Table S1. Chemical analysis of arable soils during the studied growing seasons.

Specification	Year			Mean
	2015	2016	2017	
pH $_{H2O}$	6.98	6.01	6.25	6.41
Humus content [%]	1.80	1.98	2.07	1.95
The content of assimilable macroelements in the of 0-30 cm soil layer [mg/l]				
N-NO_3	16	17	14	15.67
P	73	71	77	73.67
K	145	108	193	148.67
Ca	780	534	474	596.00
Mg	69	62	65	65.33
The content of assimilable microelements in the of 0-30 cm soil layer [mg/l]				
Cu	1.74	1.58	2.34	1.89
Zn	14.83	11.82	25.00	17.22
Mn	16.36	25.84	50.08	30.76
Fe	145.12	179.11	173.60	165.94
B	0.50	0.30	0.40	0.40

Table S2. Weather conditions in the region of experiment in the years 2015–2017.

Meteorological factor	Year	Month		Sum/mean
		IV	V	
Sum of precipitation (mm)	2015	39.5	294.6	334.1
	2016	77.9	60.7	138.6
	2017	64.7	22.8	87.5
	Sum for 1977-2007	50.2	65.3	115.5
Mean daily air temperature (℃)	2015	9.1	12.6	10.9
	2016	10.2	18.7	14.5
	2017	9.8	15.0	12.4
	Mean for 1977-2007	8.1	13.7	10.9
Sielianinov hydrotermic coefficient (K)	2015	1.4	7.5	4.5
	2016	2.5	1.4	1.9
	2017	2.2	0.5	1.4
	Mean K for 1977-2007	2.1	1.5	1.8

K ≤0.4 - extremely dry month; 0.4 <K 0.7 –very dry; 0.7 <K≤1.0–dry; 1.0 <K ≤ 1.3 –quite dry; 1.3 <K ≤ 1.6 –optimal; 1.6 <K ≤2,0 –moderately humid; 2.0 <K≤2.5–humid; 2.5 <K≤3.0–very humid; K> 3.0 –extremely humid.

Table S3. Relationship between the assimilable macro- and micronutrient forms, and biodiversity indices of microorganism community colonizing infected seedlings (correlation coefficients).

Independent variables (x)	Dependent variables (y)			
	The species richness (S)	Simpson's Reciprocal Index (1/D)	Shannon-Wiener (H')	Evenness (Shannon) ($J_{H'}$)
pH $_{H2O}$	-0.18	-0.61	-0.64	-0.61
Humus content	0.59	0.55	0.60	0.59
N	0.08	-0.04	-0.09	-0.12
P	-0.08	-0.03	0.09	0.12
K	-0.17	-0.03	0.02	0.05
Ca	-0.65	-0.59	-0.63	-0.61
Mg	-0.73	-0.59	-0.60	-0.56
Cu	0.01	0.12	0.18	0.19
Zn	-0.00	0.11	0.17	0.19
Mn	0.35	0.39	0.44	0.45
Fe	0.73	0.62	0.65	0.62
B	-0.72	-0.57	-0.58	-0.54

Explanations:

$r_{xy} > 0.9$	Very strong dependence
$0.7 < r_{xy} < 0.9$	Quite strong dependence
$0.4 < r_{xy} < 0.7$	Moderate dependence
$0.2 < r_{xy} < 0.4$	Weak dependence
$r_{xy} < 0.2$	No dependency