-02	1.39E-03
59.049	3.26E+00	5.92E-01	9.40E+00	6.05E-01	3.61E+00	5.74E-01	1.08E+01	2.73E+00
61.029	2.64E-02	3.16E-03	9.20E-02	1.07E-02	7.53E-02	1.37E-02	1.24E-01	2.16E-02
63.044	7.00E-03	4.01E-04	1.31E-02	4.65E-04	1.03E-02	1.65E-04	5.29E-03	7.22E-04
69.07	6.53E-04	3.98E-05	1.26E-03	7.76E-05	2.31E-03	1.40E-04	8.74E-04	1.32E-04
71.049	4.60E-04	2.70E-05	1.60E-04	3.39E-05	8.41E-03	3.12E-03	1.09E-04	1.89E-05
71.086	4.70E-04	2.16E-05	1.13E-03	6.47E-05	7.62E-03	5.11E-04	5.42E-04	6.82E-05
73.065	7.36E-02	1.31E-02	6.27E-03	1.01E-03	2.03E-01	5.13E-02	4.85E-03	1.26E-03
75.044	3.95E-03	4.81E-04	1.77E-02	7.25E-04	3.85E-03	4.23E-04	2.15E-02	3.25E-03
75.081	4.91E-04	5.93E-05	n.d	n.d	9.11E-04	1.02E-04	n.d	n.d
77.06	4.05E-03	5.89E-04	9.43E-03	4.32E-04	4.65E-03	5.89E-04	1.04E-02	2.03E-03

81.034	2.10E-03	9.04E-05	1.67E-03	1.14E-04	6.41E-04	8.21E-05	8.67E-04	2.08E-04
83.086	8.31E-05	6.33E-06	4.17E-04	2.88E-05	1.95E-04	2.49E-05	2.64E-04	2.87E-05
85.065	n.d	n.d	2.68E-07	5.93E-08	n.d	n.d	1.86E-07	4.59E-08
85.101	6.76E-05	1.75E-06	4.74E-05	3.11E-06	1.29E-04	8.26E-06	1.07E-04	1.12E-05
87.044	6.31E-04	1.03E-04	n.d	n.d	n.d	n.d	n.d	n.d
87.081	1.06E-03	2.17E-04	3.44E-04	6.14E-05	2.16E-03	4.06E-04	4.90E-04	1.29E-04
89.06	2.08E-03	6.16E-05	2.84E-03	1.65E-04	3.97E-02	8.19E-03	2.82E-03	2.73E-04
91.075	2.18E-04	3.02E-05	1.71E-04	6.68E-06	6.76E-04	5.20E-05	1.26E-04	1.08E-05
93.096	1.06E-03	2.06E-04	2.50E-03	2.55E-04	5.91E-03	5.28E-04	1.20E-03	4.35E-04
95.086	6.17E-04	1.01E-04	2.14E-03	3.98E-04	n.d	n.d	1.53E-03	3.08E-04
99.081	1.79E-04	6.51E-06	1.81E-04	1.13E-05	1.21E-04	1.20E-05	1.04E-04	3.05E-06
101.06	1.13E-04	9.01E-06	1.80E-04	2.69E-05	3.64E-04	5.86E-05	1.11E-04	1.14E-05
101.096	6.36E-05	6.12E-06	1.04E-04	1.17E-05	1.11E-04	1.61E-05	5.92E-05	3.63E-06
103.075	1.83E-04	2.80E-06	1.68E-04	9.79E-06	1.10E-03	1.49E-04	1.14E-04	9.40E-06
105.091	5.15E-05	3.05E-06	1.10E-04	5.13E-06	4.93E-04	1.42E-05	9.66E-05	1.10E-05
107.049	6.60E-05	1.96E-06	4.21E-05	4.58E-06	n.d	n.d	2.00E-05	1.78E-06
107.086	3.63E-07	9.30E-08	1.58E-04	1.42E-05	3.05E-07	6.38E-08	6.05E-05	1.02E-05
109.101	2.32E-04	2.21E-05	1.41E-03	2.56E-04	2.52E-03	6.59E-04	7.86E-05	6.19E-06
