Functional genetic diversity and plant growth promoting potential of polyphosphate accumulating bacteria in soil

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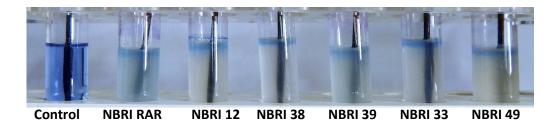
Running title: Diversity of phosphate accumulating bacteria in soil

Supplementary Table 1. Details of isolation site

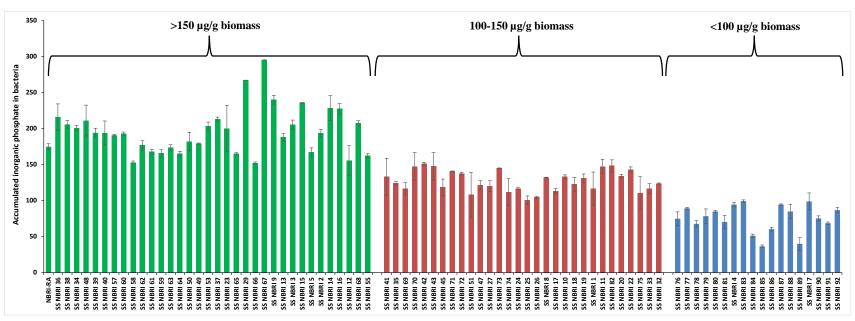
Seq2	Sequence_ID	Country	Isolation_source	Isolate	Lat_Lon
Seq2	Seq1	Deokhera, India	Rhizospheric soil	SS_NBRI_1	27.2928° N, 78.2531° E
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Seq43Bulandshahr, IndiaRhizospheric soilSS_NBRI_5028.4171° N, 77.8250° ESeq44Bulandshahr, IndiaRhizospheric soilSS_NBRI_5128.4171° N, 77.8250° ESeq45Punjab, IndiaRhizospheric soilSS_NBRI_5330.4036° N, 74.0280° E	_				
Seq44Bulandshahr, IndiaRhizospheric soilSS_NBRI_5128.4171° N, 77.8250° ESeq45Punjab, IndiaRhizospheric soilSS_NBRI_5330.4036° N, 74.0280° E	_	· ·			
Seq45 Punjab, India Rhizospheric soil SS_NBRI_53 30.4036° N, 74.0280° E	_				
1 V	_				30.4036° N, 74.0280° E
Seq46 Shillong, India Rhizospheric soil SS_NBRI_55		Shillong, India			,
Seq47 India Rhizospheric soil NBRI-RA					

Supplementary Table 2. Total fungal and bacterial population in soil samples

	Total population	on (cfu Log ₁₀ /ml)
	Fungi	Bacteria
Bulandshahr	2.11	6.048701
Bulandshahr	1.98	5.732394
Bulandshahr	1.81	5.738781
Bulandshahr	2.00	5.634141
Bulandshahr	1.79	5.718225
Bulandshahr	1.75	5.658965
Bulandshahr	1.47	5.634141
Bulandshahr	2.20	5.818666
Raebareli	1.53	5.754348
Deokhera 1	1.46	5.84427
Deokhera 2	1.76	5.795185
Punjab 1	1.25	5.892836
Punjab 2	1.48	5.839268
Gujarat	1.78	5.707002
Shillong	1.10	5.841776



Supplementary Fig. 1. Quanlitative screening of phosphate accumulating bacteria



Supplementary Fig. 2. Range of accumulated phosphate estimated as Pi in different bacterial isolates.

Supplementary Table 3. GenBank accession number of phosphate accumulating bacteria

S. N. Strains Identification Ident				Accession number				
2 SS NBRI 2 Pseudomonas sp. MT629837 MT947904 MT947953 MT948002 3 SS NBRI 3 Pseudomonas koreensis MT629838 MT947906 MT947955 MT948003 4 SS NBRI 6 Pseudomonas sp. MT629840 MT947907 MT947955 MT948006 6 SS NBRI 6 Pseudomonas sp. MT629841 MT947909 MT947957 MT948006 7 SS NBRI 8 Pseudomonas sp. MT629842 MT947909 MT947958 MT948007 8 SS NBRI 9 Pseudomonas sp. MT629843 MT947910 MT947960 MT948009 9 SS NBRI 9 Pseudomonas sp. MT629844 MT947913 MT947961 MT948009 10 SS NBRI 10 Pseudomonas sp. MT629844 MT947913 MT947960 MT948012 12 SS NBRI 10 Pseudomonas sp. MT629844 MT947915 MT947964 MT947913 MT947960 MT948012 12 SS NBRI 12 Pseudomonas sp. MT629843 MT947916 MT947960 </th <th>S.N.</th> <th>Strains</th> <th>Identification</th> <th>16S rRNA</th> <th>rpoB</th> <th>ppk</th> <th>ppx</th>	S.N.	Strains	Identification	16S rRNA	rpoB	ppk	ppx	
3 SS NBRI 3 Pseudomonas koreensis MT629838 MT947905 MT947956 MT948004 4 SS NBRI 4 Pseudomonas sp. MT629840 MT947907 MT947956 MT948004 5 SS NBRI 6 Pseudomonas sp. MT629841 MT947907 MT947956 MT948006 6 SS NBRI 6 Pseudomonas sp. MT629841 MT947908 MT947958 MT948007 7 SS NBRI 7 Pseudomonas sp. MT629842 MT947910 MT947959 MT948007 8 SS NBRI 19 Pseudomonas sp. MT629843 MT947910 MT947960 MT948001 9 SS NBRI 10 Pseudomonas sp. MT629845 MT947911 MT947960 MT948010 10 SS NBRI 11 Pseudomonas sp. MT629848 MT947913 MT947960 MT948010 11 SS NBRI 14 Pseudomonas sp. MT629848 MT947915 MT947960 MT948012 12 SS NBRI 14 Pseudomonas sp. MT629849 MT947915 MT947966 MT948013	1	SS NBRI 1	Pseudomonas sp.	MT629836	MT947903	MT947952	MT948001	
