**Supplementary Table 1**: Peak Characteristics of ethylene production in tobacco in response to *Pseudomonas syringae* pathovars

| | $C_2H_4$-I | | | $C_2H_4$-II | | | |
|---|---|---|---|---|---|---|---|
| Pathogen Genotype | Mean Peak Height (nmol $h^{-1}$ $gfwt^{-1}$) | Mean Peak Position (hpi) | Peak Area | Maximum height (nmol $h^{-1}$ $gfwt^{-1}$) | Area | Mean $C_2H_4$ I/ $C_2H_4$-II Height ratio | Mean $C_2H_4$ I/ $C_2H_4$-II area ratio |
| *Psph* | 31.1 (1.0) | 1.9 ( 0.1) | 60. 1(4.2) | 48.8 (2.5) | 214.3 (11.1) | 0.7 (0.3) | 0.2 (0.1) |
| *Pt* | 33.0 (1.5) | 1.7 ( 0.1) | 64.2 (3.2) | 4.9 (1.5) | 21.0 (2.9) | 5.7 (1.0) | 1.9 (0.6) |
| *Psph hrpA* | 29.5 (1.4) | 1.9 ( 0.2) | 61.8 (1.2) | 4.8 (0.5) | 18.0 (0.9) | 7.7 (1.1) | 3.2 (0.6) |
| *Pt avrRpm1* | 37.7 (3.1) | 2.1( 0.3) | 72.6 (8.5) | 34.6 (1.7) | 264.6 (6.5) | 1.0 (0.1) | 0.2 (0.1) |

*Psph* = *Pseudomonas syringae* pathovar *phaseolicola; Pt* = *Pseudomonas syringae* pathovar *tabaci;*

Measurements were carried out as follows (also see diagram below). $C_2H_4$ -I denotes the first transient rise in ethylene levels. Mean peak heights (maximal detected production of ethylene ($C_2H_4$ nmol $h^{-1}$ $gfwt^{-1}$) and the period until maximal production (mean peak position; hpi = hours post Inoculation) are given. The mean peak area (integration) for $C_2H_4$-I is given. $C_2H_4$-II, indicates a secondary, transient rise in ethylene production. Mean maximum heights ( maximal ethylene production) are given. $C_2H_4$-II "peaks" were often incomplete, hence areas were calculated based on the area until maximal production which was doubled to give an approximation of total area, on the assumption that the peak was approximately symmetric. Often no clear$C_2H_4$-II was detected (see main text) . In such instances, an approximation of $C_2H_4$ -II was deduced by comparison with controls inoculations where $C_2H_4$-II was evident. The timing of $C_2H_4$-II varied between replicate experiments (see main text) therefore its temporal parameters were not be analysed.

Each calculation represented the mean of at least 6 replicates.

ANOVA indicated that the none of the parameters associated with $C_2H_4$-I differed significantly ($P$ = 0.623) following inoculation with any bacterial strain . For $C_2H_4$-II, all parameters differed significantly when considering all strains ($P$ < 0.001).but not when comparing *Psph* and *Pt avrRpm1.*