111.117	3.30E-05	5.93E-06	8.29E-05	1.09E-05	2.24E-04	4.78E-05	5.83E-05	1.53E-05
113.06	9.84E-05	6.11E-06	8.99E-05	5.52E-06	1.85E-04	2.30E-05	5.94E-05	2.11E-06
115.075	6.80E-05	1.34E-06	1.03E-04	1.09E-05	8.39E-05	1.42E-05	3.60E-05	4.35E-06
117.091	7.25E-05	2.54E-06	2.01E-04	1.92E-05	1.13E-04	8.79E-06	7.89E-05	1.04E-05
121.065	7.57E-05	2.56E-06	1.22E-04	4.60E-06	1.58E-04	2.79E-05	5.97E-05	6.31E-06
123.117	3.62E-05	2.24E-06	4.08E-04	6.35E-05	2.90E-04	6.01E-05	1.33E-05	1.23E-06
127.112	5.33E-05	2.87E-06	1.06E-04	3.42E-06	9.03E-05	1.53E-05	1.07E-04	1.76E-05
129.091	4.94E-05	7.79E-06	2.75E-05	1.67E-06	8.50E-05	1.39E-05	2.10E-05	3.84E-06
129.127	2.16E-04	5.35E-05	2.92E-04	2.25E-05	2.64E-04	6.00E-05	4.71E-04	8.33E-05
135.116	5.94E-05	3.89E-06	4.14E-04	6.90E-05	n.d	n.d	1.46E-05	1.04E-06
135.138	n.d	n.d	n.d	n.d	5.58E-04	1.28E-04	n.d	n.d
137.113	4.23E-05	2.29E-06	2.74E-04	5.46E-05	2.10E-04	2.53E-05	2.58E-05	2.81E-06
139.039	1.81E-05	1.58E-06	n.d	n.d	n.d	n.d	n.d	n.d
139.075	2.65E-05	1.05E-06	n.d	n.d	n.d	n.d	n.d	n.d
149.133	6.36E-05	6.38E-06	9.25E-04	1.72E-04	7.19E-04	1.80E-04	9.17E-06	7.29E-08
205.195	2.25E-04	2.83E-05	3.18E-03	6.68E-04	4.27E-03	1.15E-03	2.89E-05	1.69E-06

Emission intensities of compounds detected by GC-MS (pmol cm^{-2} h^{-1})								
compound	tha	se	thm	se	tre	se	tve	se
(3Z,5Z,7E)-nona-1,3,5,7-tetraene	n.d	n.d	n.d	n.d	n.d	n.d	1.92E+00	3.33E-01
2-isopropyl-5-methyl-9-methylene[4.4.0]dec-1-ene	n.d	n.d	5.36E-01	1.90E-01	n.d	n.d	n.d	n.d
3-octanone	n.d	n.d	n.d	n.d	n.d	n.d	1.65E+00	2.37E-01
a-amorphene	n.d	n.d	n.d	n.d	9.78E-01	2.40E-02	n.d	n.d
a-cedrene	4.88E-02	1.73E-02	2.24E-01	8.25E-03	1.70E+00	2.38E-01	n.d	n.d
a-copaene	n.d	n.d	3.04E-01	5.81E-02	8.56E-01	3.64E-02	n.d	n.d
a-gurjunene	n.d	n.d	1.28E-01	3.19E-02	n.d	n.d	n.d	n.d
a-himachalene	n.d	n.d	n.d	n.d	1.96E-01	1.11E-02	n.d	n.d
a-muurolene	n.d	n.d	2.07E-01	1.25E-02	8.10E-01	2.47E-02	n.d	n.d
a-selinene	n.d	n.d	3.91E+00	2.82E-01	n.d	n.d	n.d	n.d
b-bisabolene	n.d	n.d	2.26E+00	1.41E-01	5.27E-01	5.00E-02	n.d	n.d
b-caryophyllene	n.d	n.d	1.11E+00	2.24E-01	n.d	n.d	n.d	n.d
b-cedrene	2.48E-02	7.69E-03	4.43E-01	7.27E-02	1.56E+00	6.59E-02	n.d	n.d