4 SS NBR1 4 Pseudomonas sp. MT629840 MT947907 MT947955 MT948004 5 SS NBR1 6 Pseudomonas sp. MT629841 MT947907 MT947956 MT948006 7 SS NBR1 7 Pseudomonas sp. MT629842 MT947900 MT947959 MT948006 8 SS NBR1 8 Pseudomonas sp. MT629843 MT947910 MT947959 MT948008 9 SS NBR1 9 Pseudomonas sp. MT629844 MT947911 MT947960 MT948009 10 SS NBR1 10 Pseudomonas sp. MT629845 MT947912 MT947960 MT948010 11 SS NBR1 12 Pseudomonas sp. MT629845 MT947914 MT947963 MT948011 12 SS NBR1 13 Pseudomonas koreensis MT629847 MT947914 MT947963 MT948010 13 SS NBR1 13 Pseudomonas koreensis MT629848 MT947910 MT947966 MT948016 15 SS NBR1 16 Pseudomonas koreensis MT629850 MT947917 MT947966 MT948016 </td <td>2</td> <td>SS NBRI 2</td> <td>Pseudomonas sp.</td> <td>MT629837</td> <td>MT947904</td> <td>MT947953</td> <td>MT948002</td>	2	SS NBRI 2	Pseudomonas sp.	MT629837	MT947904	MT947953	MT948002	
5 SS NBRI 5 Pseudomonas sp. MT629841 MT947907 MT947955 MT948005 6 SS NBRI 7 Pseudomonas sp. MT629841 MT947908 MT947957 MT948007 8 SS NBRI 8 Pseudomonas sp. MT629842 MT947910 MT947959 MT948007 9 SS NBRI 9 Pseudomonas sp. MT629844 MT947911 MT947960 MT948009 10 SS NBRI 10 Pseudomonas sp. MT629845 MT947912 MT947960 MT948010 11 SS NBRI 11 Pseudomonas sp. MT629846 MT947912 MT947960 MT948011 12 SS NBRI 12 Pseudomonas sp. MT629846 MT947915 MT947964 MT948012 13 SS NBRI 13 Pseudomonas koreensis MT629848 MT947915 MT947964 MT948012 14 SS NBRI 14 Pseudomonas koreensis MT629850 MT947916 MT947966 MT948016 15 SS NBRI 16 Pseudomonas koreensis MT629851 MT947918 MT9479607 MT948016	3	SS NBRI 3	Pseudomonas koreensis	MT629838	MT947905	MT947954	MT948003	
6 SS NBRI 6 Pseudomonas sp. MT629841 MT947908 MT947958 MT948006 7 SS NBRI 8 Pseudomonas sp. MT629842 MT947909 MT947958 MT948008 9 SS NBRI 8 Pseudomonas sp. MT629843 MT947910 MT947960 MT948008 9 SS NBRI 10 Pseudomonas sp. MT629844 MT947911 MT947961 MT948010 10 SS NBRI 11 Pseudomonas sp. MT629846 MT947913 MT947961 MT948010 11 SS NBRI 12 Pseudomonas sp. MT629846 MT947913 MT947964 MT948012 13 SS NBRI 13 Pseudomonas sp. MT629848 MT947916 MT947964 MT948013 14 SS NBRI 15 Pseudomonas koreensis MT629850 MT947916 MT947966 MT948014 15 SS NBRI 15 Pseudomonas koreensis MT629851 MT947919 MT947966 MT948016 16 SS NBRI 18 Pseudomonas koreensis MT629851 MT947910 MT947966 MT948014	4	SS NBRI 4	Pseudomonas koreensis	MT629839	MT947906	MT947955	MT948004	
7 SS NBR17 Pseudomonas sp. MT629842 MT947909 MT947959 MT948007 8 SS NBR19 Pseudomonas sp. MT629843 MT947910 MT947959 MT948009 9 SS NBR1 10 Pseudomonas sp. MT629845 MT947912 MT947960 MT948009 11 SS NBR1 11 Pseudomonas sp. MT629846 MT947912 MT947962 MT948011 12 SS NBR1 12 Pseudomonas sp. MT629847 MT947914 MT947963 MT948012 13 SS NBR1 13 Pseudomonas koreensis MT629848 MT947915 MT947963 MT948013 14 SS NBR1 16 Pseudomonas koreensis MT629849 MT947916 MT947966 MT948016 15 SS NBR1 16 Pseudomonas koreensis MT629851 MT947918 MT947966 MT948016 16 SS NBR1 17 Pseudomonas koreensis MT629851 MT947919 MT947966 MT948016 17 SS NBR1 26 Pseudomonas stutzeri MT629853 MT947920 MT947960 MT9480	5	SS NBRI 5	Pseudomonas sp.	MT629840	MT947907	MT947956	MT948005	
8 SS NBRI 8 Pseudomonas koreensis MT629843 MT947910 MT947950 MT948008 9 SS NBRI 10 Pseudomonas sp. MT629844 MT947911 MT947960 MT948010 10 SS NBRI 10 Pseudomonas sp. MT629846 MT947912 MT947961 MT948010 12 SS NBRI 12 Pseudomonas koreensis MT629847 MT947914 MT947963 MT948012 13 SS NBRI 13 Pseudomonas sp. MT629848 MT947916 MT947965 MT948013 14 SS NBRI 14 Pseudomonas sp. MT629850 MT947916 MT947965 MT948013 15 SS NBRI 15 Pseudomonas koreensis MT629851 MT947916 MT947966 MT948015 16 SS NBRI 17 Pseudomonas koreensis MT629851 MT947919 MT947966 MT948016 17 SS NBRI 18 Pseudomonas koreensis MT629851 MT947919 MT947966 MT948016 18 SS NBRI 18 Pseudomonas stutzeri MT629853 MT947920 MT947979	6	SS NBRI 6	Pseudomonas sp.	MT629841	MT947908	MT947957	MT948006	
