

**TABLE S1.** Primers used in this study

| Specificity                         | Primer                   | Sequence (5'–3')  | T <sub>a</sub><br>°C | Reference  |
|-------------------------------------|--------------------------|---|----------------------|------------|
| <i>Bacteria</i>                     | F984GC<br>R1378          | GC-clamp <sup>a</sup> -AACGCGAAGAACCTTAC<br>CGGTGTGTACAAGGCCCGGGAACG            | 53                   | (1)        |
| <i>Bacteria</i>                     | F27<br>R1494             | AGAGTTTGATCMTGGCTCAG<br>CTACGGYTACCTTGTTACGAC                                   | 56                   | (2)<br>(3) |
| <i>Bacteria</i>                     | R1492                    | TACGGYTACCTTGTTACGACT   | 56                   | (2)        |
| <i>Bacteria</i>                     | V3F<br>V4R               | ACTCCTACGGGAGGCAG<br>TACNVRRGHTHTCTAATYC  | 44                   | (4)        |
| <i>Alpha-<br/>proteobacteria</i>    | F203 $\alpha$            | CCGCATACGCCCTACGGGGGAAAGATTT<br>AT  | 56                   | (5)        |
| <i>Beta-<br/>proteobacteria</i>     | F948 $\beta$             | CGCACAAGCGGTGGATGA  | 64                   | (6)        |
| <i>Actino-<br/>bacteriales</i>      | F243 <sub>HGC</sub>      | GGATGAGCCCGCGGCCTA  | 63                   | (1)        |
| <i>Entero-<br/>bacteriaceae</i>     | F234<br>R1423            | GATGWRCCCRKATGGGA<br>AKCTAMCTRCTTCTTTTGCAA                                      | 57                   | (7)        |
| <i>Pseudomonas</i>                  | F311Ps<br>R1459Ps        | CTGGTCTGAGAGGATGATCAGT<br>AATCACTCCGTGGTAACCGT                                  | 63                   | (8)        |
| <i>Bacillus</i> and<br>related taxa | BacF                     | GGGAAACCGGGGCTAATACCGGAT  | 65                   | (9)        |
| <i>Fungi</i>                        | ITS1FG<br>C ITS4<br>ITS2 | GC-clamp-CTTGGTCATTTAGAGGAAGTAA<br>TCCTCCGCTTATTGATATGC<br>GCTGCGTTCTTCATCGATGC | 55                   | (10)       |

<sup>a</sup> 5' GC-clamp CGCCCGGGGCGCGCCCGGGCGGGGCGGGGGCACGGGGGG

**TABLE S2.** Statistical analysis of the effect of soil biota on fertility of *M. hapla* feeding on tomato planted in infested soils

| Dependent variable | Significance of fixed effects <sup>a</sup>                 |                                      |                 |
