

Table S1. Volatile compounds released by differently infested cotton plants collected at the period from 17:00 PM to 21:00 PM. Volatile compounds collected from the headspace of control cotton plants (CK), plants infested with 1 miridae (1 bug), plants infested with 2 miridae (2 bugs), plants infested with 4 miridae (4 bugs), plants infested with 8 miridae (8 bugs). The values represent the mean percentages \pm SE of the peak area relative to the peak area of the internal standard. Letters following each value in the same row indicate significant differences between rice plant treatments based on one-way ANOVA followed Tukey HSD test ($P < 0.05$).

| Peak no. | Volatile | CK | 1 bug | 2 bugs | 4 bugs | 8bugs | p |
|----------|---|---------------------|----------------------|-----------------------|---------------------|---------------------|---------|
| 1 | ethylbenzene ¹ | 30.56 \pm 3.24b | 32.89 \pm 6.19b | 29.45 \pm 6.68b | 29.57 \pm 3.12b | 63.95 \pm 6.20a | P<0.05 |
| 2 | 1,3-xylene ¹ | 16.49 \pm 8.34ab | 24.26 \pm 7.73a | 22.60 \pm 3.22a | 9.35 \pm 0.91b | 14.34 \pm 0.85ab | P<0.05 |
| 3 | n-nonane ¹ | 67.56 \pm 9.66c | 69.36 \pm 0.92bc | 74.98 \pm 1.96bc | 78.96 \pm 1.20b | 102.7 \pm 5.11a | P<0.05 |
| 4 | α -pinene ² | 3.27 \pm 1.36a | 4.87 \pm 1.41a | 4.00 \pm 0.74a | 3.82 \pm 0.38a | 4.60 \pm 0.26a | P=0.194 |
| 5 | benzaldehyde ² | 14.45 \pm 4.71b | 10.66 \pm 1.93b | 31.38 \pm 5.01a | 28.95 \pm 3.10a | 13.15 \pm 1.98b | P<0.05 |
| 6 | (E)-2-hexenal ² | 15.88 \pm 1.66c | 15.32 \pm 0.56c | 27.96 \pm 1.51a | 21.76 \pm 2.26b | 6.73 \pm 1.15d | P<0.05 |
| 7 | β -myrcene ² | - | - | 8.32 \pm 3.03 | 7.18 \pm 1.72 | 1.13 \pm 0.58 | |
| 8 | 6-methyl-5-hepten-2-one ² | - | 19.87 \pm 5.53 | 14.86 \pm 8.62 | 11.05 \pm 1.78 | 12.65 \pm 1.29 | |
| 9 | decane ¹ | 57.76 \pm 9.72a | 54.45 \pm 4.01a | 65.55 \pm 3.79a | 62.19 \pm 2.68a | 63.18 \pm 11.98a | P=0.268 |
| 10 | octanal ² | 23.98 \pm 3.39b | 34.16 \pm 17.79b | 55.04 \pm 5.40a | 65.25 \pm 5.57a | 24.74 \pm 5.34b | P<0.05 |
| 11 | terpinene ¹ | - | 0.85 \pm 0.30 | 2.55 \pm 0.98 | 2.36 \pm 0.57 | 3.52 \pm 1.12 | |
| 12 | limonene ² | - | 2.02 \pm 0.95 | 4.59 \pm 0.70 | 3.76 \pm 0.31 | 2.24 \pm 0.90 | |
| 13 | (Z)-3-hexen-1-yl acetate ² | 11.08 \pm 3.40b | 9.24 \pm 2.07b | 44.02 \pm 24.24a | 33.56 \pm 2.16a | 10.96 \pm 1.73b | P<0.05 |
| 14 | (E)- β -ocimene ² | 7.99 \pm 2.06c | 16.62 \pm 5.81c | 13.16 \pm 6.55c | 78.08 \pm 18.30a | 50.64 \pm 7.03b | P<0.05 |
| 15 | acetophenone ² | 12.32 \pm 4.62a | 13.32 \pm 0.55a | 10.36 \pm 0.36a | 11.46 \pm 1.03a | 8.5 \pm 4.58a | P=0.231 |
| 16 | linalool oxide ² | - | 11.40 \pm 2.97 | 12.99 \pm 2.66 | 12.21 \pm 0.95 | 10.95 \pm 5.18 | |
| 17 | linalool ¹ | 19.91 \pm 0.75a | 17.11 \pm 0.81a | 20.57 \pm 2.05a | 19.60 \pm 2.31a | 17.72 \pm 1.53a | P=0.236 |
| 18 | nonanal ¹ | 91.08 \pm 20.38b | 87.85 \pm 24.74b | 207.69 \pm 28.14a | 209.92 \pm 11.89a | 79.45 \pm 13.81b | P<0.05 |
| 19 | DMNT ^{2,a} | 18.59 \pm 5.97c | 24.41 \pm 4.89bc | 21.42 \pm 5.23c | 40.28 \pm 2.00a | 30.63 \pm 3.30b | P<0.05 |
| 20 | hexenyl butyrate ² | - | 6.75 \pm 1.79 | 3.52 \pm 1.29 | 3.82 \pm 1.78 | 3.66 \pm 0.66 | |
| 21 | (4Z)-4-hexenyl butylate ³ | - | 11.29 \pm 1.20 | 79.22 \pm 11.14 | 72.76 \pm 9.38 | 12.34 \pm 3.02 | |
| 22 | dodecane ¹ | 355.28 \pm 75.04d | 408.65 \pm 82.49cd | 542.55 \pm 130.75bc | 623.25 \pm 26.62b | 763.16 \pm 82.99a | P<0.05 |
| 23 | decanal ¹ | 108.14 \pm 29.48b | 60.55 \pm 32.69bc | 219.93 \pm 41.90a | 235.25 \pm 43.93a | 38.30 \pm 14.75c | P<0.05 |
| 24 | (2E)-2-hexen-1-yl propanoate ³ | 7.01 \pm 2.09b | 13.60 \pm 3.24a | 11.99 \pm 1.18ab | 11.88 \pm 1.22ab | 15.61 \pm 4.08a | P<0.05 |

