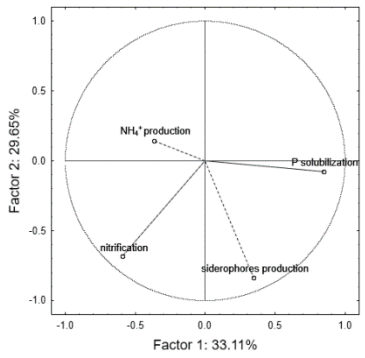
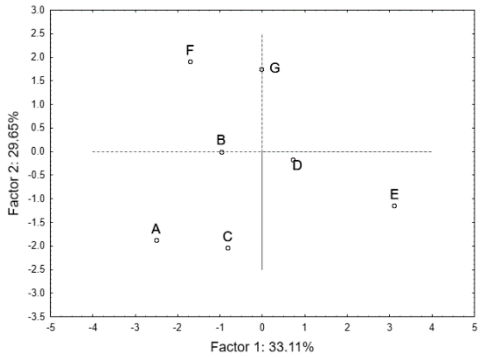
Figure S1: Soil samples around the roots

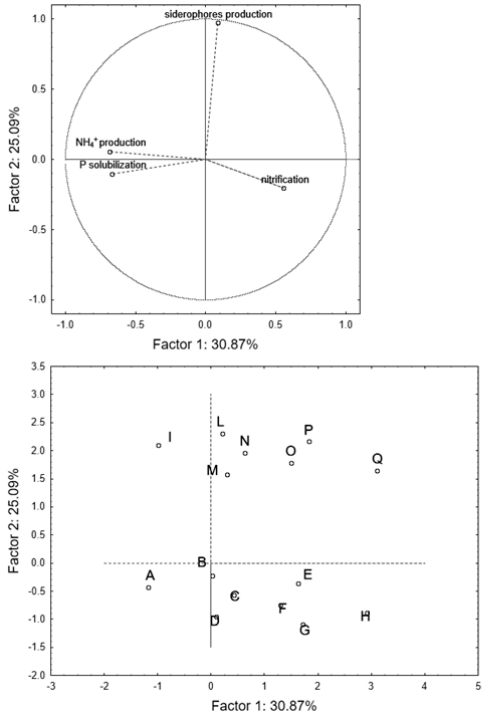




	Isolates	1	2	3	4
A	6P, 15P, 54P, 56P	+	+	-	+
B	12P, 14P, 32P, 47P, 53P	+	-	-	+
C	19P, 20P, 30P	+	+	+	+
D	7P, 8P, 10P, 34P, 35P, 36P, 37P, 38P, 39P, 43P, 44P, 45P, 46P, 48P, 49P, 50P, 51P, 52P, 55P, 57P, 59P, 62P	+	-	+	+
E	42P	-	-	+	+
F	26P, 24P, 27P, 29P, 56P	+	-	-	-
G	3P, 4P, 60P, 61P, 63P, 64P	+	-	+	-

1, NH_4^+ production; 2, Nitrification; 3, P-solubilization; 4, siderophore production

Figure S2: Principal Component Analysis run on pseudomonads.



	Isolates	1	2	3	4
A	3A, 6A, 12A, 14A, 17A, 18A, 21A, 23A, 28A, 31A, 48A, 49A, 50A, 56A, 72A, 80A, 84A, 85A, 86A, 90A, 91A, 92A, 93A, 95A, 98A, 105A, 114A, 125A, 130A, 131A, 133A, 141A, 146A, 147A, 149A, 166A, 176A, 177A	+	-	+	-
B	7A, 13A, 16A, 22A, 32A, 39A, 2A, 5A, 40A, 44A, 51A, 54A, 55A, 60A, 69A, 70A, 74A, 75A, 87A, 99A, 101A, 102A, 111A, 119A, 143A, 145A, 153A, 157A, 159A, 160A, 164A, 174A	+	-	-	-
C	122A, 123A, 132A, 151A, 165A	-	-	+	-
D	62A, 71A, 100A, 117A, 156A, 158A	+	+	+	-
E	57A, 79A, 113A, 126A, 144A, 170A, 173A, 175A	-	-	-	-
F	42A, 43A, 61A, 65A, 78A, 97A, 115A, 138A	+	+	-	-
G	83A	-	+	+	-
H	10A, 116A, 136A, 142A	-	+	-	-
I	25A, 26A, 82A, 104A, 108A, 124A, 137A	+	-	+	+
J	8A, 24A, 34A, 38A, 47A, 107A, 129A, 179A	+	-	-	+
K	1A, 103A	+	+	+	+
L	109A	-	-	+	+
M	112A	+	+	-	+
N	110A, 167A	-	-	-	+
O	148A	-	+	-	+

1, NH_4^+ production; 2, Nitrification; 3, P-solubilization; 4, siderophore production

Figure S3: Principal Component Analysis run on actinobacteria.