|--------------------|--|--------------------------------------|-----------------|
|                    | soil   | sterilized                           | soil*sterilized |
| logGalls           | $P=0.015$  | $P<0.001$                            | $P=0.070$       |
| logEggmasses       | $P=0.055$  | $P<0.001$                            | $P=0.096$       |
| logEggs            | $P<0.001$  | $P<0.001$                            | $P<0.001$       |
| logEggs            | $P<0.001$ with sterilized=0<br>$P=0.044$ with sterilized=1 | $P<0.002$ with<br>soil=Kw, Go, or Gb | not applicable  |
| fecundity          | $P=0.003$  | $P<0.001$                            | $P=0.097$       |

<sup>a</sup> Data and statistical analysis by SAS package 9.3:

```

data M_hapla;
input block soil$ sterilized galls eggmasses eggs; /* per gram root freshweight*/
datalines;
1 Kw 0 26.1 19.9 3569.7
2 Kw 0 6.2 4.0 1968.7
3 Kw 0 14.3 10.1 1204.5
4 Kw 0 18.7 14.1 2145.9
5 Kw 0 3.8 1.0 1085.6
6 Kw 0 23.3 8.6 3506.5
7 Kw 0 5.7 3.7 1824.8
8 Kw 0 23.9 20.5 2424.2
1 Kw 1 45.6 38.6 32362.2
2 Kw 1 37.1 32.8 32861.9
3 Kw 1 37.8 32.4 25784.0
4 Kw 1 37.8 30.1 29014.1
5 Kw 1 31.2 25.9 26210.2
6 Kw 1 49.9 48.1 44296.4
7 Kw 1 32.5 31.8 30723.2
8 Kw 1 13.4 12.5 26215.0
1 Go 0 23.6 14.2 4829.7
2 Go 0 34.6 28.7 20323.7
3 Go 0 24.5 11.0 7300.6
4 Go 0 27.9 18.5 7541.0
5 Go 0 27.8 17.9 15363.6
6 Go 0 31.5 21.5 17770.4
7 Go 0 25.2 20.7 3952.9
8 Go 0 34.2 24.3 6818.2
1 Go 1 28.3 25.8 25055.9
2 Go 1 43.6 35.1 32651.0
3 Go 1 40.9 31.1 27985.5
4 Go 1 13.8 11.9 13071.9
5 Go 1 39.0 33.5 33246.5
6 Go 1 34.3 27.4 28133.0
7 Go 1 63.9 50.0 37230.2
8 Go 1 65.0 50.6 35150.5
1 Gb 0 9.1 8.1 2673.9
2 Gb 0 17.0 17.9 9242.2
3 Gb 0 7.8 2.0 6736.8
4 Gb 0 15.7 8.1 7037.0
5 Gb 0 12.5 2.3 10242.8
6 Gb 0 19.4 12.7 7870.0
7 Gb 0 17.5 12.6 5909.5
8 Gb 0 29.9 24.0 14403.0
1 Gb 1 21.3 17.2 29278.6
2 Gb 1 40.4 35.1 43593.3
3 Gb 1 48.6 35.1 38557.2
4 Gb 1 33.0 22.1 23832.9
5 Gb 1 35.2 31.9 45328.3

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6 Gb 1      42.2  30.8  31615.6
7 Gb 1      31.6  27.8  50319.1
8 Gb 1      34.6  30.3  53750.7
;
data M_hapla; set M_hapla; /* log transformation */
fecundity = log(eggs / eggmasses);
logGalls= log(galls); logEggmasses= log(eggmasses); logEggs=log(eggs);

