Supplementary material

The Supplement contains 2 supplementary figures and 5 supplementary tables.

Figures

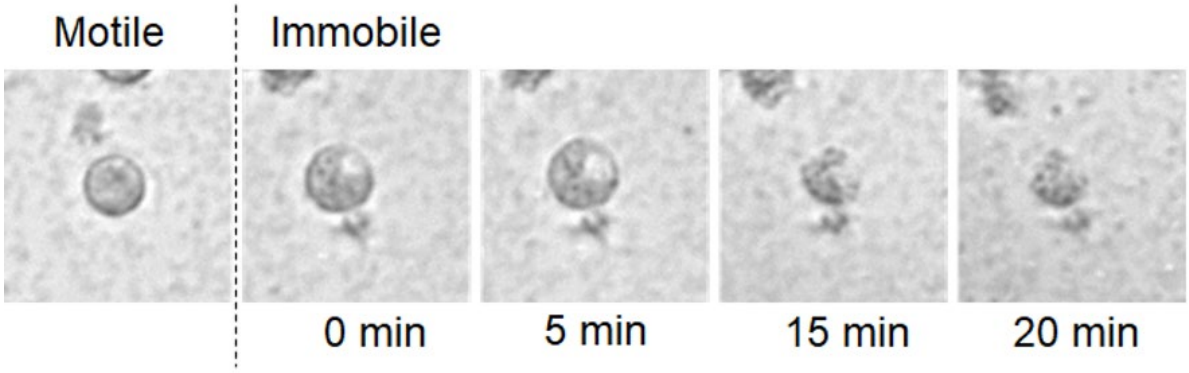

Figure S1 Time lapse images of the immobilization and degradation of a zoospore exposed to R32 in a bacterial suspension. Pictures were taken every 5 minutes using a Cytation5 plate reader (Biotek, United States).

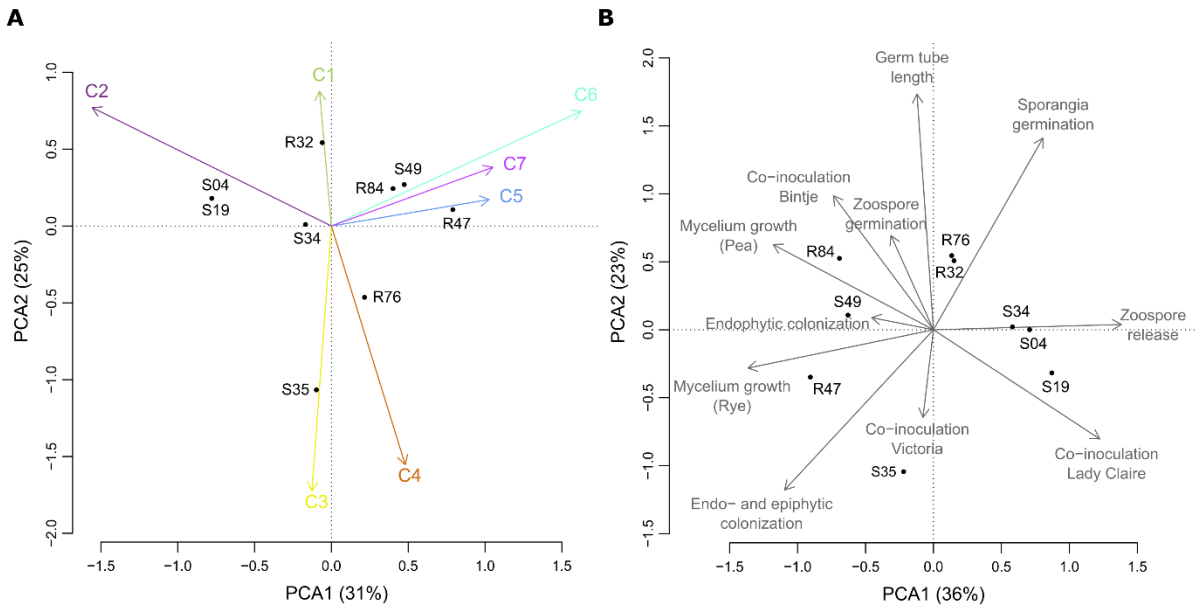

Figure S2 (A) PCA analysis on the clusters of co-occurring genes. (B) PCA analysis on the phenotypic data of the *in vitro* experiments, plant colonization experiments and co-inoculation experiments.

Tables

Table S1: NCBI data submission information. Bioproject, Biosample, SRA and Genbank accession are given for each strain.

