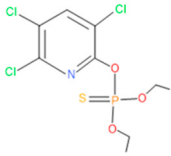
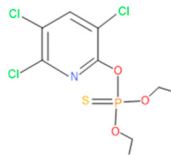
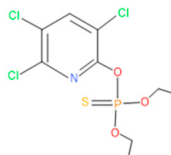

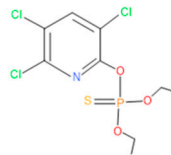
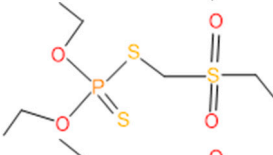

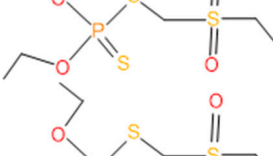
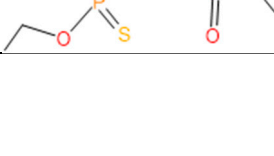
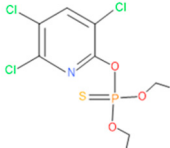
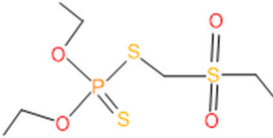


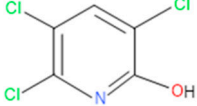

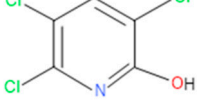
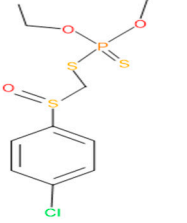

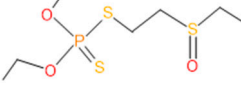


Table S1: Biodegradations profile of chlorpyrifos (1 gm/100 mL) in minimal broth medium after treated with endophytic bacterial synthetic Consortium-2.

Similarity of hit	Spectrum	Soft ionization (SI)	Spectrum	Molecular weight (Da)	Molecular form	Molecular structure
1	78	2921	88	2	Chlorpyrifos	
2	70	2921	88	2	Chlorpyrifos	
3	67	2921	88	2	Chlorpyrifos	
4	67	2921	88	2	Chlorpyrifos	
5	65	2921	88	2	Chlorpyrifos	
6	59	2588	3	6	Phorate sulfone	
7	59	2588	3	6	Phorate sulfone	
8	58	2588	4	7	Phorate sulfone	
9	58	2588	3	6	Phorate sulfone	

10	58	2921	88	2	Chlorpyrifos	
11	57	2588	4	7	Phorate sulfone	
12	56	5598	13	0	Chloropyriphos-methyl	
13	55	2921	88	2	Chlorpyrifos	
14	55	6515	38	4	2-Hydroxy-3,5,6-trichloropyridine	
15	55	2588	4	7	Phorate sulfone	
16	55	6515	38	4	2-Hydroxy-3,5,6-trichloropyridine	
17	54	17297	40	4	Carbofenothion sulfoxide	
18	53	2588	4	7	Phorate sulfone	
19	52	2497	7	6	Oxydisulfoton	

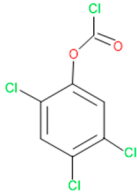
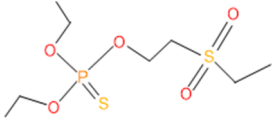
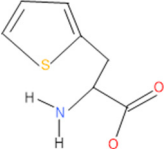
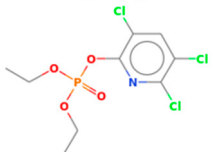


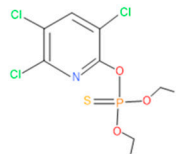
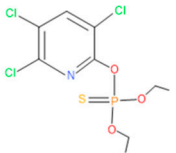
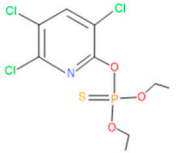
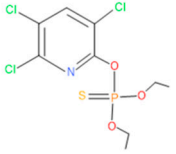
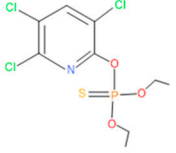
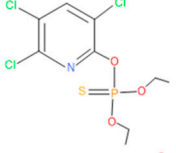
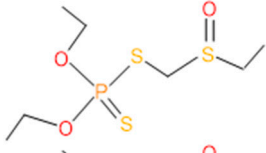
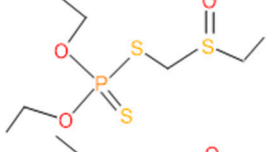
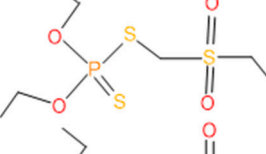
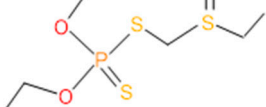