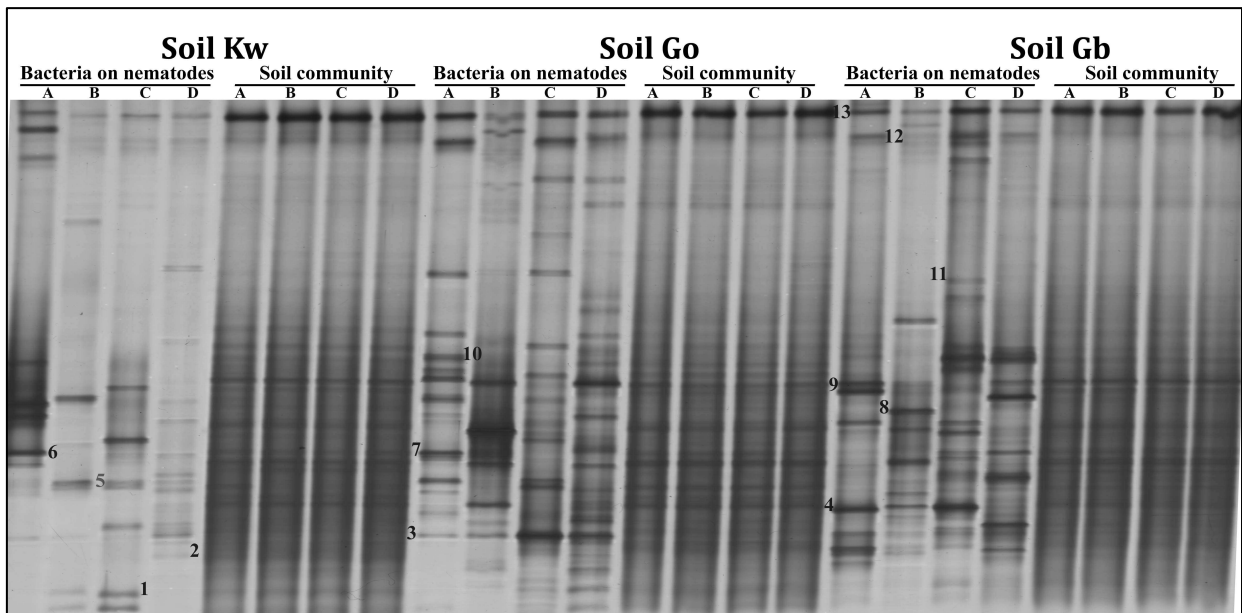
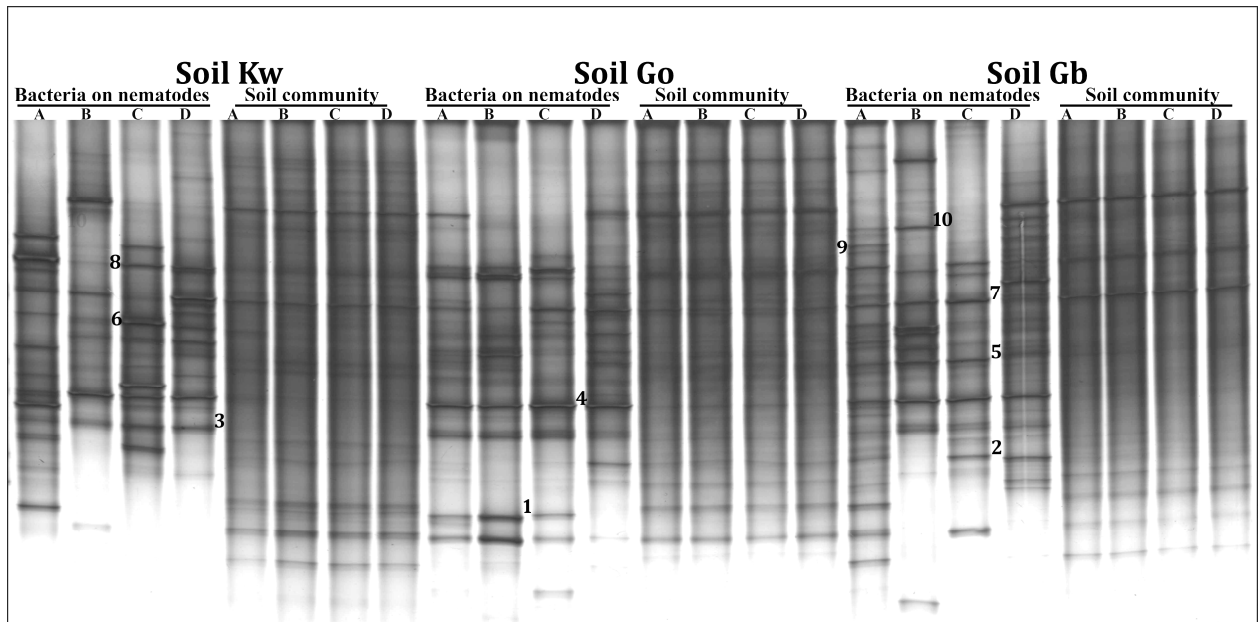
/* General tests */
proc mixed data=M_hapla; /* Effect of soil and soil sterilization on gall no. */
class block soil sterilized;
model logGalls = soil sterilized soil*sterilized / ddfm=kr; random block;
proc mixed data=M_hapla; /* Effect of soil and soil sterilization on eggmass no. */
class block soil sterilized;
model logEggmasses = soil sterilized soil*sterilized / ddfm=kr; random block;
proc mixed data=M_hapla; /* Effect of soil and soil sterilization on eggs no. */
class block soil sterilized;
model logEggs = soil sterilized soil*sterilized / ddfm=kr; random block;
proc mixed data=M_hapla; /* Effect of soil and sterilization on eggs per eggmass */
class block soil sterilized;
model fecundity = soil sterilized soil*sterilized / ddfm=kr; random block;

/* Tukey-Kramer tests for sterilized and native soils separately: */
proc sort data=M_hapla; by sterilized soil block;
proc mixed data=M_hapla; by sterilized; /* difference between soils in gall no. */
class block soil;
model logGalls = soil / ddfm=kr; random block;
lsmeans soil / ADJUST=TUKEY;
proc mixed data=M_hapla; by sterilized; /* egg masses compared between soils */
class block soil;
model logEggmasses= soil / ddfm=kr; random block;
lsmeans soil / ADJUST=TUKEY;
proc mixed data=M_hapla; by sterilized; /* no. of eggs compared between soils */
class block soil;
model logEggs = soil / ddfm=kr; random block;
lsmeans soil / ADJUST=TUKEY;
proc mixed data=M_hapla; by sterilized; /* fecundity compared between soils */
class block soil;
model fecundity = soil / ddfm=kr; random block;
lsmeans soil / ADJUST=TUKEY;
proc sort data=M_hapla; by soil sterilized block;
proc mixed data=M_hapla; by soil; /* For verification of general effects after */
class block sterilized; /* a significant interaction soil*sterilized */
model logEggs = sterilized / ddfm=kr; random block;
run;

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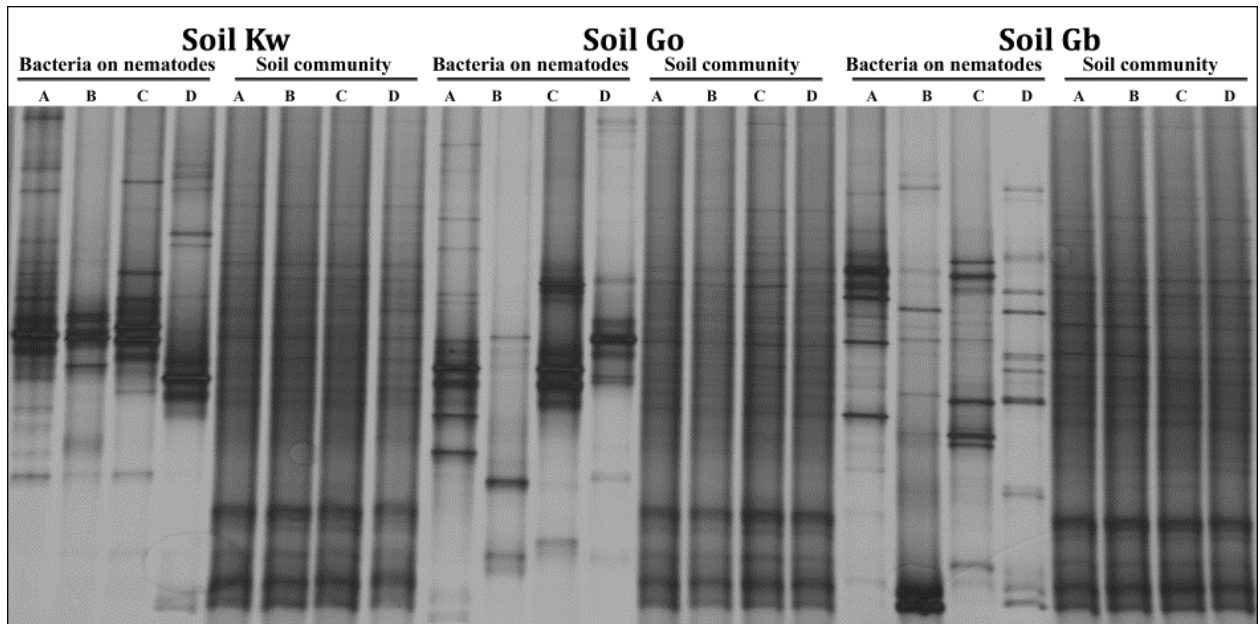
**Fig. S1.** PCR-DGGE profiles of 16S rRNA genes of bacterial subgroups amplified in nested PCR from DNA of *M. hapla* juveniles from three arable soils (Kw, Go, Gb), and from total soil DNA. Ribotypes are marked that were enriched in nematode samples and characterized by sequencing (Table 2).

