

Supplemental Tables

TABLE S1 Description of tomato hybrid rootstocks and their potential resistance to tomato diseases and pests, as described at www.vegetablegrafting.org.

Diseases	Maxifort	RST-04-106
Bacterial Wilt		R
Corky Root Rot	R	R
Fusarium Wilt Race 1	R	R
Fusarium Wilt Race 2	R	R
Fusarium Crown and Root Rot	R	
Verticillium Wilt	R	
Nematode	R	R
Tomato Mosaic Virus	R	R
Developer	DeRuiter Seeds	DP Seeds

R: Resistant

TABLE S2 ANOVA table comparing Shannon entropy among the rootstock treatments.

Observations were divided by compartments (A & C – Endosphere; B & D – Rhizosphere) and years (A & B – Year 2015; C & D – Year 2015), and diversity was compared among the rootstock treatments at each study site.

A) Year = 2014

Compartment = Endosphere

Analysis of Variance Table

Response: value

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
Rootstock	3	2224.7	741.55	5.95	0.001	**
Study_site	2	989.1	494.54	3.97	0.025	*
Rootstock:Study_site	6	1200.1	200.02	1.60	0.167	
Residuals	44	5474.9	124.43			

Study_site = Common Harvest:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	56.70	5.57	44	45.46	67.94	a
Nongraft	54.20	5.57	44	42.96	65.44	a
RST-04-106	54.14	5.57	44	42.90	65.38	a
Selfgraft	41.84	5.57	44	30.60	53.08	a

Study_site = Gieringer:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	70.85	5.57	44	59.61	82.09	a
Selfgraft	64.92	5.57	44	53.68	76.17	ab
Nongraft	55.13	5.57	44	43.89	66.37	ab
RST-04-106	50.19	5.57	44	38.95	61.43	b

Study_site = OHREC:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	65.56	4.55	44	56.38	74.74	a
Selfgraft	47.53	4.55	44	38.36	56.71	b
RST-04-106	45.35	4.55	44	36.17	54.53	b
Nongraft	43.83	4.55	44	34.65	53.01	b

B) TABLE S2 Continued.
Year = 2014
Compartment = Rhizosphere
Analysis of Variance Table

Response: value

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Rootstock	3	31945	10648.5	5.42	0.002 **
Study_site	2	34621	17310.7	8.81	0.0006 ***
Rootstock:Study_site	6	4982	830.4	0.42	0.8598
Residuals	44	86408	1963.8		

Study_site = Common Harvest:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	162.97	22.15	44	118.32	207.63	a
RST-04-106	123.41	22.15	44	78.75	168.06	ab
Nongraft	112.03	22.15	44	67.37	156.68	ab
Selfgraft	98.14	22.15	44	53.48	142.79	b

Study_site = Gieringer:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	132.74	22.15	44	88.08	177.40	a
RST-04-106	101.02	22.15	44	56.36	145.67	a
Selfgraft	86.48	22.15	44	41.83	131.14	a
Nongraft	77.88	22.15	44	33.23	122.54	a

Study_site = OHREC:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	201.66	18.09	44	165.20	238.12	a
Selfgraft	164.58	18.09	44	128.11	201.04	ab
RST-04-106	146.23	18.09	44	109.77	182.69	b
Nongraft	121.25	18.09	44	84.79	157.72	b

C) TABLE S2 Continued.
Year = 2015
Compartment = Endosphere
Analysis of Variance Table

Response: value

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Rootstock	3	2207.5	735.82	3.0160	0.039 *
Study_site	2	5805.6	2902.81	11.8983	7.403e-05 ***
Rootstock:Study_site	6	1533.6	255.60	1.0477	0.408
Residuals	44	10734.6	243.97		

Study_site = Common Harvest:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	88.16	7.80	44	72.42	103.90	a
Selfgraft	82.76	7.80	44	67.02	98.50	a
RST-04-106	82.09	7.80	44	66.35	97.83	a
Nongraft	67.88	7.80	44	52.14	83.62	a

Study_site = Gieringer:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Nongraft	58.84	7.80	44	43.10	74.58	a
Maxifort	56.03	7.80	44	40.29	71.77	a
RST-04-106	53.81	7.80	44	38.07	69.55	a
Selfgraft	51.94	7.80	44	36.20	67.68	a

Study_site = OHREC:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	90.59	6.37	44	77.73	103.44	a
RST-04-106	79.19	6.37	44	66.34	92.04	ab
Selfgraft	68.46	6.37	44	55.61	81.31	b
Nongraft	62.64	6.37	44	49.79	75.50	b