9 SS NBR1 9 Pseudomonas sp. MT629844 MT947911 MT947960 MT948009 10 SS NBR1 11 Pseudomonas sp. MT629845 MT947912 MT947961 MT948011 11 SS NBR1 11 Pseudomonas koreensis MT629847 MT947914 MT947962 MT948012 13 SS NBR1 13 Pseudomonas koreensis MT629848 MT947915 MT947964 MT948013 14 SS NBR1 13 Pseudomonas koreensis MT629849 MT947916 MT947966 MT948014 15 SS NBR1 15 Pseudomonas koreensis MT629850 MT947917 MT947966 MT948014 16 SS NBR1 16 Pseudomonas koreensis MT629851 MT947919 MT947966 MT948016 17 SS NBR1 17 Pseudomonas koreensis MT629852 MT947919 MT947968 MT948016 18 SS NBR1 19 Pseudomonas koreensis MT629851 MT947920 MT947969 MT948016 19 SS NBR1 20 Pseudomonas suttzeri MT629854 MT947922 MT947970<	7	SS NBRI 7	Pseudomonas sp.	MT629842	MT947909	MT947958	MT948007	
10 SS NBRI 10 Pseudomonas sp. MT629845 MT947912 MT947961 MT948010 11 SS NBRI 11 Pseudomonas sp. MT629846 MT947913 MT947962 MT948012 12 SS NBRI 12 Pseudomonas sp. MT629848 MT947915 MT947963 MT948012 14 SS NBRI 14 Pseudomonas sp. MT629849 MT947916 MT947965 MT948013 15 SS NBRI 14 Pseudomonas koreensis MT629850 MT947917 MT947966 MT948016 16 SS NBRI 16 Pseudomonas koreensis MT629851 MT947918 MT947966 MT948016 17 SS NBRI 17 Pseudomonas koreensis MT629852 MT947918 MT947969 MT948017 18 SS NBRI 18 Pseudomonas stutzeri MT629853 MT947920 MT947970 MT948018 19 SS NBRI 19 Pseudomonas stutzeri MT629854 MT947922 MT9479770 MT948012 20 SS NBRI 20 Pseudomonas stutzeri MT629856 MT947922 MT9479771	8	SS NBRI 8	Pseudomonas koreensis	MT629843	MT947910	MT947959	MT948008	
SS NBRI 11	9	SS NBRI 9	Pseudomonas sp.	MT629844	MT947911	MT947960	MT948009	
12 SS NBRI 12 Pseudomonas koreensis MT629847 MT947914 MT947964 MT948013 14 SS NBRI 14 Pseudomonas koreensis MT629848 MT947915 MT947965 MT948013 15 SS NBRI 15 Pseudomonas koreensis MT629850 MT947917 MT947965 MT948014 16 SS NBRI 16 Pseudomonas koreensis MT629851 MT947918 MT947967 MT948016 17 SS NBRI 17 Pseudomonas koreensis MT629852 MT947919 MT947968 MT948016 18 SS NBRI 19 Pseudomonas koreensis MT629853 MT947920 MT947969 MT948018 19 SS NBRI 19 Pseudomonas stutzeri MT629854 MT947920 MT947969 MT948018 19 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947920 MT947979 MT948018 20 SS NBRI 20 Pseudomonas stutzeri MT629856 MT947922 MT947977 MT94802 21 SS NBRI 22 Pseudomonas stutzeri MT629858 MT947925 <td< td=""><td>10</td><td>SS NBRI 10</td><td>Pseudomonas sp.</td><td>MT629845</td><td>MT947912</td><td>MT947961</td><td>MT948010</td></td<>	10	SS NBRI 10	Pseudomonas sp.	MT629845	MT947912	MT947961	MT948010	
13 SS NBRI 13 Pseudomonas sp. MT629848 MT947915 MT947964 MT948013 14 SS NBRI 14 Pseudomonas koreensis MT629849 MT947916 MT947965 MT948014 15 SS NBRI 16 Pseudomonas koreensis MT629850 MT947918 MT947966 MT948015 16 SS NBRI 16 Pseudomonas koreensis MT629852 MT947918 MT947966 MT947961 17 SS NBRI 17 Pseudomonas koreensis MT629853 MT947920 MT947969 MT948018 18 SS NBRI 18 Pseudomonas struceri MT629854 MT947921 MT947970 MT948019 20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947921 MT947970 MT948019 21 SS NBRI 22 Pseudomonas stutzeri MT629855 MT947921 MT947970 MT948021 22 SS NBRI 23 Pseudomonas alcaliphila MT629858 MT947922 MT947973 MT948022 23 SS NBRI 24 Pseudomonas suttaeri MT629859 MT947926 MT	11	SS NBRI 11	Pseudomonas sp.	MT629846	MT947913	MT947962	MT948011	
14 SS NBRI 14 Pseudomonas koreensis MT629849 MT947916 MT947965 MT948015 15 SS NBRI 15 Pseudomonas sp. MT629850 MT947917 MT947966 MT948015 16 SS NBRI 16 Pseudomonas koreensis MT629851 MT947918 MT947967 MT948016 17 SS NBRI 17 Pseudomonas koreensis MT629852 MT947919 MT947967 MT948016 18 SS NBRI 18 Pseudomonas koreensis MT629853 MT947920 MT947969 MT948019 19 SS NBRI 19 Pseudomonas koreensis MT629855 MT947921 MT947970 MT948019 20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947922 MT947971 MT948020 21 SS NBRI 22 Pseudomonas alcaliphila MT629857 MT947922 MT947971 MT948021 22 SS NBRI 24 Pseudomonas alcaliphila MT629857 MT947924 MT947977 MT948021 24 SS NBRI 25 Pseudomonas stutzeri MT629860 MT947925 <t< td=""><td>12</td><td>SS NBRI 12</td><td>Pseudomonas koreensis</td><td>MT629847</td><td>MT947914</td><td>MT947963</td><td>MT948012</td></t<>	12	SS NBRI 12	Pseudomonas koreensis	MT629847	MT947914	MT947963	MT948012	