A) PCR-DGGE for “*Bacillus*” (based on specificity of primer BacF):

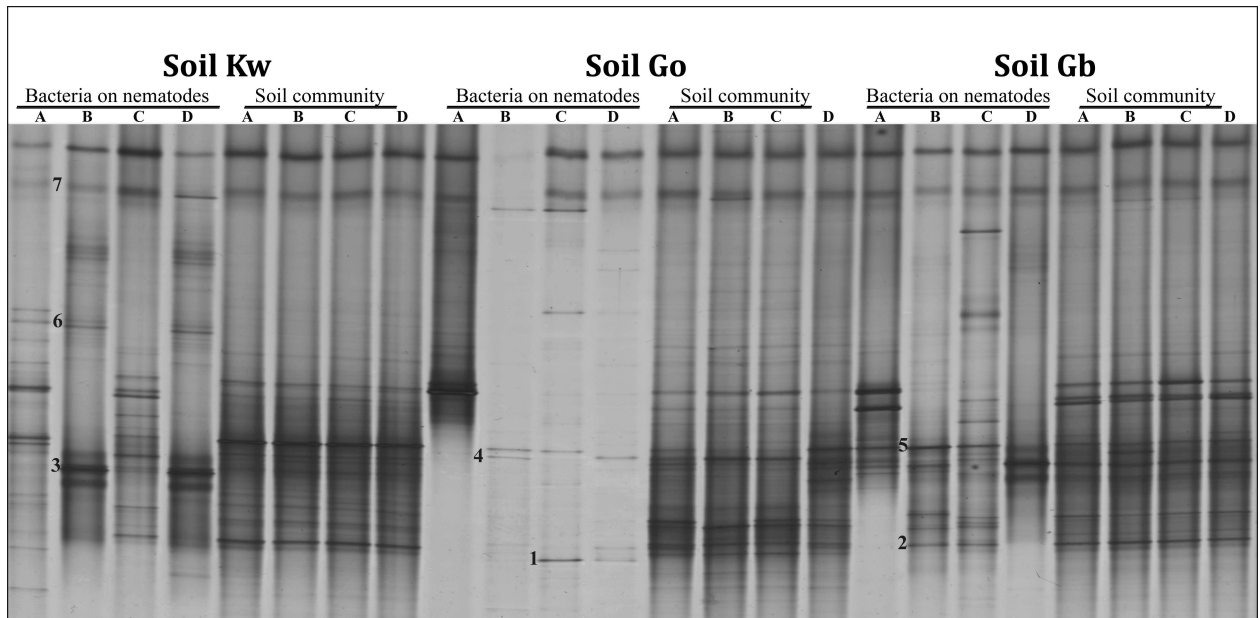


B) PCR-DGGE for *Alphaproteobacteria* (based on specificity of primer F203 $\alpha$ ):

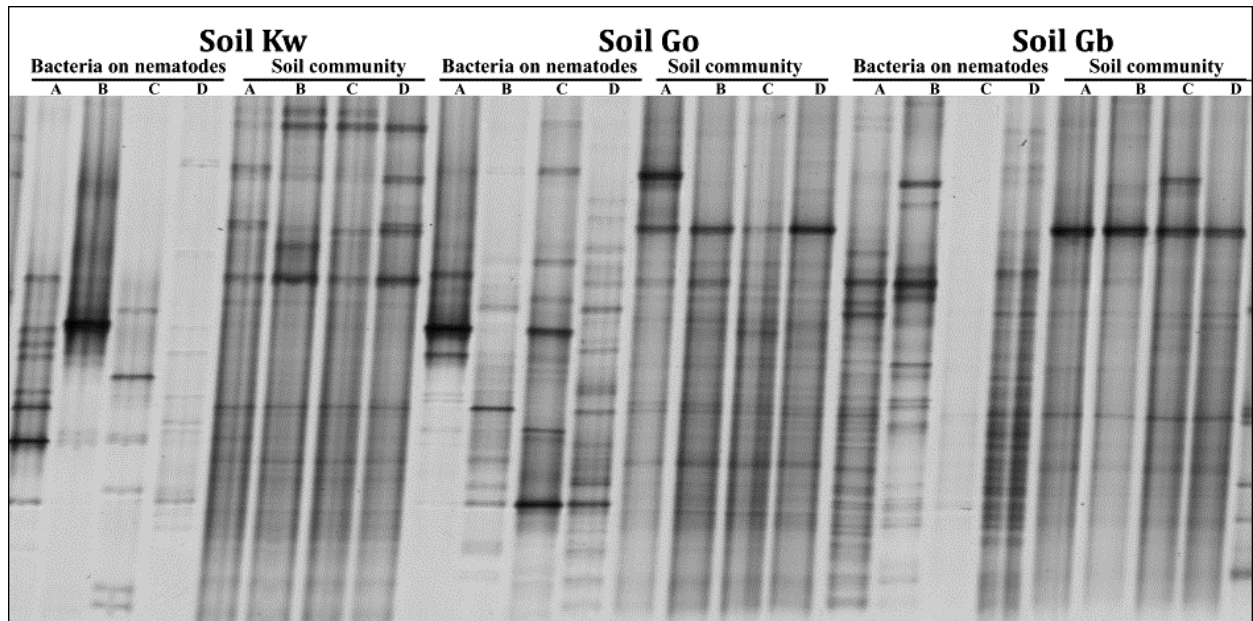
C) PCR-DGGE for *Betaproteobacteria* (based on specificity of primer F948 $\beta$ ):



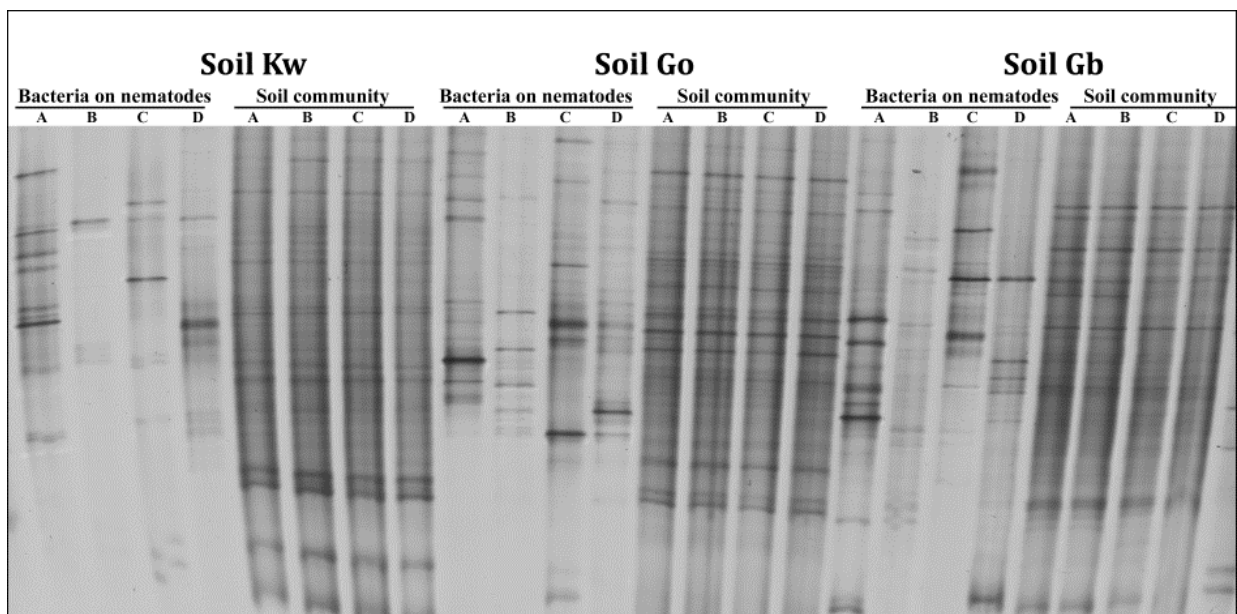
D) PCR-DGGE for *Pseudomonas* (based on specificity of primers F311Ps / R1459Ps):



E) PCR-DGGE for *Enterobacteriaceae* (based on specificity of primers F234 / R1423):



F) PCR-DGGE for *Actinobacteriales* (based on specificity of primer F243HGC):



**BlastN hits with NCBI GenBank and UNITE species hypothesis (SH) database of representative (RepS) and reference ITS sequences (RefS), v.6 2014/1/15**

>Fungi DGGE band no. 1

EU400587 *Malassezia restricta* isolate HA414, Basidiomycota, Ustilaginomycotina, Exobasidiomycetes, Malasseziales, Malasseziaceae, score 582 bits(315), e-value 4e-163, identities 324/328(99%), gaps 1

RepS SH206219.06FU, % identity 99.22, e-value 6e-127, bit score 452, *Malassezia restricta*

>Fungi DGGE band no. 2

GU017496 *Aspergillus penicillioides* isolate KH00256, Ascomycota, Pezizomycotina, Eurotiomycetes, Eurotiomycetidae, Eurotiales, Trichocomaceae, score 544 bits(294), e-value 2e-151, identities 297/298(99%), gaps 1

RepS SH213198.06FU, % identity 100.00, e-value 7e-132, bit score 468, *Aspergillus penicillioides*

>Fungi DGGE band no. 3

AB105353 *Cryptococcus pseudolongus*, Basidiomycota, Agaricomycotina, Tremellomycetes, Tremellales, score 320 bits(173), e-value 2e-84, identities 173/173(100%), gaps 0

RepS SH198505.06FU, % identity 100.0, e-value 5e-68, bit score 255, uncultured Basidiomycota

>Fungi DGGE band no. 4

JX501299 *Chaetomium globosum* strain ATCC6205, Ascomycota, Sordariomycetes, Sordariomycetidae, Sordariales, Chaetomiaceae, Score 503 bits(272), e-value 3e-139, identities 283/288(98%), gaps 2

HM537056 Fungal endophyte sp. g79, score 503 bits(272), e-value 3e-139, identities 283/288(98%), gaps 2

RepS SH234979.06FU, % identity 97.8, e-value 3e-105, bit score 379, *Chaetomium globosum*

>Fungi DGGE band no. 5

FJ439584 *Arthopyreniaceae* sp. GMG\_P1, Ascomycota, Pezizomycotina, Dothideomycetes, Pleosporomycetidae, Pleosporales, Arthopyreniaceae, score 508 bits(275), e-value 6e-141, identities 275/275(100%), gaps 0

RepS SH011458.06FU, % identity 99.5, e-value 1e-103, bit score 374, *Arthopyreniaceae*

>Fungi DGGE band no. 6

AM901702 *Eurotium* sp. BF106, Ascomycota, Pezizomycotina, Eurotiomycetes, Eurotiomycetidae, Eurotiales, Trichocomaceae, score 475 bits(257), e-value 6e-131, identities 257/257(100%), gaps 0

RepS SH236882.06FU, % identity 100.0, e-value 1e-95, bit score 347, *Eurotium repens*

RepS SH236881.06FU, % identity 100.0, e-value 1e-95, bit score 347, *Paecilomyces*

>Fungi DGGE band no. 7

JX501311 *Ganoderma applanatum* strain BL26, Basidiomycota, Agaricomycetes, Polyporales, Ganodermataceae, score 582 bits(315), e-value 4e-163, identities 318/319(99%), gaps 1

RepS SH203388.06FU, % identity 100.0, e-value 3e-130, bit score 462, uncultured *Ganoderma*

>Fungi DGGE band no. 8

AJ300335 *Cladosporium cladosporioides* strain CBS 169.54 (identical to GU594746 *Cladosporium cucumerinum* strain 870381), Ascomycota, Pezizomycotina, Dothideomycetes, Dothideomycetidae, Capnodiales, Davidiellaceae, mitosporic Davidiellaceae, score 501 bits(271), e-value 1e-138, identities 271/271(100%), gaps 0

RepS SH005140.06FU, % identity 97.7, e-value 4e-103, bit score 372, uncultured soil fungus