D) TABLE S2 Continued.
Year = 2015
Compartment = Rhizosphere
Analysis of Variance Table

Response: value

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Rootstock	3	13594	4531.3	2.4316	0.07 .
Study_site	2	2490	1244.9	0.6680	0.51
Rootstock:Study_site	6	5265	877.6	0.4709	0.82
Residuals	44	81995	1863.5		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Study_site = Common Harvest:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
RST-04-106	161.07	21.58	44	117.57	204.57	a
Selfgraft	136.89	21.58	44	93.39	180.39	a
Maxifort	134.76	21.58	44	91.26	178.26	a
Nongraft	126.29	21.58	44	82.79	169.79	a

Study_site = Gieringer:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	178.03	21.58	44	134.53	221.53	a
RST-04-106	149.58	21.58	44	106.08	193.09	a
Nongraft	135.36	21.58	44	91.86	178.86	a
Selfgraft	127.74	21.58	44	84.24	171.24	a

Study_site = OHREC:

Rootstock	lsmean	SE	df	lower.CL	upper.CL	.group
Maxifort	185.09	17.62	44	149.58	220.61	a
RST-04-106	165.06	17.62	44	129.55	200.58	ab
Nongraft	139.58	17.62	44	104.06	175.10	ab
Selfgraft	133.27	17.62	44	97.75	168.79	b