Table S1: Second selection. Qualitative codes based on medians and quartiles. P, mineralization of P; IAA, production of indole acetic acid; nitr, nitrification.

Actinobacteria

	P	IAA	nitr
1A	0	0	1
3A	1	0	0
10A	0	0	3
12A	3	1	0
13 A	0	2	0
17A	1	1	0
18 A	0	1	0
20 A	0	2	0
23A	3	0	0
25A	3	0	0
26 A	0	2	0
28 A	0	1	0
31A	1	1	0
32 A	0	3	0
37 A	0	1	0
38 A	0	1	0
42A	0	0	3
47 A	0	1	0
48 A	2	1	0
49 A	0	1	0
50 A	0	1	0
51 A	0	1	0
54 A	0	1	0
55 A	0	1	0
56 A	0	1	0
65 A	0	1	0
71A	2	1	0
72 A	0	1	0
74 A	0	1	0
75 A	0	1	0
78 A	0	1	1
80A	1	0	0
84 A	0	1	0
85 A	0	1	0
90A	3	1	0
92 A	0	1	0
93A	1	0	0
94 A	0	1	0
95 A	0	3	0
97 A	0	3	0
98 A	0	1	0
100 A	0	2	2
103 A	0	1	1
104A	2	1	0
105 A	0	2	0
107 A	0	3	0
108 A	0	2	0
109 A	0	3	0
110 A	0	2	0
111 A	0	1	0
112 A	0	3	3
115A	0	0	1
122A	1	2	0
124 A	0	1	0
125 A	0	2	0
129 A	0	1	0
133 A	0	2	0
135 A	0	1	0
136 A	0	1	2
138 A	0	2	0
139 A	0	2	0
140 A	0	2	0
141 A	0	2	0
143 A	0	2	0
144 A	0	3	0
145 A	0	3	0
147 A	0	1	0
148 A	0	2	0
149A	1	0	0
151 A	2	1	0
153 A	0	3	0
155 A	0	2	0
156 A	0	3	1
158 A	0	3	0
159 A	0	3	0
160 A	0	3	0
164 A	0	3	0
165 A	1	1	0
166 A	0	1	0
167 A	0	3	0
168 A	0	2	0
170 A	0	2	0
171 A	0	3	0
172 A	0	3	0
175 A	0	3	0
176 A	0	3	0

Mesophiles

	P	IAA	nitr.
4M	3	0	0
11M	1	0	0
16M	3	0	0
17M	2	0	0
18M	1	0	0
19M	3	0	0
20M	3	0	0
21M	1	0	0
22M	2	0	0
23M	2	0	1
26M	1	0	0
27M	2	1	0
29M	1	0	0
30M	1	0	0
32M	0	0	1
35M	3	0	0
36M	3	1	1
38M	0	0	2
40M	3	0	0
41M	2	0	0
43M	1	0	0
45M	0	0	2
48M	3	0	0
50M	2	1	1
54M	0	0	3
58M	0	0	3
59M	1	0	0
60M	0	0	3
61M	1	0	1
62M	0	1	0
63M	2	0	0
67M	2	0	0
68M	0	1	0
72M	3	0	0
73M	0	1	0
74M	2	2	0
75M	0	1	0
77M	1	1	1
78M	0	1	0
79M	1	0	0
84M	1	1	0
86M	2	0	0
87M	1	1	0
91M	0	2	0
92 M	0	1	0
93M	0	0	2
96 M	0	1	0
97M	3	0	0
100M	1	0	0
105M	0	2	0
106M	0	2	0
109M	1	1	0
111M	0	1	0
112M	0	3	0
113M	1	2	0
114M	0	3	0
115M	1	3	0
116M	0	3	0
117M	1	3	0
118M	3	0	0
119M	1	2	0
120M	1	2	0
121M	0	1	0
122M	0	1	0
123M	0	2	0
124M	0	2	0
125M	2	3	0
127M	1	2	0
128M	0	3	0
129M	0	3	0
130M	0	3	0
131M	1	1	0
133M	1	0	0