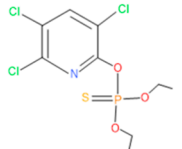

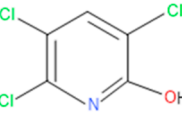
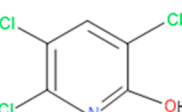

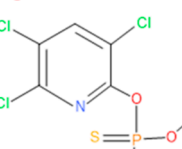
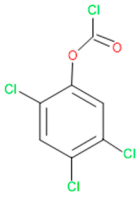
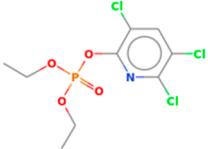
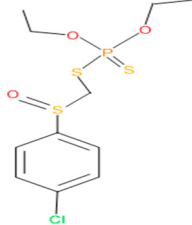
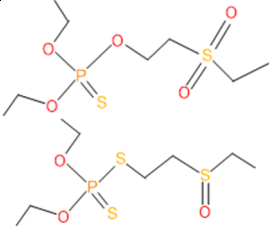
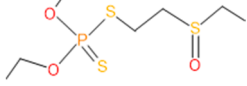
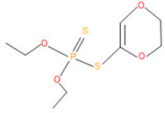
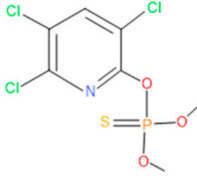
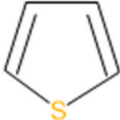
20	52	16947	69	6	Carbonochloridic acid	
21	51	4891	54	7	Thionodemeton sulfone	
22	51	2021	58	1	dl-2-. beta. -Thienyl-. alpha. -alanine	
23	50	5598	15	2	Phosphoric acid, diethyl 3,5,6-trichloro-2-pyridyl ester/Chlorpyrifos Oxon	
24	50	683	8	9	Diethyl methanephosphonate	
25	50	683	8	9	Diethyl methanephosphonate	

Table S2: Biodegradations profile of chlorpyrifos (1 gm/100 mL) in minimal broth medium after treated with endophytic bacterial synthetic Consortium-4.

Similarity of hit	search Spectrum	Soft ionization (SI)	Spectrum	Molecular weight (Da)	Molecular form	Molecular structure
1	78	2921	88	2	Chlorpyrifos	
2	70	2921	88	2	Chlorpyrifos	
3	67	2921	88	2	Chlorpyrifos	
4	67	2921	88	2	Chlorpyrifos	
5	65	2921	88	2	Chlorpyrifos	
6	59	2921	88	2	Chlorpyrifos	
7	59	2588	3	6	Phorate sulfoxide	
8	58	2588	3	6	Phorate sulfoxide	
9	58	2588	4	7	Phorate sulfone	
10	58	2588	3	6	Phorate sulfoxide	

11	57	2588	4	7	Phorate sulfone	
12	56	2921	88	2	Chlorpyrifos	
13	55	2588	4	7	Phorate sulfone	
14	55	6515	38	4	2-Hydroxy-3,5,6-trichloropyridine	
15	55	6515	38	4	2-Hydroxy-3,5,6-trichloropyridine	
16	55	2588	4	7	Phorate sulfone	
17	54	5598	13	0	Chloropyriphos-methyl	
18	53	16947	69	6	Carbonochloridic acid	
19	52	5598	15	2	Phosphoric acid	
20	52	17297	40	4	Carbofenothion sulfoxide	

21	51	4891	54	7	Thionodemeton sulfone	
22	51	2497	7	6	Oxydisulfoton	
23	50	16270	87	4	Phosphorodithioic acid	
24	50	5598	13	0	Chloropyriphos-methyl	
25	50	4861	59	0	Thiophene,	