A) 2014_Endosphere

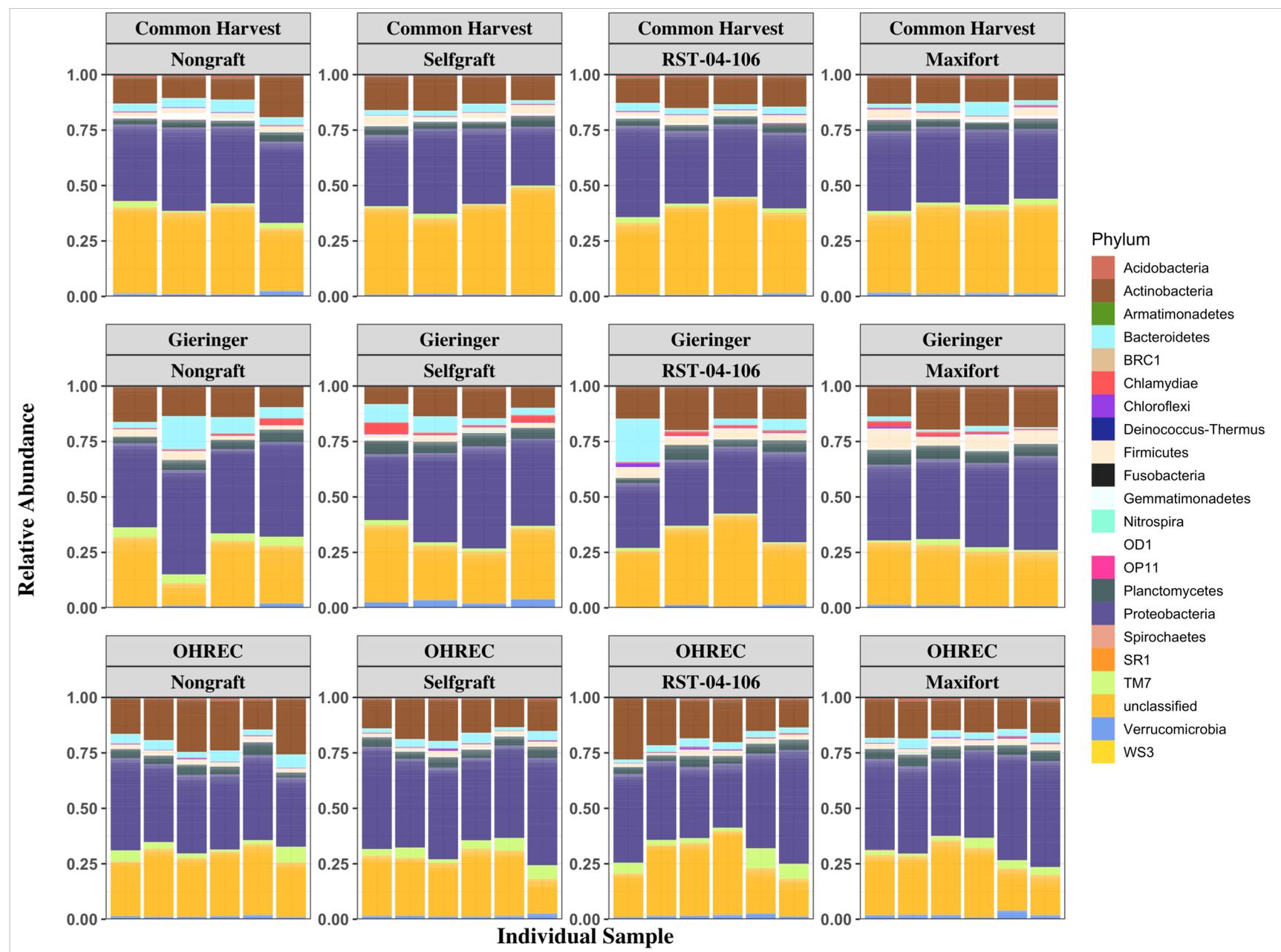


FIG S1 Profile of bacterial communities from tomato rootstocks at the phylum level, separated by compartment, location, and sampling year. The relative abundance of the endosphere (A & C) and rhizosphere (B & D) bacterial phyla associated with two hybrid rootstocks (RST-04-106 and Maxifort) and nongraft and selfgraft (BHN589) controls are reported for the years 2014 and 2015. The colored area of each bar represents the relative abundance of the corresponding phylum.

B) 2014_Rhizosphere

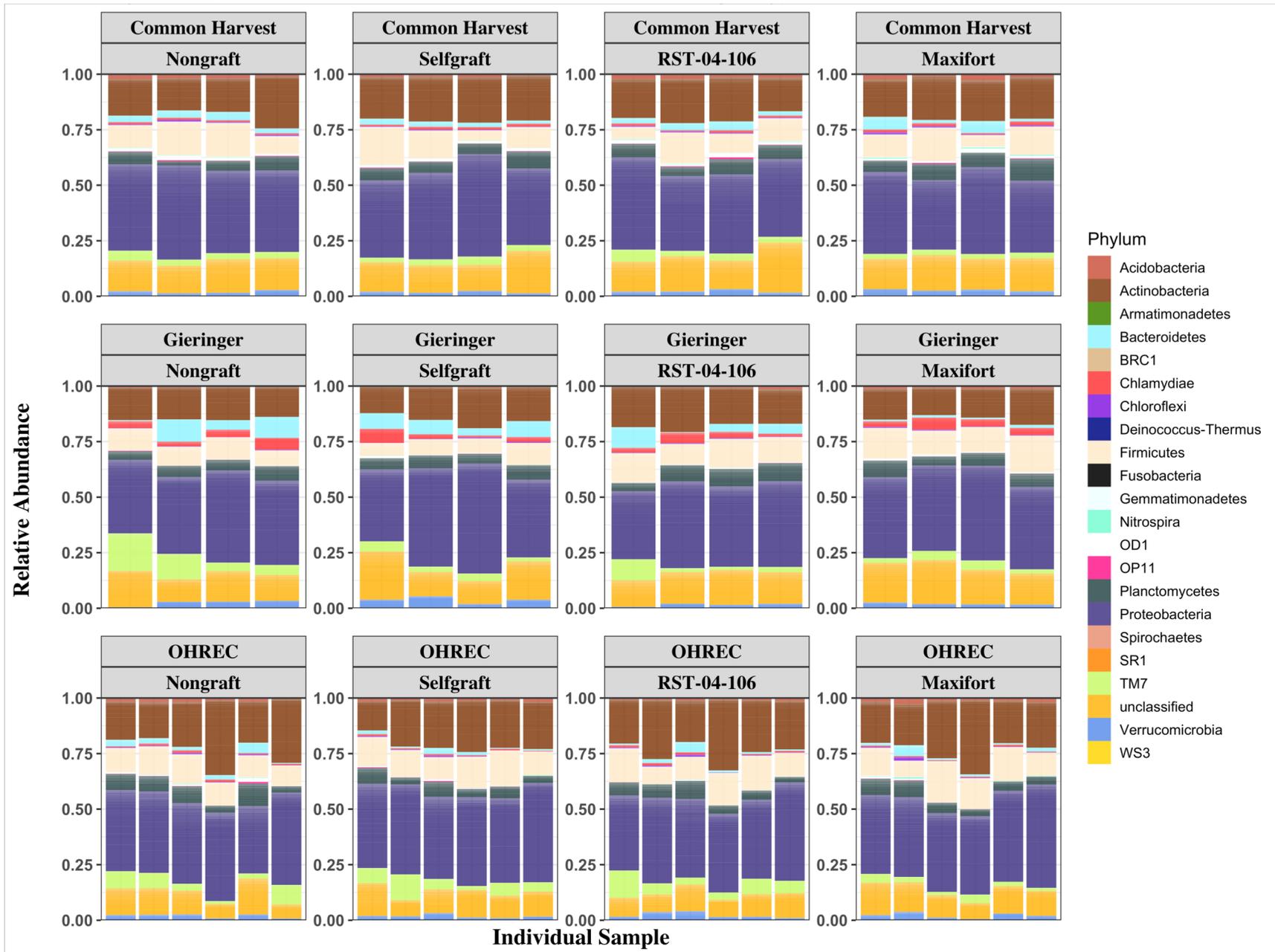


FIG S1 Continued.