15 SS NBRI 15 Pseudomonas sp. MT629850 MT947917 MT947966 MT948016 16 SS NBRI 16 Pseudomonas koreensis MT629851 MT947918 MT947967 MT948016 17 SS NBRI 18 Pseudomonas sp. MT629852 MT947919 MT947968 MT948017 18 SS NBRI 18 Pseudomonas sp. MT629853 MT947920 MT947968 MT948018 19 SS NBRI 19 Pseudomonas koreensis MT629855 MT947921 MT947970 MT948019 20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947922 MT947971 MT948012 21 SS NBRI 22 Pseudomonas stutzeri MT629856 MT947923 MT947972 MT948021 22 SS NBRI 23 Pseudomonas alcaliphila MT629858 MT947924 MT947977 MT948022 24 SS NBRI 25 Pseudomonas alcaliphila MT629865 MT947926 MT947975 MT948022 25 SS NBRI 26 Pseudomonas stutzeri MT629861 MT947927 MT947977 <td>13</td> <td>SS NBRI 13</td> <td>Pseudomonas sp.</td> <td>MT629848</td> <td>MT947915</td> <td>MT947964</td> <td>MT948013</td>	13	SS NBRI 13	Pseudomonas sp.	MT629848	MT947915	MT947964	MT948013	
16 SS NBRI 16 Pseudomonas koreensis MT629851 MT947918 MT947967 MT948016 17 SS NBRI 17 Pseudomonas koreensis MT629852 MT947919 MT947968 MT948017 18 SS NBRI 18 Pseudomonas sp. MT629853 MT947920 MT947969 MT948018 19 SS NBRI 19 Pseudomonas koreensis MT629854 MT947921 MT947970 MT948018 20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947922 MT947977 MT948020 21 SS NBRI 22 Pseudomonas slucaliphila MT629856 MT947924 MT947972 MT948021 22 SS NBRI 23 Pseudomonas alcaliphila MT629858 MT947925 MT947973 MT948022 23 SS NBRI 24 Pseudomonas p. MT629858 MT947926 MT947975 MT948022 24 SS NBRI 25 Pseudomonas sutzeri MT629860 MT947927 MT947976 MT948024 25 SS NBRI 29 Pseudomonas decaliphila MT629861 MT947929 MT9	14	SS NBRI 14	Pseudomonas koreensis	MT629849	MT947916	MT947965	MT948014	
17 SS NBRI 17 Pseudomonas koreensis MT629852 MT947919 MT947968 MT948018 18 SS NBRI 18 Pseudomonas sp. MT629853 MT947920 MT947969 MT948018 19 SS NBRI 19 Pseudomonas koreensis MT629855 MT947921 MT947970 MT948019 20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947922 MT947971 MT948020 21 SS NBRI 22 Pseudomonas alcaliphila MT629857 MT947924 MT947977 MT948022 23 SS NBRI 24 Pseudomonas mendocina MT629858 MT947925 MT947974 MT948022 24 SS NBRI 25 Pseudomonas alcaliphila MT629859 MT947926 MT947975 MT948024 25 SS NBRI 26 Pseudomonas stutzeri MT629860 MT947927 MT947976 MT948025 26 SS NBRI 27 Pseudomonas stutzeri MT629861 MT947929 MT947977 MT948026 27 SS NBRI 32 Pseudomonas alcaliphila MT629862 MT947929 <	15	SS NBRI 15	Pseudomonas sp.	MT629850	MT947917	MT947966	MT948015	
18 SS NBRI 18 Pseudomonas sp. MT629853 MT947920 MT947969 MT948019 19 SS NBRI 19 Pseudomonas koreensis MT629854 MT947921 MT947970 MT948019 20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947922 MT947971 MT948020 21 SS NBRI 22 Pseudomonas stutzeri MT629856 MT947923 MT947972 MT948021 22 SS NBRI 23 Pseudomonas alcaliphila MT629858 MT947924 MT947973 MT948023 24 SS NBRI 24 Pseudomonas alcaliphila MT629858 MT947925 MT947974 MT948024 25 SS NBRI 26 Pseudomonas alcaliphila MT629860 MT947927 MT947976 MT948025 26 SS NBRI 27 Pseudomonas alcaliphila MT629861 MT947928 MT947977 MT948026 27 SS NBRI 32 Pseudomonas alcaliphila MT629862 MT947930 MT947979 MT948027 28 SS NBRI 33 Pseudomonas alcaliphila MT629863 MT947930	16	SS NBRI 16	Pseudomonas koreensis	MT629851	MT947918	MT947967	MT948016	