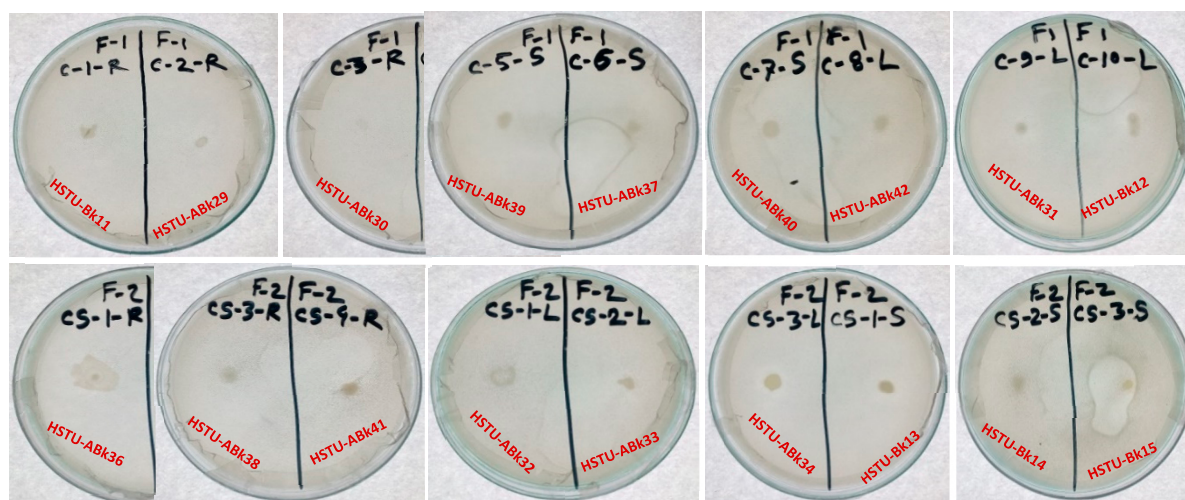
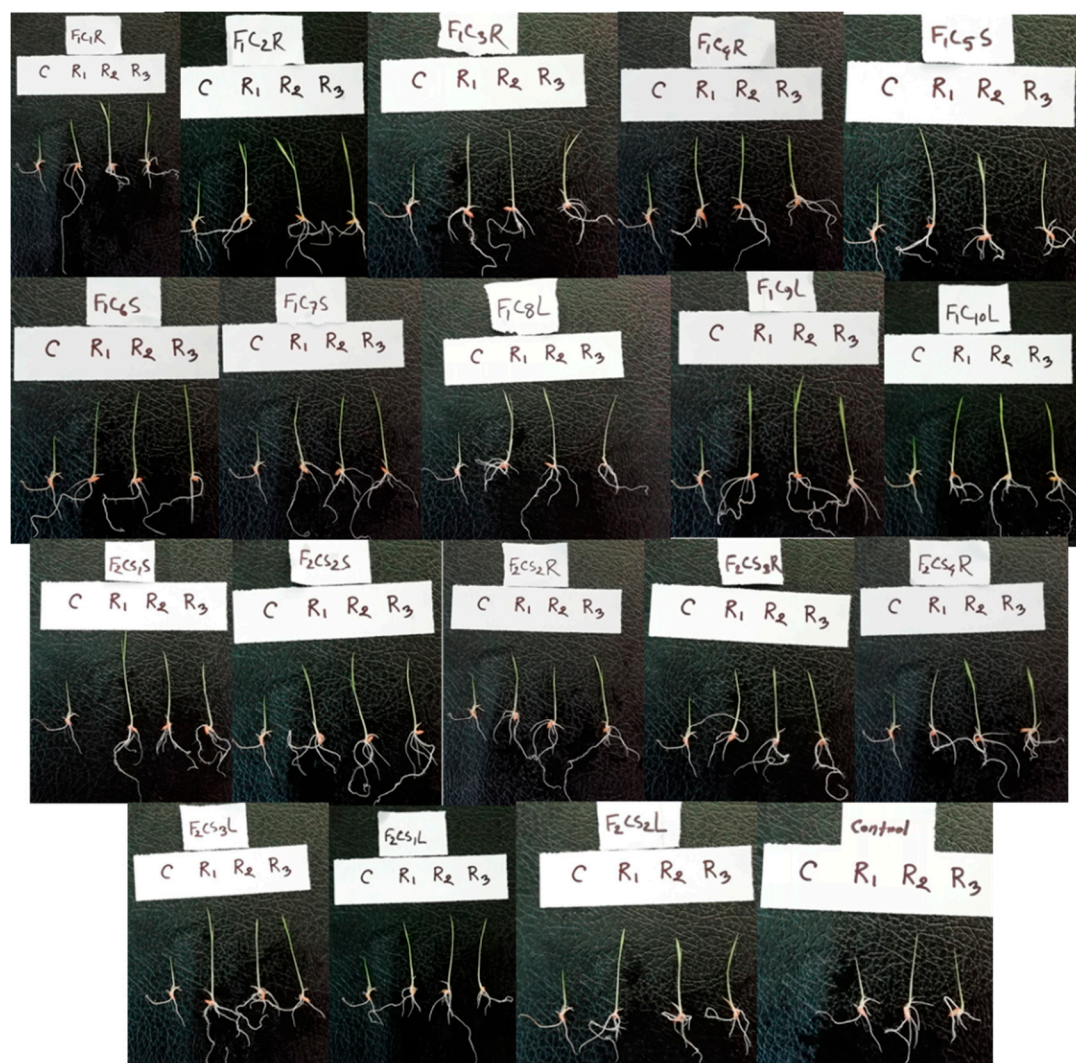
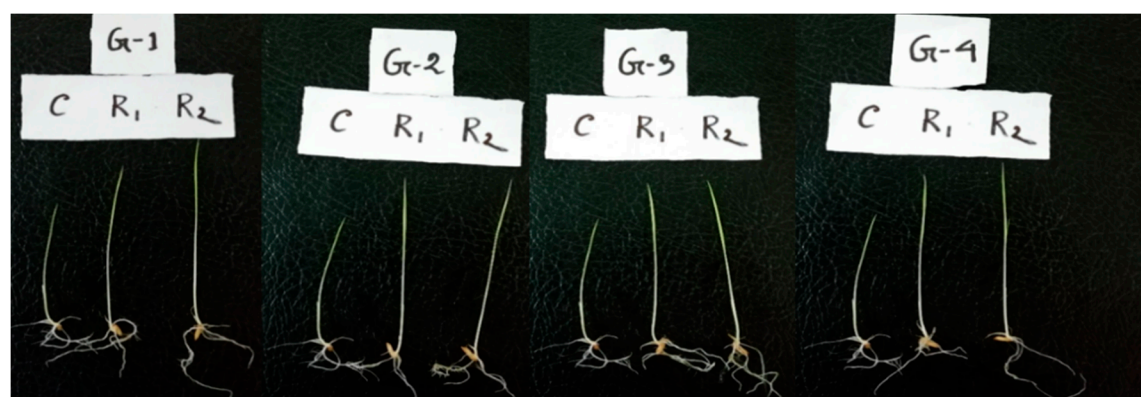