b-curcumene	7.13E-02	2.28E-02	2.81E-01	9.74E-03	2.00E+00	3.09E-01	8.17E-03	2.53E-03
b-elemene	n.d	n.d	5.21E+00	5.82E-01	n.d	n.d	n.d	n.d
b-himachalene	n.d	n.d	n.d	n.d	4.43E-02	4.06E-03	n.d	n.d
b-patchoulene	n.d	n.d	n.d	n.d	7.64E-02	2.54E-03	n.d	n.d
b-sesquiphellandrene	n.d	n.d	8.28E-01	1.56E-01	1.55E-01	1.19E-02	n.d	n.d
butylhydroxytoluene	1.88E+00	8.23E-01	5.90E+00	1.00E+00	2.76E+00	4.94E-01	8.86E+00	3.68E+00
cyclohexanol,1-acetyl-2-ethylidene	n.d	n.d	n.d	n.d	7.20E+00	2.47E-01	n.d	n.d
dodecane	1.86E-01	2.82E-02	1.67E-01	1.87E-02	n.d	n.d	1.71E-01	7.51E-02
dodecyl acrylate	2.68E-01	4.42E-02	n.d	n.d	n.d	n.d	n.d	n.d
epizonarene	n.d	n.d	2.66E-01	5.63E-02	1.01E-01	2.98E-03	n.d	n.d
epsilon -muurolene	n.d	n.d	1.52E-01	3.03E-02	n.d	n.d	n.d	n.d
gamma-cadinene	n.d	n.d	n.d	n.d	1.01E-01	5.64E-03	n.d	n.d
gamma-muurolene	n.d	n.d	n.d	n.d	1.03E-01	2.29E-03	n.d	n.d
germacrene d	n.d	n.d	8.78E-01	1.73E-01	n.d	n.d	n.d	n.d
isoledene	n.d	n.d	3.30E-01	6.77E-02	n.d	n.d	n.d	n.d
nerolidol	n.d	n.d	n.d	n.d	2.61E+00	6.81E-02	n.d	n.d
palustrol	n.d	n.d	9.96E-02	1.64E-02	n.d	n.d	n.d	n.d
phenol, 3-(1-methylethyl)-	n.d	n.d	n.d	n.d	1.10E+01	4.81E-01	n.d	n.d
selina-4(15),7(11)-diene	n.d	n.d	1.05E+00	1.64E-01	n.d	n.d	9.26E-03	2.85E-03
spiro[4.5]dec-8-en-7-ol, 4,8-dimethyl-1-(1-methylethyl)-	n.d	n.d	n.d	n.d	2.30E+00	2.23E-01	n.d	n.d
tetrahydrocarvone	2.67E+00	4.00E-01	5.24E+00	1.62E+00	n.d	n.d	1.59E-01	8.59E-03

trans-a-bisabolene	n.d	n.d	n.d	n.d	3.23E-01	1.41E-02	n.d	n.d
trans-gamma-bisabolene	n.d	n.d	1.01E+01	2.08E+00	n.d	n.d	n.d	n.d
tridecane	1.96E-01	2.52E-02	1.75E-01	1.29E-02	n.d	n.d	1.93E-01	7.23E-02
undecane	1.05E+00	2.70E-01	7.04E-01	9.68E-02	n.d	n.d	1.19E+00	4.01E-01
unknown SQT	n.d	n.d	n.d	n.d	9.05E-01	5.07E-02	n.d	n.d
unknown_o_SQT_1	n.d	n.d	1.24E-02	2.92E-03	5.40E-01	9.76E-02	n.d	n.d
unknown_o_SQT_2	n.d	n.d	1.59E-02	3.77E-03	1.46E-01	1.91E-02	n.d	n.d
unknown_o_SQT_3	n.d	n.d	3.95E-02	1.08E-02	5.65E-01	8.01E-02	n.d	n.d
unknown_o_SQT_4	n.d	n.d	n.d	n.d	8.26E-02	2.91E-02	n.d	n.d
zingiberene	n.d	n.d	n.d	n.d	5.57E-01	1.26E-02	n.d	n.d

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