>Fungi DGGE band no. 9

JX164064 *Davidiella* sp. FA-7B, Ascomycota, Dothideomycetes, Dothideomycetidae, Capnodiales, Davidiellaceae, score 497 bits(269), e-value 1e-137, identities 271/272(99%), gaps 0

RepS SH005107.06FU, % identity 100.0, e-value 6e-107, bit score 385, *Cladosporium*

>Fungi DGGE band no. 10

JX164076 *Cryptococcus* sp. FM-D1, Basidiomycota, Agaricomycotina, Tremellomycetes, Filobasidiales, mitosporic Filobasidiales, score 472 bits(255), e-value 7e-130, identities 255/255(100%), gaps 0

RepS SH005107.06FU, % identity 100.0, e-value 7e-93, bit score 338, *Cryptococcus magnus*

RepS SH019036.06FU, % identity 100.0, e-value 7e-93, bit score 338, *Cryptococcus*

>Fungi DGGE band no. 11

EF060720 *Trichosporonales* strain LM408, Basidiomycota, Agaricomycotina, Tremellomycetes, Tremellales, unclassified *Trichosporonales*, score 424 bits(229), e-value 2e-115, identities 237/241(98%), gaps 0

RepS SH195353.06FU, % identity 97.8, e-value 9e-85, bit score 311, *Trichosporon asahii*

>Fungi DGGE band no. 12

JF439489 *Mortierella* sp. T6, Fungi incertae sedis, Early diverging fungal lineages, Mortierellomycotina, Mortierellales, Mortierellaceae, score 499 bits(270), e-value 4e-138, identities 272/273(99%), gaps 0

JF439486 *Mortierella humilis* isolate F13, score 455 bits(246), e-value 8e-125, identities 266/275(97%), gaps 3

RepS SH218050.06FU, % identity 100.0, e-value 1e-102, bit score 370, *Mortierella*

>Fungi DGGE band no. 13

GU198183 *Cylindrocarpon olidum* isolate FI 2037, Ascomycota, Pezizomycotina, Sordariomycetes, Hypocreomycetidae, Hypocreales, Nectriaceae, mitosporic Nectriaceae, mitosporic *Neonectria*, score 375 bits(203), e-value 7e-101, identities 208/210(99%), gaps 1

RepS SH232146.06FU, % identity 99.6, e-value 1e-108, bit score 390, *Cylindrocarpon olidum*

>Fungi DGGE band no. 14

AM410609 Ascomycete sp. VTT D-041032, Ascomycota, 697 bp, 460 bits(249), e-value=2e-126, identities 254/256(99%), gaps 1

HE972037 *Gibellulopsis nigrescens*, Ascomycota, Pezizomycotina, Sordariomycetes, Hypocreomycetidae, Glomerellales, Plectosphaerellaceae, score 457 bits(247), e-value 2e-125, identities 253/256(99%), gaps 0

RepS SH219633.06FU, % identity 100.0, e-value 2e-99, bit score 360, *Verticillium nigrescens*

>Fungi DGGE band no. 15

DQ485617 *Rhizophydium* sp. JEL-223, Chytridiomycota, Chytridiomycetes, Rhizophydiales, Rhizophydiaceae, score 558 bits(302), e-value 7e-156, identities 308/311(99%), gaps 0

RepS SH208245.06FU, % identity 98.1, e-value 8e-125, bit score 444, uncultured ectomycorrhizal fungus

>Bacillus DGGE band no. 1

NR\_043037 *Bradyrhizobium pachyrhizi* strain PAC48, Alphaproteobacteria; Rhizobiales; Bradyrhizobiaceae, score 1323 bits(716), e-value 0.0, identities 748/764(98%), gaps 0

>Bacillus DGGE band no. 2



NR\_044187 *Sphingomonas insulae* strain DS-28, Alphaproteobacteria; Sphingomonadales; Sphingomonadaceae, score 1982 bits(1073), e-value 0.0, identities 1087/1094(99%), gaps 0

> Bacillus DGGE band no. 3  
NR\_036904 *Staphylococcus epidermidis* strain Fussel, Firmicutes; Bacilli; Bacillales; Staphylococcaceae, score 869 bits(470), e-value 0.0, identities 470/470(100%), gaps 0

> Bacillus DGGE band no. 4  
NR\_036904 *Staphylococcus epidermidis* strain Fussel, Firmicutes; Bacilli; Bacillales; Staphylococcaceae, score 2071 bits(1121), e-value 0.0, identities 1130/1134(99%), gaps 1

> Bacillus DGGE band no. 5  
NR\_044365 *Micrococcus endophyticus* strain YIM 56238, Actinobacteria; Actinomycetales; Micrococcaceae, score 1655 bits(896), e-value 0.0, identities 924/937(99%), gaps 4

