

## Supplementary Material

**Table S1.** Average ( $\pm$  standard error;  $n = 3$ ) constitutive VOC emission rates [ $\text{nmol m}^{-2} \text{s}^{-1}$ ] in five tropical crop species measured by gas chromatography.

Compound class	Compound name	Molecular formula	<i>Abelmoschus esculentus</i>	<i>Amaranthus cruentus</i>	<i>Amaranthus hybridus</i>	<i>Solanum aethiopicum</i>	<i>Telfairia occidentalis</i>
<b>Lightweight oxygenated compounds (LOCs)</b>	Acetaldehyde	C <sub>2</sub> H <sub>4</sub> O	42 $\pm$ 22	45 $\pm$ 23	55 $\pm$ 55	23 $\pm$ 23	48 $\pm$ 39
	Acetone	C <sub>3</sub> H <sub>6</sub> O	155 $\pm$ 65	208 $\pm$ 91	70 $\pm$ 37	68 $\pm$ 53	105 $\pm$ 65
<b>Lipoxygenase pathway products (LOX products)</b>	1-Penten-3-one	C <sub>5</sub> H <sub>8</sub> O	nd	nd	3.5 $\pm$ 2.2	1.2 $\pm$ 1.2	3.8 $\pm$ 3.3
	Pentanal	C <sub>5</sub> H <sub>10</sub> O	10 $\pm$ 8	16 $\pm$ 5.7	20 $\pm$ 12	nd	3.0 $\pm$ 2.4
	2-Pentanone	C <sub>5</sub> H <sub>10</sub> O	7 $\pm$ 5	2.4 $\pm$ 2.26	7.3 $\pm$ 2.1	nd	6.1 $\pm$ 3.9
	1-Pentanol	C <sub>5</sub> H <sub>12</sub> O	nd	nd	2.1 $\pm$ 1.7	3.9 $\pm$ 3.4	0.090 $\pm$ 0.085
	1-Penten-3-ol	C <sub>5</sub> H <sub>12</sub> O	nd	nd	32 $\pm$ 16	nd	nd
	(Z)-3-Hexen-1-ol	C <sub>6</sub> H <sub>12</sub> O	nd	nd	21 $\pm$ 20	nd	nd
	(E)-3-Hexen-1-ol	C <sub>6</sub> H <sub>12</sub> O	nd	nd	2.2 $\pm$ 2.2	nd	nd
	Hexanal	C <sub>6</sub> H <sub>12</sub> O	28 $\pm$ 12	12 $\pm$ 12	34 $\pm$ 7.7	31 $\pm$ 15	30 $\pm$ 15
	(E)-1-hexanol	C <sub>6</sub> H <sub>14</sub> O	38 $\pm$ 14	44 $\pm$ 15	20 $\pm$ 6.5	11 $\pm$ 8.6	27 $\pm$ 14
<b>Fatty acid derived compounds</b>	Heptanal	C <sub>7</sub> H <sub>14</sub> O	14 $\pm$ 4.6	21 $\pm$ 2.5	36 $\pm$ 18	nd	2.4 $\pm$ 1.9
	Octanal	C <sub>8</sub> H <sub>16</sub> O	13 $\pm$ 3.3	41 $\pm$ 5.7	41 $\pm$ 31	nd	3.2 $\pm$ 3.2
	Nonanal	C <sub>9</sub> H <sub>18</sub> O	42 $\pm$ 21	93 $\pm$ 23	98 $\pm$ 77	15 $\pm$ 15	4.6 $\pm$ 2.9
	Decanal	C <sub>10</sub> H <sub>20</sub> O	92 $\pm$ 16	40 $\pm$ 26	71 $\pm$ 61	2.4 $\pm$ 2.4	2.0 $\pm$ 2.0
<b>Benzenoids</b>	Benzaldehyde	C <sub>8</sub> H <sub>8</sub> O <sub>2</sub>	10 $\pm$ 3.5	34 $\pm$ 9.1	28 $\pm$ 4.9	19 $\pm$ 19	46 $\pm$ 21
<b>Geranylgeranyl diphosphate pathway</b>	6-Methyl-5-hepten-2-one	C <sub>8</sub> H <sub>14</sub> O <sub>2</sub>	48 $\pm$ 8	20 $\pm$ 4.4	66 $\pm$ 41	45 $\pm$ 45	40 $\pm$ 37
	Geranyl acetone	C <sub>13</sub> H <sub>22</sub> O	21 $\pm$ 13	47 $\pm$ 29	24 $\pm$ 12	nd	3.2 $\pm$ 3.2