Strain	Bioproject	Biosample	SRA acc.#	GenBank acc. #
PspR32	PRJNA355625	SAMN06234845	SRS1925888	CP019396
PchIR47	PRJNA355625	SAMN06241861	SRS1929209	CP019399
PspR76	PRJNA355625	SAMN06242059	SRS1932041	CP019428
PspR84	PRJNA355625	SAMN06242059	SRS1932279	CP019426
PspS04	PRJNA355625	SAMN06246385	SRS1932352	CP019427
PspS19	PRJNA355625	SAMN06234846	SRS1925892	CP019397
PspS34	PRJNA355625	SAMN06241450	SRS1929109	CP019398
PspS35	PRJNA355625	SAMN06241957	SRS1932016	CP019431
PspS49	PRJNA355625	SAMN06245871	SRS1932214	CP019432

Table S2: Strains used for construction of the phylogenetic tree and their accession numbers

No.	Strain	Accession
1.	*Pseudomonas aeruginosa* PA7	NC_009656
2.	*Pseudomonas aeruginosa* PACS2	NZ_AAQW01000001
3.	*Pseudomonas aeruginosa* PAO1	NC_002516
4.	*Pseudomonas alkylphenolia* strain KL28	CP009048
5.	*Pseudomonas antarctica* strain PAMC 27494	CP015600
6.	*Pseudomonas azotoformans* strain S4	CP014546
7.	*Pseudomonas brassicacearum* subsp. brassicacearum NFM421	NC_015379
8.	*Pseudomonas brenneri strain* BS2771	NZ_LT629800
9.	*Pseudomonas chlororaphis* subsp. aurantiaca strain JD37	NZ_CP009290
10.	*Pseudomonas chlororaphis* subsp. aureofaciens 30-84	NZ_CM001559
11.	*Pseudomonas chlororaphis* O6	NZ_CM001490
12.	*Pseudomonas chlororaphis* strain PA23	NZ_CP008696
13.	*Pseudomonas chlororaphis* strain PCL1606	NZ_CP011110
14.	*Pseudomonas corrugata* strain RM1-1-4	NZ_CP014262
15.	*Pseudomonas fluorescens* A506	NC_017911
16.	*Pseudomonas fluorescens* BBc6R8	NZ_AKXH00000000
17.	*Pseudomonas fluorescens* strain DSM 50090	LHVP01000000
18.	*Pseudomonas fluorescens* F113	CP003150
19.	*Pseudomonas fluorescens* Pf0-1	NC_007492

20.	*Pseudomonas fluorescens* SBW25	AM181176
21.	*Pseudomonas fluorescens* SS101	NZ_CM001513
22.	*Pseudomonas fluorescens* strain UK4	NZ_CP008896
23.	*Pseudomonas granadensis* strain LMG 27940	LT629778
24.	*Pseudomonas koreensis* strain D26	CP014947
25.	*Pseudomonas lini* strain BS3782	LT629746
26.	*Pseudomonas mandelii* 36MFCvi	NZ_KB906353
27.	*Pseudomonas mandelii* JR-1	CP005960
28.	*Pseudomonas moraviensis* strain BS3668	LT629788
29.	*Pseudomonas poae* RE*1-1-14	NC_020209
30.	*Pseudomonas protegens* CHA0	CP003190
31.	*Pseudomonas protegens* Pf-5	NC_004129
32.	*Pseudomonas psychrophila* strain BS3667	NZ_LT629795
33.	*Pseudomonas putida* BIRD-1	NC_017530
34.	*Pseudomonas putida* H8234	NC_021491
35.	*Pseudomonas putida* KT2440	NC_002947
36.	*Pseudomonas putida* ND6	NC_017986
37.	*Pseudomonas putida* S16	NC_015733
38.	*Pseudomonas putida* W619	NC_010501
39.	*Pseudomonas reinekei* strain BS3776	NZ_LT629709
40.	*Pseudomonas sp.* 20_BN	NZ_CCSF01000001

41.	*Pseudomonas sp.* A3	CP014870
42.	*Pseudomonas sp.* CMR5c	NZ_LHUY00000000
43.	*Pseudomonas sp.* UW4	NC_019670
44.	*Pseudomonas sp.* Z003-0.4C(8344-21)	LT629756
45.	*Pseudomonas stutzeri* A1501	NC_009434
46.	*Pseudomonas syringae* pv. syringae B728a	NC_007005
47.	*Pseudomonas syringae* pv. tomato str. DC3000	NC_004578
48.	*Pseudomonas veronii* 1YdBTEX2	LT599583
49.	*Azotobacter vinelandii* DJ	NC_012560.1

Tables S3 to S5, please see separate Excel files

Table S3: The list of genes from each of the nine genomes including their annotation obtained from NCBI, and COG categories, additional functional annotation information from interproscan and eggnog.

Table S4: The first table contains to the list of genes and corresponding reference protein sequences and locus_tags of the homologs found in the nine *Pseudomonas* strains. The reference protein sequences were searched against the genomes of the nine *Pseudomonas* strains using blastp (v 2.2.30+) (Altschul *et al.*, 1990). Only the best matching hit satisfying certain threshold parameters (e-value ≤ 1e-5, percentage identity ≥ 50% and query coverage ≥ 50%) was taken as homolog in each of the nine *Pseudomonas* strains. The second table contains the genes belonging to putative R-pyocins found between the *mutS* and *cinA* genes for each strain.

Table S5: List of genes and corresponding locus tags positively correlated to mycelial growth inhibition, plant colonization and inhibition of sporangia germination. For mycelial growth inhibition, all genes present in at least four of the five active strains (R32, R47, R84, S35 and S49) or present in all five active strains and R76 or S34 are listed.

Reference

Altschul, S.F., Gish, W., Miller, W., Myers, E.W., and Lipman, D.J. (1990) Basic local alignment search tool. *J. Mol. Biol.* **215**: 403–410.