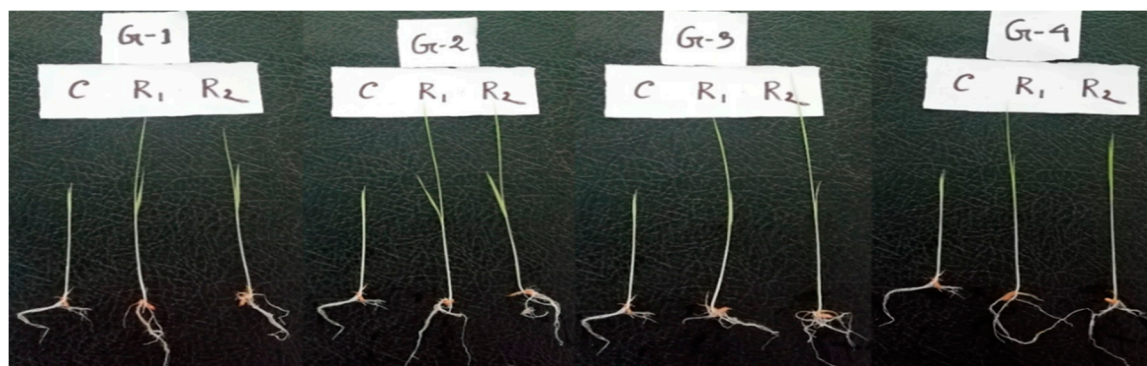
Figure S1: phosphate solubilizing activities of the chlorpyrifos mineralizing endophytic bacteria