19 SS NBRI 19 Pseudomonas koreensis MT629854 MT947921 MT947970 MT948019 20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947922 MT947971 MT948020 21 SS NBRI 22 Pseudomonas stutzeri MT629856 MT947923 MT947972 MT948021 22 SS NBRI 23 Pseudomonas alcaliphila MT629858 MT947924 MT947974 MT948022 23 SS NBRI 24 Pseudomonas mendocina MT629858 MT947926 MT947977 MT948023 24 SS NBRI 25 Pseudomonas sp. MT629860 MT947926 MT947975 MT948025 25 SS NBRI 27 Pseudomonas stutzeri MT629861 MT947927 MT947976 MT947977 MT948025 26 SS NBRI 29 Pseudomonas alcaliphila MT629862 MT947929 MT947978 MT948027 28 SS NBRI 32 Pseudomonas mendocina MT629863 MT947930 MT947990 MT948028 30 SS NBRI 33 Pseudomonas mendocina MT629865 <td< td=""><td>17</td><td>SS NBRI 17</td><td>Pseudomonas koreensis</td><td>MT629852</td><td>MT947919</td><td>MT947968</td><td>MT948017</td></td<>	17	SS NBRI 17	Pseudomonas koreensis	MT629852	MT947919	MT947968	MT948017	
20 SS NBRI 20 Pseudomonas stutzeri MT629855 MT947922 MT947971 MT948020 21 SS NBRI 22 Pseudomonas stutzeri MT629856 MT947923 MT947972 MT948021 22 SS NBRI 23 Pseudomonas alcaliphila MT629857 MT947924 MT947973 MT948022 23 SS NBRI 24 Pseudomonas mendocina MT629858 MT947925 MT947974 MT948023 24 SS NBRI 25 Pseudomonas alcaliphila MT629860 MT947926 MT947975 MT948024 25 SS NBRI 26 Pseudomonas stutzeri MT629860 MT947927 MT947976 MT947976 MT947976 MT947976 MT947977 MT947977 MT947976 MT947977 MT947929 MT947977 MT947928 MT947979 MT947930 MT947979 MT948026 26 SS NBRI 32 Pseudomonas stutzeri MT629862 MT947930 MT947979 MT948026 28 SS NBRI 33 Pseudomonas alcaliphila MT629863 MT947930 MT947980 MT947980 MT948033 <td>18</td> <td>SS NBRI 18</td> <td>Pseudomonas sp.</td> <td>MT629853</td> <td>MT947920</td> <td>MT947969</td> <td>MT948018</td>	18	SS NBRI 18	Pseudomonas sp.	MT629853	MT947920	MT947969	MT948018	
21 SS NBRI 22 Pseudomonas sutzeri MT629856 MT947923 MT947972 MT948021 22 SS NBRI 23 Pseudomonas alcaliphila MT629857 MT947924 MT947973 MT948022 23 SS NBRI 24 Pseudomonas mendocina MT629858 MT947925 MT947974 MT948023 24 SS NBRI 25 Pseudomonas alcaliphila MT629859 MT947926 MT947975 MT948024 25 SS NBRI 26 Pseudomonas sp. MT629860 MT947927 MT947976 MT948025 26 SS NBRI 27 Pseudomonas stutzeri MT629861 MT947928 MT947977 MT948026 27 SS NBRI 32 Pseudomonas alcaliphila MT629862 MT947930 MT947979 MT948027 28 SS NBRI 33 Pseudomonas alcaliphila MT629863 MT947930 MT947980 MT948029 30 SS NBRI 34 Pseudomonas alcaliphila MT629865 MT947931 MT947980 MT948033 31 SS NBRI 36 Pseudomonas alcaliphila MT629866 MT947934	19	SS NBRI 19	Pseudomonas koreensis	MT629854	MT947921	MT947970	MT948019	
22 SS NBRI 23 Pseudomonas alcaliphila MT629857 MT947924 MT947973 MT948023 23 SS NBRI 24 Pseudomonas mendocina MT629858 MT947925 MT947974 MT948023 24 SS NBRI 25 Pseudomonas alcaliphila MT629859 MT947926 MT947975 MT948024 25 SS NBRI 26 Pseudomonas sp. MT629860 MT947927 MT947976 MT948025 26 SS NBRI 27 Pseudomonas stutzeri MT629861 MT947928 MT947977 MT948026 27 SS NBRI 32 Pseudomonas alcaliphila MT629862 MT947929 MT947978 MT948027 28 SS NBRI 33 Pseudomonas alcaliphila MT629863 MT947930 MT947979 MT948028 29 SS NBRI 34 Pseudomonas mendocina MT629865 MT947931 MT947980 MT948029 30 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947981 MT948031 31 SS NBRI 36 Pseudomonas mendocina MT629866 MT947934	20	SS NBRI 20	Pseudomonas stutzeri	MT629855	MT947922	MT947971	MT948020	
23 SS NBRI 24 Pseudomonas mendocina MT629858 MT947925 MT947974 MT948023 24 SS NBRI 25 Pseudomonas alcaliphila MT629859 MT947926 MT947975 MT948024 25 SS NBRI 26 Pseudomonas sp. MT629860 MT947977 MT947976 MT948025 26 SS NBRI 27 Pseudomonas stutzeri MT629861 MT947928 MT947977 MT948026 27 SS NBRI 29 Pseudomonas alcaliphila MT629862 MT947929 MT947978 MT948027 28 SS NBRI 32 Pseudomonas alcaliphila MT629863 MT947930 MT947979 MT948028 29 SS NBRI 33 Pseudomonas alcaliphila MT629864 MT947931 MT947980 MT948029 30 SS NBRI 34 Pseudomonas alcaliphila MT629865 MT947932 MT947981 MT948030 31 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947982 MT948031 32 SS NBRI 36 Pseudomonas mendocina MT629868 MT947935	21	SS NBRI 22	Pseudomonas stutzeri	MT629856	MT947923	MT947972	MT948021	