Pseudomonads

	P	IAA	nitr.
6P	0	0	3
7P	0	3	0
10P	0	3	0
11P	0	2	0
13P	0	3	0
14P	0	3	0
15P	0	0	1
16P	0	1	0
19P	0	1	1
20P	0	1	2
23P	3	3	0
26P	0	1	0
30P	1	0	1
37P	0	2	0
47P	0	3	0
48P	0	1	0
49P	0	1	0
50P	0	1	0
51P	0	1	0
52P	0	1	0
54P	0	1	3
56P	0	0	2
58P	0	1	0
62P	2	0	0

Spore-forming bacteria

	P	IAA	nitr.
2 B	0	1	0
3B	3	1	1
4B	1	3	0
5 B	0	3	0
6 B	0	2	0
7 B	0	1	0
8 B	0	1	1
9 B	0	1	0
10 B	0	1	0
12 B	0	1	0
13 B	0	1	0
15 B	0	1	2
16B	3	2	0
17 B	0	1	0
18 B	0	1	0
19B	1	2	3
20 B	0	2	0
21 B	0	1	0
22B	1	2	1
23 B	0	1	0
24 B	0	2	0
26 B	0	1	3
27B	2	1	0
28B	2	0	0
29B	1	0	0
30 B	0	1	3
31 B	0	2	0
32 B	0	1	0
33 B	1	1	0
34B	0	2	3
35B	3	2	0
36 B	0	1	0
37B	3	1	0
38 B	0	2	0
39 B	0	1	0
40 B	0	1	0
42 B	0	3	0
43 B	0	3	0
45 B	0	3	0
46 B	0	2	0
47 B	0	2	0
48 B	0	3	0
49B	1	3	0
50B	2	0	0
51 B	0	1	0
53 B	0	1	0
54 B	0	3	0
55 B	0	1	0
56B	2	0	0
57 B	0	1	0
58B	3	3	0
60B	0	3	2
61B	1	1	1
62 B	0	3	0
63 B	0	2	0
66 B	0	1	0
67 B	0	1	2
68 B	0	1	0
69 B	0	1	1
70 B	0	2	0
71 B	0	3	0
72 B	0	1	0
73 B	0	1	0
74 B	0	3	0
75 B	0	3	0
77B	0	0	3
79 B	0	1	0
80 B	0	2	1
82 B	0	1	0
83 B	0	3	1
84B	1	1	0
86 B	0	3	0
87 B	0	3	0
88 B	0	2	0
89 B	0	3	0
90 B	0	3	0
91 B	0	1	0
93 B	0	3	1
94 B	0	2	0
95 B	0	1	0
96 B	1	3	0

Table S2-A: One-way ANOVA (homogeneous group approach) on P-mineralization by mesophilic bacteria.

Isolate	P-min. (µM)	Homogeneous group		
		I	II	III
4M	3.14			
48M	3.23			
20M	3.28			
19M	3.35			
118M	3.67			
16M	3.83			
35M	4.30			
40M	4.79			
36M	4.90			
97M	8.90			

Table S2-B: One-way ANOVA (homogeneous group approach) on P-mineralization by spore-forming bacteria.

Isolate	P-min. (µM)	Homogeneous group				
		I	II	III	IV	V
96B	0.17					
29B	0.54					
61B	0.55					
49B	0.66					
33B	0.81					
84B	1.33					
22B	1.34					
4B	1.38					
19B	1.48					
50B	1.50					
28B	1.54					
56B	1.64					
27B	1.78					
37B	1.79					
35B	2.35					
16B	2.36					
58B	2.56					
3B	2.89					

Table S2-C: One-way ANOVA (homogeneous group approach) on P-mineralization by pseudomonads.

Isolate	P-min. (µM)	Homogeneous group
30P	0.64	
62P	0.91	
23P	2.17	

Table S2-D: One-way ANOVA (homogeneous group approach) on P-mineralization by actinobacteria.

Isolate	P-min. (µM)	Homogeneous group
93A	0.13	
17A	0.14	
31A	0.14	
122A	0.16	
80A	0.20	
165A	0.35	
3A	0.47	
149A	0.49	
104A	0.50	
151A	0.62	
71A	1.27	
48A	1.50	
90A	1.94	
23A	2.99	
25A	3.96	
12A	8.01	