(a)

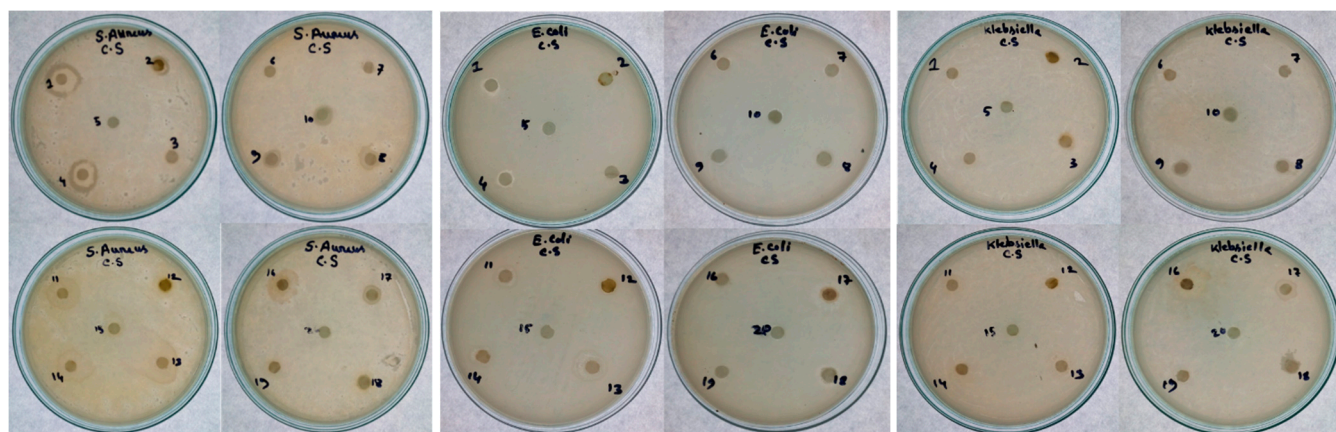


(b)



(c)

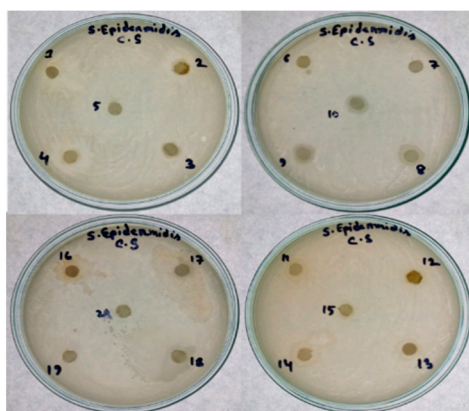
Figure S2: (a) Germinated rice plants after 8 days of endophytic bacterial treatment. (C) control, (R) replica; (b) Effect of endophytic consortium on seedling and growth parameter after 8 days. (C) control, (R) replica and (G) consortia; (c) Effect of endophytic consortium on Seedling and growth parameter after 12 days of treatment. (C) control, (R) replica and (G) consortia.



(a)

(b)

(c)



(d)

Figure S3: (a) Antibacterial activity of endophytic bacteria against multidrug-resistant human pathogenic bacteria *S. Aureus* after 32 h. (b) Antibacterial activity of endophytic bacteria against multidrug-resistant human pathogenic bacteria *E. Coli* after 32 h. (c) Antibacterial activity of endophytic bacteria against multidrug-resistant human pathogenic bacteria *Klebsiella* sp. after 32 h. (d) Antibacterial activity of endophytic bacteria against multidrug-resistant human pathogenic bacteria *S. epidermidis* after 32 h.