24 SS NBRI 25 Pseudomonas alcaliphila MT629859 MT947926 MT947975 MT948024 25 SS NBRI 26 Pseudomonas sp. MT629860 MT947927 MT947976 MT948025 26 SS NBRI 27 Pseudomonas stutzeri MT629861 MT947928 MT947977 MT948026 27 SS NBRI 29 Pseudomonas alcaliphila MT629862 MT947929 MT947978 MT948027 28 SS NBRI 32 Pseudomonas sp. MT629863 MT947930 MT947979 MT948028 29 SS NBRI 33 Pseudomonas alcaliphila MT629864 MT947931 MT947980 MT948029 30 SS NBRI 34 Pseudomonas mendocina MT629865 MT947932 MT947981 MT948030 31 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947982 MT948031 32 SS NBRI 36 Pseudomonas mendocina MT629868 MT947933 MT947984 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 <	22	SS NBRI 23	Pseudomonas alcaliphila	MT629857	MT947924	MT947973	MT948022	
25 SS NBRI 26 Pseudomonas sp. MT629860 MT947927 MT947976 MT948025 26 SS NBRI 27 Pseudomonas stutzeri MT629861 MT947928 MT947977 MT948026 27 SS NBRI 29 Pseudomonas alcaliphila MT629862 MT947929 MT947978 MT948027 28 SS NBRI 32 Pseudomonas sp. MT629863 MT947930 MT947979 MT948028 29 SS NBRI 33 Pseudomonas alcaliphila MT629864 MT947931 MT947980 MT948029 30 SS NBRI 34 Pseudomonas mendocina MT629865 MT947932 MT947981 MT948030 31 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947982 MT948031 32 SS NBRI 36 Pseudomonas mendocina MT629868 MT947934 MT947983 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 40 Pseudomonas alcaliphila MT629870 MT947938 <	23	SS NBRI 24	Pseudomonas mendocina	MT629858	MT947925	MT947974	MT948023	
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28 SS NBRI 32 Pseudomonas sp. MT629863 MT947930 MT947979 MT948028 29 SS NBRI 33 Pseudomonas alcaliphila MT629864 MT947931 MT947980 MT948029 30 SS NBRI 34 Pseudomonas mendocina MT629865 MT947932 MT947981 MT948030 31 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947982 MT948031 32 SS NBRI 36 Pseudomonas alcaliphila MT629867 MT947934 MT947983 MT948032 33 SS NBRI 37 Pseudomonas mendocina MT629868 MT947935 MT947984 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629873 MT947940	26	SS NBRI 27	Pseudomonas stutzeri	MT629861	MT947928	MT947977	MT948026	
29 SS NBRI 33 Pseudomonas alcaliphila MT629864 MT947931 MT947980 MT948029 30 SS NBRI 34 Pseudomonas mendocina MT629865 MT947932 MT947981 MT948030 31 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947982 MT948031 32 SS NBRI 36 Pseudomonas alcaliphila MT629867 MT947934 MT947983 MT948032 33 SS NBRI 37 Pseudomonas mendocina MT629868 MT947935 MT947984 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947940 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT9479	27	SS NBRI 29	Pseudomonas alcaliphila	MT629862	MT947929	MT947978	MT948027	
30 SS NBRI 34 Pseudomonas mendocina MT629865 MT947932 MT947981 MT948030 31 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947982 MT948031 32 SS NBRI 36 Pseudomonas alcaliphila MT629867 MT947934 MT947983 MT948032 33 SS NBRI 37 Pseudomonas mendocina MT629868 MT947935 MT947984 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947999 MT948039 40 SS NBRI 45 Pseudomonas mendocina MT629875 MT947942	28	SS NBRI 32	Pseudomonas sp.	MT629863	MT947930	MT947979	MT948028	
31 SS NBRI 35 Pseudomonas alcaliphila MT629866 MT947933 MT947982 MT948031 32 SS NBRI 36 Pseudomonas alcaliphila MT629867 MT947934 MT947983 MT948032 33 SS NBRI 37 Pseudomonas mendocina MT629868 MT947935 MT947984 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas mendocina MT629876 MT9479	29	SS NBRI 33	Pseudomonas alcaliphila	MT629864	MT947931	MT947980	MT948029	