> Bacillus DGGE band no. 6  
NR\_024691 *Bacillus flexus* strain IFO15715 / NR\_043401 *Bacillus megaterium* strain IAM 13418, Firmicutes; Bacilli; Bacillales; Bacillaceae, score 1967 bits(1065), e-value 0.0, identities 1072/1075(99%), gaps 1/1075(0%)

> Bacillus DGGE band no. 7  
NR\_037113 *Micrococcus luteus* strain DSM 20030, Actinobacteria; Actinomycetales; Micrococcaceae, score 2043 bits(1106), e-value 0.0, identities 1124/1133(99%), gaps 0

> Bacillus DGGE band no. 8  
NR\_040847 *Propionibacterium acnes*, Actinobacteria; Actinomycetales; Propionibacteriaceae, score 2111 bits(1143), e-value 0.0, identities 1143/1143(100%), gaps 0

> Bacillus DGGE band no. 9  
NR\_041028 *Methylobacterium rhodesianum* strain DSM 5687, Alphaproteobacteria; Rhizobiales; Methylobacteriaceae, score 1956 bits(1059), e-value 0.0, identities 1124/1156(97%), gaps 1

> Bacillus DGGE band no. 10  
NR\_042778 *Streptococcus thermophilus* strain ATCC 19258, Firmicutes; Bacilli; Lactobacillales; Streptococcaceae, score 800 bits(433), e-value 0.0, identities 433/433(100%), gaps 0

> Alphaproteobacteria DGGE band no. 1  
NR\_041365 *Solirubrobacter soli* strain Gsoil 355, Actinobacteria, Solirubrobacteriales, Solirubrobacteraceae, score 793 bits(429), identities 431/432(99.8%), gaps 0

> Alphaproteobacteria DGGE band no. 2  
NR\_026365 *Janthinobacterium lividum* strain DSM 1522, Betaproteobacteria, Burkholderiales, Oxalobacteraceae, score 747 bits(404), identities 406/407(99.8%), gaps 0

> Alphaproteobacteria DGGE band no. 3  
NR\_044112 *Rhizobium phaseoli* strain ATCC 14482, Alphaproteobacteria, Rhizobiales, Rhizobiaceae, score 782 bits(423), identities 425/426(99.8%), gaps 0

> Alphaproteobacteria DGGE band no. 4  
NR\_026337 *Pedomicrobium australicum* strain IFAM ST1306, Alphaproteobacteria, Rhizobiales, Hyphomicrobiaceae, score 584 bits(316), identities 344/358(96.1%), gaps 0

> Alphaproteobacteria DGGE band no. 5  
NR\_074243 *Ochrobactrum anthropi* ATCC 49188 / NR\_043184 *O. cytisi* strain ESC1, Alphaproteobacteria, Rhizobiales, Brucellaceae, score 793 bits(429), identities 433/435(99.5%), gaps 0

> Alphaproteobacteria DGGE band no. 6

NR\_041967 *Maricaulis maris* strain ATCC 15268, Alphaproteobacteria, Rhodobacterales, Hyphomonadaceae, score 551 bits(298), identities 374/411(91.0%), gaps 4

>Alphaproteobacteria DGGE band no. 7

NR\_029287 *Nitrospira moscoviensis* strain NSP M-1, Nitrospira, Nitrospirales, Nitrospiraceae, score 721 bits(390), identities 422/438(96.3%), gaps 0

>Alphaproteobacteria DGGE band no. 8

NR\_042626 *Anderseniella baltica* strain BA141, Alphaproteobacteria, Rhizobiales, Rhodobiaceae, score 621 bits(336), identities 400/431(92.8%), gaps 4

>Alphaproteobacteria DGGE band no. 9

NR\_044214 *Devosia chinhatensis* strain IPL18, Alphaproteobacteria, Rhizobiales, Hyphomicrobiaceae, score 719 bits(389), identities 420/435(96.6%), gaps 2

>Alphaproteobacteria DGGE band no. 10

NR\_044302 *Kaistia soli* strain 5YN9-8, Alphaproteobacteria, Rhizobiales, Rhizobiaceae, score 453 bits(245), identities 268/279(96.1%), gaps 1

>Alphaproteobacteria DGGE band no. 11

NR\_027605 *Magnetospirillum gryphiswaldense* strain MSR-1, Alphaproteobacteria, Rhodospirillales, Rhodospirillaceae, score 702 bits(380), identities 414/430(96.3%), gaps 4

>Alphaproteobacteria DGGE band no. 12

NR\_028798 *Bosea eneeae* strain 34614, Alphaproteobacteria, Rhizobiales, Bradyrhizobiaceae, score 680 bits(368), identities 407/426(95.5%), gaps 1

>Alphaproteobacteria DGGE band no. 13