C) 2015_Endosphere

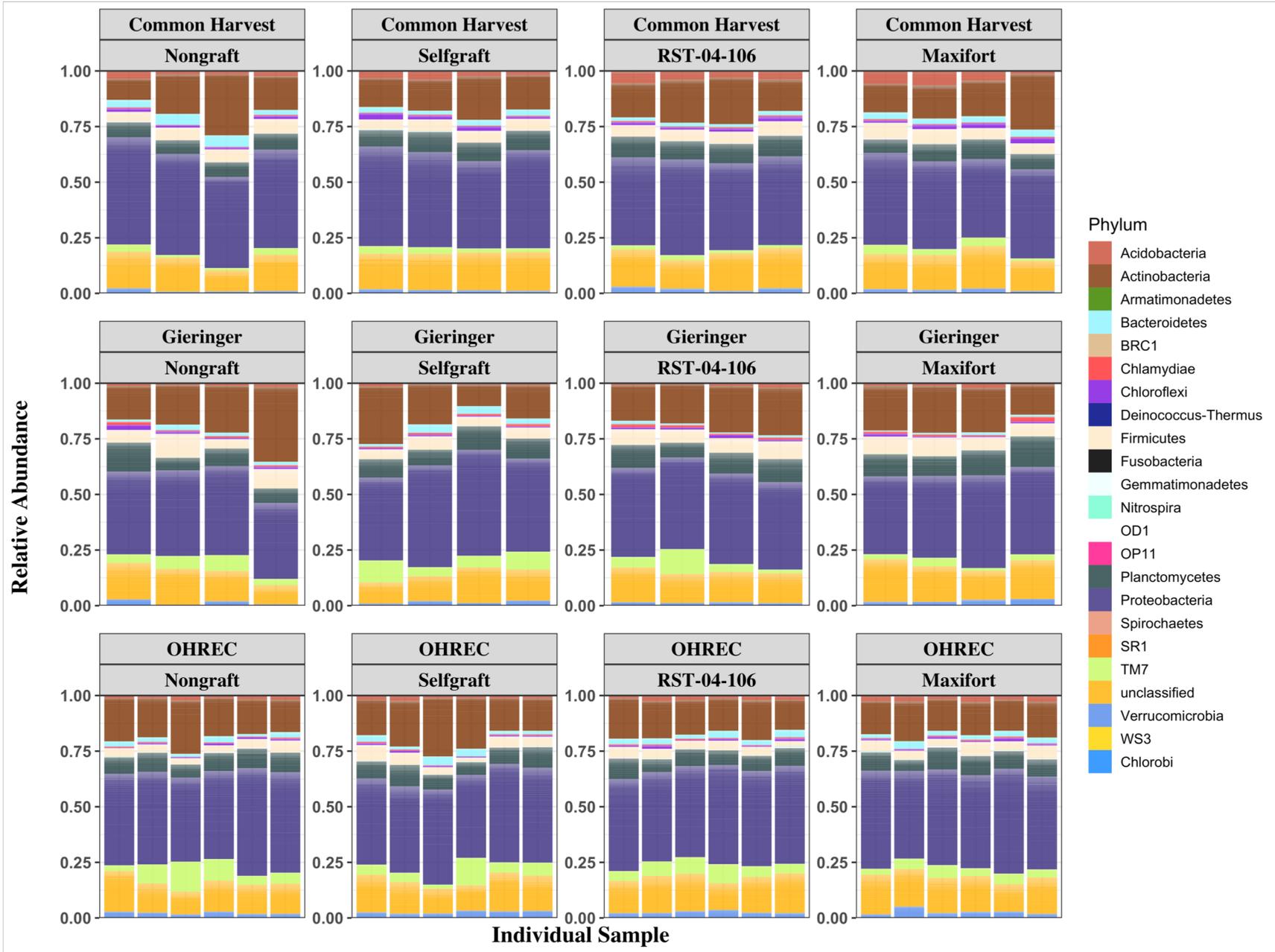


FIG S1 Continued.