32 SS NBRI 36 Pseudomonas alcaliphila MT629867 MT947934 MT947983 MT948032 33 SS NBRI 37 Pseudomonas mendocina MT629868 MT947935 MT947984 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas mendocina MT629875 MT947942 MT947991 MT948040 41 SS NBRI 48 Pseudomonas mendocina MT629879 MT947945	30	SS NBRI 34	Pseudomonas mendocina	MT629865	MT947932	MT947981	MT948030	
33 SS NBRI 37 Pseudomonas mendocina MT629868 MT947935 MT947984 MT948033 34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas mendocina MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947944 MT947993 MT948042 43 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 </td <td>31</td> <td>SS NBRI 35</td> <td>Pseudomonas alcaliphila</td> <td>MT629866</td> <td>MT947933</td> <td>MT947982</td> <td>MT948031</td>	31	SS NBRI 35	Pseudomonas alcaliphila	MT629866	MT947933	MT947982	MT948031	
34 SS NBRI 38 Pseudomonas alcaliphila MT629869 MT947936 MT947985 MT948034 35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas mendocina MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629878 MT947944 MT947994 MT948042 43 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 </td <td>32</td> <td>SS NBRI 36</td> <td>Pseudomonas alcaliphila</td> <td>MT629867</td> <td>MT947934</td> <td>MT947983</td> <td>MT948032</td>	32	SS NBRI 36	Pseudomonas alcaliphila	MT629867	MT947934	MT947983	MT948032	
35 SS NBRI 39 Pseudomonas mendocina MT629870 MT947937 MT947986 MT948035 36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas alcaliphila MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 </td <td>33</td> <td>SS NBRI 37</td> <td>Pseudomonas mendocina</td> <td>MT629868</td> <td>MT947935</td> <td>MT947984</td> <td>MT948033</td>	33	SS NBRI 37	Pseudomonas mendocina	MT629868	MT947935	MT947984	MT948033	
36 SS NBRI 40 Pseudomonas alcaliphila MT629871 MT947938 MT947987 MT948036 37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas alcaliphila MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 50 Pseudomonas mendocina MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 45 SS NBRI 51 Pseudomonas sp. MT629881 MT947948	34	SS NBRI 38	Pseudomonas alcaliphila	MT629869	MT947936	MT947985	MT948034	
37 SS NBRI 41 Pseudomonas alcaliphila MT629872 MT947939 MT947988 MT948037 38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas alcaliphila MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 49 Pseudomonas sp. MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 <t< td=""><td>35</td><td>SS NBRI 39</td><td>Pseudomonas mendocina</td><td>MT629870</td><td>MT947937</td><td>MT947986</td><td>MT948035</td></t<>	35	SS NBRI 39	Pseudomonas mendocina	MT629870	MT947937	MT947986	MT948035	
38 SS NBRI 42 Pseudomonas alcaliphila MT629873 MT947940 MT947989 MT948038 39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas alcaliphila MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 49 Pseudomonas sp. MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	36	SS NBRI 40	Pseudomonas alcaliphila	MT629871	MT947938	MT947987	MT948036	
39 SS NBRI 43 Pseudomonas alcaliphila MT629874 MT947941 MT947990 MT948039 40 SS NBRI 45 Pseudomonas alcaliphila MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 49 Pseudomonas sp. MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	37	SS NBRI 41	Pseudomonas alcaliphila	MT629872	MT947939	MT947988	MT948037	
40 SS NBRI 45 Pseudomonas alcaliphila MT629875 MT947942 MT947991 MT948040 41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 49 Pseudomonas sp. MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	38	SS NBRI 42	Pseudomonas alcaliphila	MT629873	MT947940	MT947989	MT948038	