NR\_043735 *Rhodobacter blasticus* strain ATCC 33485, Alphaproteobacteria, Rhodobacterales, Rhodobacteraceae, score 667 bits(361), identities 392/407(96.3%), gaps 2

>*Pseudomonas* DGGE band no. 1

NR\_040802.1 *Pseudomonas asplenii* strain ATCC 23835 / *Pseudomonas monteilii* strain CIP 104883, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 793 bits(429) , identities 433/435(99.5%), gaps 0

>*Pseudomonas* DGGE band no. 2

NR\_043990 *Pseudomonas tuomuerensis* strain 78-123 / NR\_024734 *Pseudomonas alcaliphila* strain AL15-21, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 782 bits(423), identities 431/435(99.1%), gaps 0/435(0%)

>*Pseudomonas* DGGE band no. 3

NR\_025228 *Pseudomonas koreensis* strain Ps 9-14 / *Pseudomonas brassicacearum* subsp. *brassicacearum* NFM421 / *Pseudomonas cedrina* strain CFML 96-198 / *Pseudomonas chlororaphis* subsp. *chlororaphis* strain DSM 50083T / *Pseudomonas kilonensis* strain 520-20 / *Pseudomonas thivervalensis* strain SBK26, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 804 bits(435) , identities 435/435(100.0%), gaps 0

>*Pseudomonas* DGGE band no. 4

NR\_024918 *Pseudomonas jessenii* strain CIP 105274 / NR\_025227 *Pseudomonas umsongensis* strain Ps 3-10 / NR\_043314 *Pseudomonas moraviensis* strain CCM 7280, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 776 bits(420) , identities 426/429(99.3%), gaps 0

>*Pseudomonas* DGGE band no. 5

NR\_024918 *Pseudomonas jessenii* strain CIP 105274 / NR\_025227 *Pseudomonas umsongensis* strain Ps 3-10, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 782 bits(423) , identities 431/435(99.1%), gaps 0

>*Pseudomonas* DGGE band no. 6

NR\_025228 *Pseudomonas koreensis* strain Ps 9-14 / *Pseudomonas brassicacearum* subsp. *brassicacearum* NFM421 / *Pseudomonas cedrina* strain CFML 96-198 / *Pseudomonas chlororaphis* subsp. *chlororaphis* strain DSM 50083T / *Pseudomonas kilonensis* strain 520-20 / *Pseudomonas thivervalensis* strain SBK26, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 798 bits(432) , identities 434/435(99.8%), gaps 0

>Pseudomonas DGGE band no. 7

NR\_036909 *Pseudomonas taetrolens* strain I11 / NR\_024704 *Pseudomonas lundensis* strain ATCC 49968, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 776 bits(420) , identities 430/435(98.9%), gaps 0

>J2 specific bacterium (Table 3), row 1

KC469953, *Micrococcus yunnanensis*, Actinobacteria, Micrococcales, Micrococcaceae, score 595 bits(322), e-value 7e-167, identities 322/322(100%), gaps 0

> J2 specific bacterium (Table 3), row 2

AY043359 *Rothia amarae*, Actinobacteria, Micrococcales, Micrococcaceae, score 595 bits(322), e-value 7e-167, identities 322/322(100%), gaps 0

> J2 specific bacterium (Table 3), row 3

AJ554207 *Geobacillus stearothermophilus*, Firmicutes, Bacillales, Bacillaceae, score 481 bits(260), e-value 2e-132, identities 262/263(99%), gaps 0

> J2 specific bacterium (Table 3), row 4

AY188352 *Streptococcus salivarius*, Firmicutes, Bacilli, Lactobacillales, Streptococcaceae, score 828 bits(448), e-value 0.0, identities 448/448(100%), gaps 0

> J2 specific bacterium (Table 3), row 5

Y07841 *Anaerococcus octavius*, Firmicutes, Clostridia, Clostridiales, Clostridiales, Family XI. Incertae Sedis, score 424 bits(229), e-value 2e-115, identities 234/236(99%), gaps 1

> J2 specific bacterium (Table 3), row 6

DQ911241 *Peptoniphilus gorbachii*, Firmicutes, Clostridia, Clostridiales, Clostridiales, Family XI. Incertae Sedis, score 634 bits(343), e-value 2e-178, identities 343/343(100%), gaps 0

> J2 specific bacterium (Table 3), row 7