| | | | | | | | |
|----|---|--------------|-------------|--------------|--------------|-------------|---------|
| 25 | tridecane ¹ | 14.97±4.43a | 15.44±0.66a | 20.38±2.43a | 18.30±1.70a | 16.28±2.34a | P=0.056 |
| 26 | unknown | - | - | - | 10.70±1.18 | 10.29±4.25 | |
| 27 | (E)- β -caryophyllene ² | 26.64±9.32bc | 20.95±0.21c | 36.25±4.73a | 30.73±2.10ab | 1.25±0.39d | P<0.05 |
| 28 | (E)- α -caryophyllene ² | 15.78±5.09c | 9.37±5.06c | 40.75±8.91a | 29.78±1.04b | 8.65±3.17c | P<0.05 |
| 29 | α -farnesene ² | - | - | 20.59±3.91 | 19.35±0.99 | 4.15±1.12 | |
| 30 | (+)- δ -cadinene ² | - | - | 192.24±49.07 | 174.39±40.12 | 6.13±2.90 | |
| 31 | nerolidol ² | - | 1.24±1.09 | 12.17±2.20 | 10.87±1.22 | 2.95±2.56 | |

Table S2. Volatile compounds released by differently infested cotton plants collected at the period from 10:00 PM to 14:00 PM. Volatile compounds collected from the headspace of control cotton plants (CK), plants infested with 1 miridae (1 bug), plants infested with 2 miridae (2 bugs), plants infested with 4 miridae (4 bugs), plants infested with 8 miridae (8 bugs). The values represent the mean percentages \pm SE of the peak area relative to the peak area of the internal standard. Letters following each value in the same row indicate significant differences between rice plant treatments based on one-way ANOVA followed Tukey HSD test (P<0.05).

| Peak no. | Volatile | CK | 1 bug | 2 bugs | 4 bugs | 8bugs | p |
|----------|---------------------------------------|---------------|--------------|--------------|-------------|--------------|---------|
| 1 | ethylbenzene ¹ | 14.89±2.33c | 18.73±3.49bc | 15.97±4.00c | 24.11±2.87b | 31.24±2.21a | P<0.05 |
| 2 | 1,3-xylene ¹ | 7.41±2.49b | 7.09±0.68b | 7.06±1.75b | 10.06±1.55b | 15.25±5.05a | P<0.05 |
| 3 | n-nonane ¹ | 67.72±3.55d | 72.25±2.22cd | 76.41±3.64c | 87.14±6.02b | 94.95±4.43a | P<0.05 |
| 4 | α -pinene ² | 3.38±1.10a | 4.15±0.70a | 3.80±0.66a | 5.74±1.39a | 5.38±2.56a | P=0.151 |
| 5 | benzaldehyde ² | 16.26±2.39b | 19.73±4.54b | 16.92±1.64b | 37.56±4.39a | 17.63±7.42b | P<0.05 |
| 6 | (E)-2-hexenal ² | 16.36±1.14b | 8.36±3.22c | 17.68±4.49b | 24.79±2.38a | 6.43±2.49c | P<0.05 |
| 7 | β -myrcene ² | - | 4.94±1.17 | 4.83±1.32 | 6.86±1.05 | 2.97±0.72 | |
| 8 | 6-methyl-5-hepten-2-one ² | 18.07±7.74a | 23.06±4.75a | 16.20±8.21a | 26.75±7.24a | 25.00±2.95a | P=0.157 |
| 9 | decane ¹ | 61.47±6.00b | 55.57±10.92b | 54.20±3.74b | 67.59±4.72b | 83.04±5.81a | P<0.05 |
| 10 | octanal ² | 42.95±11.76b | 51.20±19.61b | 57.19±19.41b | 97.05±4.91a | 41.28±22.80b | P<0.05 |
| 11 | terpinene ¹ | - | - | 2.74±0.64 | 4.04±0.28 | 1.74±0.70 | |
| 12 | limonene ² | - | 0.93±0.55 | 3.46±0.83 | 4.97±0.45 | 2.18±0.48 | |
| 13 | (Z)-3-hexen-1-yl acetate ² | 29.68±13.39bc | 15.77±3.89c | 44.12±10.80b | 87.86±3.18a | 100.36±7.72a | P<0.05 |