<b>Hemiterpene</b>	Isoprene	C <sub>5</sub> H <sub>8</sub>	52 ± 21	110 ± 19	48 ± 35	43 ± 17	69 ± 43
<b>Non-oxygenated monoterpenes</b>	Camphene	C <sub>10</sub> H <sub>16</sub>	nd	13 ± 5.3	nd	0.92 ± 0.92	4.4 ± 3.9
	Δ <sup>3</sup> -Carene	C <sub>10</sub> H <sub>16</sub>	nd	2.8 ± 2.8	58 ± 58	27 ± 19	80 ± 40
	p-Cymene	C <sub>10</sub> H <sub>16</sub>	nd	25 ± 17	9.5 ± 5.0	18 ± 14	6.2 ± 3.0
	Limonene	C <sub>10</sub> H <sub>16</sub>	134 ± 25	26 ± 12	31 ± 10	14 ± 3.5	22 ± 11
	β-Myrcene	C <sub>10</sub> H <sub>16</sub>	nd	nd	nd	8.6 ± 8.6	4.9 ± 4.7
	(E)-β-ocimene	C <sub>10</sub> H <sub>16</sub>	nd	99 ± 49	54 ± 51	37 ± 37	3.1 ± 2.8
	α-Pinene	C <sub>10</sub> H <sub>16</sub>	58 ± 21	69 ± 32	57 ± 19	5.0 ± 5.0	59 ± 30
	β-Pinene	C <sub>10</sub> H <sub>16</sub>	18 ± 7	12 ± 6.0	22 ± 6.5	3.2 ± 3.3	12 ± 6.5
	α-Phellandrene	C <sub>10</sub> H <sub>16</sub>	nd	nd	nd	0.16 ± 0.15	nd
	β-Phellandrene	C <sub>10</sub> H <sub>16</sub>	nd	4.3 ± 2.4	3.9 ± 2.4	2.4 ± 2.2	2.8 ± 1.4
	α-Terpinene	C <sub>10</sub> H <sub>16</sub>	11 ± 5	nd	0.15 ± 0.15	nd	nd
<b>Oxygenated monoterpenes</b>	(E)-Dihydrocarvone	C <sub>10</sub> H <sub>16</sub> O	12 ± 5	nd	nd	nd	nd
	Camphor	C <sub>10</sub> H <sub>16</sub> O	68 ± 11	nd	nd	nd	nd
	β-Cyclocytral	C <sub>10</sub> H <sub>16</sub> O	36 ± 16	nd	nd	nd	nd
	1,8-cineole	C <sub>10</sub> H <sub>18</sub> O	nd	0.49 ± 0.49	nd	nd	nd
	Linalool	C <sub>10</sub> H <sub>18</sub> O	32 ± 14	nd	nd	nd	nd
	α-Terpineol	C <sub>10</sub> H <sub>18</sub> O	18 ± 6	nd	nd	nd	nd
<b>Sesquiterpenes</b>	Cubebene	C <sub>15</sub> H <sub>24</sub>	26 ± 12	nd	nd	nd	nd
	(E)-β-Farnesene	C <sub>15</sub> H <sub>24</sub>	nd	40 ± 20	nd	5.1 ± 2.9	5.2 ± 2.7
	Longifolene	C <sub>15</sub> H <sub>24</sub>	nd	nd	nd	2.4 ± 2.4	nd
	Aromadendrene	C <sub>15</sub> H <sub>24</sub>	nd	nd	0.96 ± 0.96	nd	nd

nd: not detected