Genomic and metabolic comparison with Dickeya
dadantii 3937 reveals the emerging Dickeya solani potato
pathogen to display distinctive metabolic activities and
T5SS/T6SS-related toxin repertoire
Jacques Pedron, Samuel Mondy, Yannick Raoul Des Essarts, Frederique van
Gijsegem, Denis Faure

To cite this version:
Jacques Pedron, Samuel Mondy, Yannick Raoul Des Essarts, Frederique van Gijsegem, Denis Faure. Genomic and metabolic comparison with Dickeya dadantii 3937 reveals the emerging Dickeya solani potato pathogen to display distinctive metabolic activities and T5SS/T6SS-related toxin repertoire. BMC Genomics, BioMed Central, 2014, 15, 10.1186/1471-2164-15-283. hal-02632855

HAL Id: hal-02632855
https://hal.inrae.fr/hal-02632855
Submitted on 27 May 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.
| D. solani 3337 gene (ID) | Identity (%) | Cter motif identity (%) |
|--------------------------|--------------|-------------------------|
| **hecA2 (0501)**         | D. dadantii 3937 77 | 29                      |
|                          | D. chrysanthemi 1591 66 | 29                      |
|                          | D. paradisiaca 703 59 |                          |
|                          | D. zeae 586 64 |                          |
| **cdi (0409)**           | D. dadantii 3937 73 | 33                      |
|                          | D. chrysanthemi 1591 67 | 32                      |
|                          | D. paradisiaca 703 49 |                          |
|                          | D. zeae 586 62 |                          |
| **hcpA (3404)**          | D. dadantii 3937 99 |                          |
|                          | D. chrysanthemi 1591 98 |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 97 |                          |
| **vgrGA (3403)**         | D. dadantii 3937 98 |                          |
|                          | D. chrysanthemi 1591 97 |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 97 |                          |
| **rhsA (3401)**          | D. dadantii 3937 91 | 100                     |
|                          | D. chrysanthemi 1591 93 | 13                      |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 90 | 16                      |
| **rhsA (3400)**          | D. dadantii 3937 100 |                          |
|                          | D. chrysanthemi 1591 none |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 none |                          |
| **hcpB (4345)**          | D. dadantii 3937 99 |                          |
|                          | D. chrysanthemi 1591 98 |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 98 |                          |
| **vgrGB (4346)**         | D. dadantii 3937 88 |                          |
|                          | D. chrysanthemi 1591 88 |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 89 |                          |
| **rhsB (4348)**          | D. dadantii 3937 none* |                          |
|                          | D. chrysanthemi 1591 none* |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 none* |                          |
| **rhsIB (4349)**         | D. dadantii 3937 none* |                          |
|                          | D. chrysanthemi 1591 none* |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 none* |                          |
| **hcpC (3992)**          | D. dadantii 3937 99 |                          |
|                          | D. chrysanthemi 1591 98 |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 98 |                          |
| **vgrGC (3993)**         | D. dadantii 3937 91 |                          |
|                          | D. chrysanthemi 1591 94 |                          |
|                          | D. paradisiaca 703 none |                          |
|                          | D. zeae 586 93 |                          |
| **rhsC (4000)**          | D. dadantii 3937 90 | 24                      |
|                          | D. chrysanthemi 1591 none* |                          |
|          |                 |     |     |
|----------|----------------|-----|-----|
|          | $D. \text{paradisiaca}$ 703 | none|     |
|          | $D. \text{zeae}$ 586 | 85  | 97  |
| rhsIC (4001) | $D. \text{dadantii}$ 3937 | none*|     |
|          | $D. \text{chrysanthemi}$ 1591 | none*|     |
|          | $D. \text{paradisiaca}$ 703 | none|     |
|          | $D. \text{zeae}$ 586 | 95  |     |

1 none: no homologous gene (threshold blastp evalue : $10^{-5}$). *: gene present but not homologous.
2 for toxin encoding genes ($\text{hecA2, cdl, rhsABC}$). # / #: when variation is restricted to the C-ter motif (C-ter toxin domain), number of conserved amino acid in the C-ter motif. When no value is indicated, the variation is not restricted to the C-ter.