Y18176 *Clostridium disporicum*, Firmicutes, Clostridia, Clostridiales, Clostridiaceae, score 433 bits(234), e-value 4e-118, identities 236/237(99%), gaps 0

> J2 specific bacterium (Table 3), row 8

CP003703 *Mycoplasma wenyonii*, Tenericutes, Mollicutes, Mycoplasmataceae, score 619 bits(335), e-value 4e-174, identities 337/338(99%), gaps 0

> J2 specific bacterium (Table 3), row 9

EU159980 Uncultured *Gemmatimonas* in rhizosphere, Gemmatimonadetes, Gemmatimonadales, Gemmatimonadaceae, score 776 bits(420), e-value 0.0, identities 430/435(99%), gaps 0

> J2 specific bacterium (Table 3), row 10

HE613616 Uncultured delta proteobacterium, score 592 bits(320), e-value 9e-166, identities 320/320(100%), gaps 0

> J2 specific bacterium (Table 3), row 11

AJ242584 *Ochrobactrum* sp., AY594216 *Brucella* sp., Alphaproteobacteria, Rhizobiales, Brucellaceae, score 547 bits(296), e-value 2e-152, identities 296/296(100%), gaps 0

> J2 specific bacterium (Table 3), row 12

FM202386 *Hirschia maritima*, Alphaproteobacteria, Rhodobacterales, Hyphomonadaceae, score 368 bits(199), e-value 1e-98, identities 217/226(96%), gaps 0

> J2 specific bacterium (Table 3), row 13

DQ342315 *Haematobacter missouriensis*, Alphaproteobacteria, Rhodobacterales, Rhodobacteraceae, score 486 bits(263), e-value 3e-134, identities 263/263(100%), gaps 0

> J2 specific bacterium (Table 3), row 14

AY014173 *Paracoccus yeei*, Alphaproteobacteria, Rhodobacterales, Rhodobacteraceae, score 756 bits(409), e-value 0.0, identities 409/409(100%), gaps 0  
> J2 specific bacterium (Table 3), row 15

GQ263062 Uncultured Rhodospirillaceae, Alphaproteobacteria, Rhodospirillales, score 708 bits(383), e-value 0.0, identities 383/383(100%), gaps 0  
> J2 specific bacterium (Table 3), row 16

AB077038 *Malikia spinosa*, Betaproteobacteria, Burkholderiales, Comamonadaceae, score 577 bits(312), e-value 2e-161, identities 322/327(98%), gaps 0  
> J2 specific bacterium (Table 3), row 17

Y08846 *Janthinobacterium lividum*, Betaproteobacteria, Burkholderiales, Oxalobacteraceae, score 479 bits(259), e-value 6e-132, identities 261/262(99%), gaps 0  
> J2 specific bacterium (Table 3), row 18

HG005351 *Neisseria mucosa*, Betaproteobacteria, Neisseriales, Neisseriaceae, score 501 bits(271), e-value 1e-138, identities 273/274(99%), gaps 0  
> J2 specific bacterium (Table 3), row 19

AB021385 *Vogesella indigofera*, Betaproteobacteria, Neisseriales, Neisseriaceae, score 473 bits(256), e-value 3e-130, identities 260/262(99%), gaps 0  
> J2 specific bacterium (Table 3), row 20

X96963 *Shigella flexneri* / AF530475 *S. fergusonii*, Gammaproteobacteria, Enterobacteriales, Enterobacteriaceae, score 813 bits(440), e-value 0.0, identities 440/440(100%), gaps 0  
> J2 specific bacterium (Table 3), row 21

AJ278311 *Acinetobacter schindleri*, Gammaproteobacteria, Pseudomonadales, Moraxellaceae, score 481 bits(260), e-value 2e-138, identities 262/263(99%), gaps 0  
> J2 specific bacterium (Table 3), row 22

X81663 *Acinetobacter johnsonii*, Gammaproteobacteria, Pseudomonadales, Moraxellaceae, score 486 bits(263), e-value 3e-134, identities 263/263(100%), gaps 0  
> J2 specific bacterium (Table 3), row 23

AJ550856 *Enhydrobacter aerosaccus*, Gammaproteobacteria, Pseudomonadales, Moraxellaceae, score 826 bits(447), e-value 0.0, identities 447/447(100%), gaps 0  
> J2 specific bacterium (Table 3), row 24

AJ292426 *Pseudomonas kilonensis*, Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae, score 821 bits(444), e-value 0.0, identities 444/444(100%), gaps 0

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