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|----|--|----------------|----------------|----------------|---------------|---------------|---------|
| 14 | (<i>E</i>)- β -ocimene ² | 11.80±2.90b | 30.51±17.83b | 14.95±7.23b | 93.47±10.52a | 124.38±48.90a | P<0.05 |
| 15 | acetophenone ² | 11.15±1.52a | 7.94±1.25a | 11.31±0.87a | 11.07±0.65a | 9.47±2.65a | P=0.052 |
| 16 | linalool oxide ² | - | 9.63±1.47 | 12.10±3.16 | 15.31±1.66 | 8.68±3.02 | |
| 17 | linalool ¹ | 21.73±2.25ab | 16.45±1.41b | 19.27±3.16ab | 22.84±4.83a | 6.10±2.25c | P<0.05 |
| 18 | nonanal ¹ | 157.81±30.19bc | 100.91±27.15cd | 194.23±48.92b | 320.02±23.65a | 74.05±36.42d | P<0.05 |
| 19 | DMNT ^{2,a} | 29.17±10.29b | 29.65±4.47b | 18.43±4.29c | 58.14±2.66a | 45.81±17.75ab | P<0.05 |
| 20 | hexenyl butyrate ² | - | 2.66±0.86 | 3.61±1.57 | 5.75±1.47 | 6.50±4.46 | |
| 21 | (4 <i>Z</i>)-4-hexenyl butylate ³ | 67.90±16.74b | 65.76±10.49b | 79.80±25.01b | 118.52±24.55a | 21.10±11.00c | P<0.05 |
| 22 | dodecane ¹ | 530.14±117.92a | 471.67±108.98a | 602.80±151.50a | 427.29±15.75a | 552.72±63.74a | P=0.185 |
| 23 | decanal ¹ | 232.76±67.27b | 250.05±8.3b | 249.40±99.78b | 386.49±94.04a | 32.10±18.28c | |
| 24 | (2 <i>E</i>)-2-hexen-1-yl propanoate ³ | 8.16±1.84b | 9.57±2.23b | 14.11±5.00ab | 16.74±2.54a | 9.35±2.83b | P<0.05 |
| 25 | tridecane ¹ | 11.38±3.44b | 13.22±3.12b | 13.16±1.76b | 13.27±1.13b | 36.56±11.34a | P<0.05 |
| 26 | unknown | - | - | 3.31±0.94 | 6.94±2.00 | 9.82±2.83 | |
| 27 | (<i>E</i>)- β -caryophyllene ² | 19.84±7.60c | 23.38±2.15bc | 31.05±5.74b | 43.00±1.07a | 1.22±0.74d | P<0.05 |
| 28 | (<i>E</i>)- α -caryophyllene ² | - | 9.40±5.64 | 33.61±5.53 | 44.66±1.96 | 6.70±2.65 | |
| 29 | α -farnesene ² | - | - | 14.82±4.32 | 26.98±2.02 | 3.68±1.89 | |
| 30 | (+)- δ -cadinene ² | - | - | 175.75±37.18 | 242.55±15.78 | 20.58±6.78 | |
| 31 | nerolidol ² | - | 4.49±0.64 | 13.97±1.26 | 14.82±4.19 | 37.06±13.32 | |

"1" comparing their retention times and mass spectra to authentic standards;

"2" comparing their mass spectra and retention indices calculated relatively to the C8-C20 n-alkanes on the DB-5 column;

"3" comparing their mass spectra in the mass spectra library NIST 2014;

"a" DMNT = (3*E*)-4,8-dimethyl-1,3,7-nonatriene;

"-" indicates that the concentration of the volatile was below the detection level;

"unknown" were the compounds that were not confirmed with authentic standards.