D) 2015_Rhizosphere

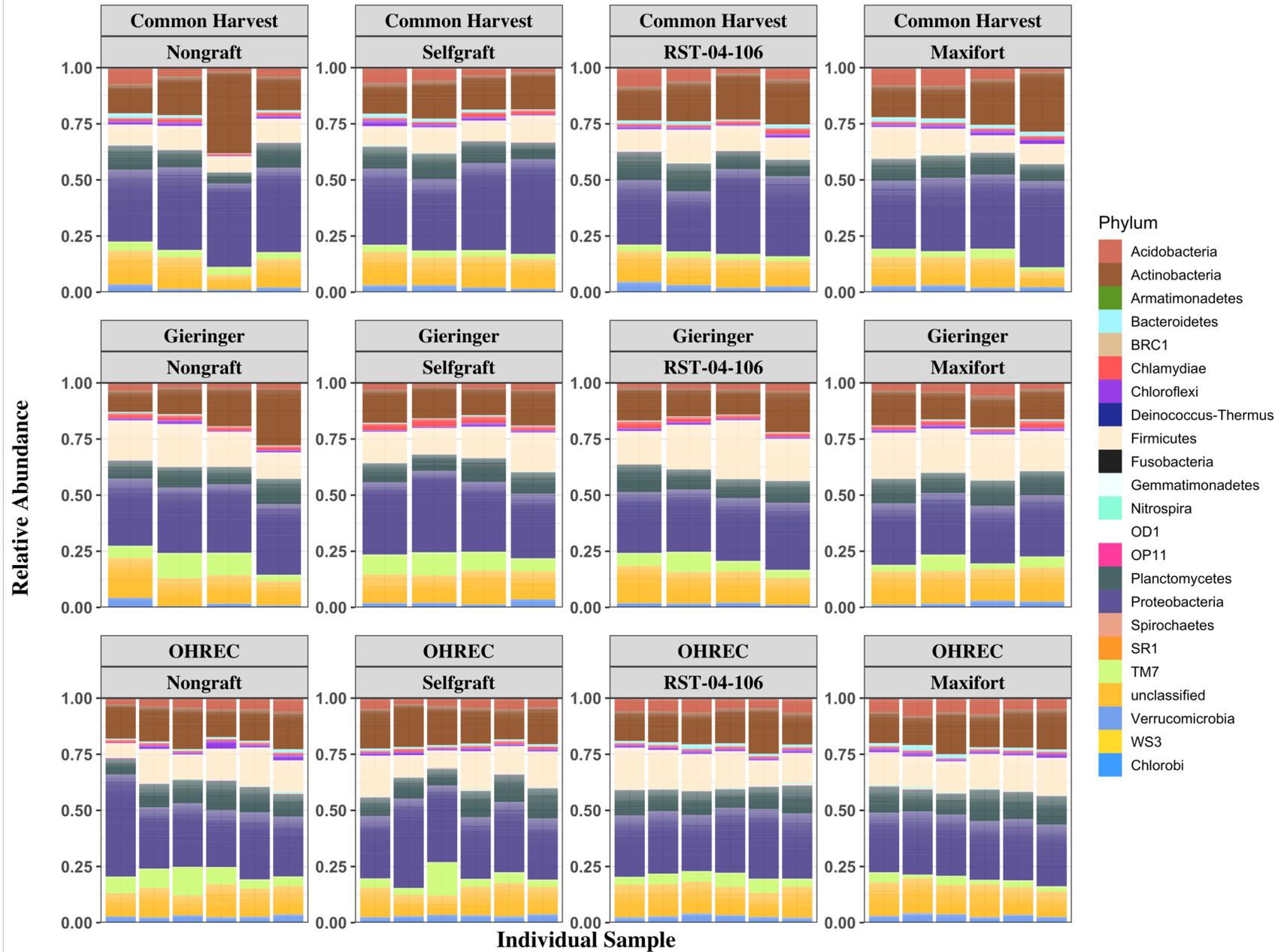


FIG S1 Continued.

Information about Supplemental Datasets

Dataset S1: Table displaying the bioinformatics pipeline used for analyzing sequence data using mothur.

Dataset S2: Table showing the endosphere and rhizosphere samples associated with four rootstocks across three study sites in the year 2014.

Dataset S3: Table showing the endosphere and rhizosphere samples associated with four rootstocks across three study sites in the year 2015.

Dataset S4: Ten most frequent OTUs observed for each rootstock treatment in the endosphere and the rhizosphere compartment.