41 SS NBRI 47 Pseudomonas mendocina MT629876 MT947943 MT947992 MT948041 42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 49 Pseudomonas sp. MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	39	SS NBRI 43	Pseudomonas alcaliphila	MT629874	MT947941	MT947990	MT948039	
42 SS NBRI 48 Pseudomonas mendocina MT629877 MT947944 MT947993 MT948042 43 SS NBRI 49 Pseudomonas sp. MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	40	SS NBRI 45	Pseudomonas alcaliphila	MT629875	MT947942	MT947991	MT948040	
43 SS NBRI 49 Pseudomonas sp. MT629878 MT947945 MT947994 MT948043 44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	41	SS NBRI 47	Pseudomonas mendocina	MT629876	MT947943	MT947992	MT948041	
44 SS NBRI 50 Pseudomonas mendocina MT629879 MT947946 MT947995 MT948044 45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	42	SS NBRI 48	Pseudomonas mendocina	MT629877	MT947944	MT947993	MT948042	
45 SS NBRI 51 Pseudomonas mendocina MT629880 MT947947 MT947996 MT948045 46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	43	SS NBRI 49	Pseudomonas sp.	MT629878	MT947945	MT947994	MT948043	
46 SS NBRI 52 Pseudomonas sp. MT629881 MT947948 MT947997 MT948046	44	SS NBRI 50	Pseudomonas mendocina	MT629879	MT947946	MT947995	MT948044	
•	45	SS NBRI 51	Pseudomonas mendocina	MT629880	MT947947	MT947996	MT948045	
	46	SS NBRI 52	Pseudomonas sp.	MT629881	MT947948	MT947997	MT948046	
47 SS NBRI 53 Pseudomonas alcaliphila MT629882 MT947949 MT947998 MT948047	47	SS NBRI 53	Pseudomonas alcaliphila	MT629882	MT947949	MT947998	MT948047	

48	SS NBRI 54	Pseudomonas sp.	MT629883	MT947950	MT947999	MT948048
49	SS NBRI 55	Enterobacter cloacace	MT629884	MT947951	MT948000	MT948049
50	NBRIRA	Pseudomonas putida	MTCC5279	MT982439	MT982437	MT982438

Supplemenatry Table 4. Plant growth promotary traits in phosphate accumulating bacterial isolates

	Auxin	Phosphate	Siderophore	Alkaline Phosphatase	Acidic Phosphatase	Biofilm
	production (μg/ml)	solubilisation (µg/ml)	Production (zone in cm)	(µM of pNP produced)	(μM of pNP produced)	production
NBRI RA	55.68±0.10	41.50±3.34	0±0.00	5.53±0.42	10.53±1.27	1.30±0.10
SS NBRI 1	39.55±1.11	22.00±0.09	0.4 ± 0.002	4.30±0.47	7.71±0.26	0.94 ± 0.06
SS NBRI 2	47.74±0.14	15.89±0.55	1.1 ± 0.004	7.76±0.31	17.07±3.88	2.30±0.28
SS NBRI 3	50.33±0.14	11.53±0.42	0.5±0.01	1.91±0.42	8.77±0.37	1.95±0.08
SS NBRI 4	44.34±0.45	26.42±3.08	0 ± 0.00	4.84 ± 2.07	15.10±0.46	2.35±0.17
SS NBRI 5	49.56±0.14	17.77±0.03	0.7 ± 0.002	1.06±0.42	$6.86 \pm .26$	2.37±0.10
SS NBRI 7	43.43±0.66	15.21±1.04	0.7 ± 0.002	25.69 ± 3.14	5.16±0.15	2.05±0.12
SS NBRI 8	56.52±0.45	15.99±0.00	0.8 ± 0.006	6.65±3.56	15.53±1.50	1.64±0.21
SS NBRI 9	48.19±0.03	10.36±0.09	1±0.00	9.25±3.93	6.75±1.75	1.53±0.62
SS NBRI 10	45.04±0.52	11.79±0.16	1±0.00	3.13±0.05	7.34±0.10	3.23±0.18
SS NBRI 11	46.69±0.91	13.42±0.87	0.6 ± 0.001	2.23±0.10	7.44 ± 0.00	1.22±0.06
SS NBRI 12	49.56±0.14	17.06±0.29	0.8 ± 0.005	7.66±1.27	26.28±4.36	1.12±0.12
SS NBRI 13	52.92±0.35	17.58±4.97	0.7 ± 0.003	0.15±0.05	6.43±0.37	0.85 ± 0.09
SS NBRI 14	57.15±0.59	16.34±0.74	1±0.00	1.43±0.26	6.06±0.10	2.05±0.06
SS NBRI 15	45.81±0.45	2.27±0.19	0.7 ± 0.003	4.46±0	5.69±0.69	2.20±0.18
SS NBRI 16	51.34±0.17	15.86±0.78	0.8 ± 0.005	3.45±0.69	4.68±0.10	2.14±0.17

SS NBRI 17	51.38±0.14	12.64±0.09	0.9±0.001	1.91±0.63	19.57±2.02	1.26±0.09
SS NBRI 18	41.54±0.73	3.47 ± 0.22	0.7 ± 0.007	4.41±0.05	13.77±1.01	2.75±0.05
SS NBRI 19	59.92±0.98	17.42±0.39	0.5±0.003	8.45±0.37	46.70±1.17	1.63±0.19
SS NBRI 20	33.53±0.35	42.86±0.09	0.3±0.004	3.67±0.05	3.51±0.63	0.98 ± 0.22
SS NBRI 22	30.87±0.21	4.06 ± 0.03	0.3±0.004	3.08±0.10	4.46±0.10	1.10±0.21
SS NBRI 23	43.54±0.14	10.40±0.32	0 ± 0.00	9.46±0.53	41.81±0.63	2.13±0.26
SS NBRI 24	52.18±0.38	3.41±0.290.	0 ± 0.00	7.92±0.05	38.83 ± 0.00	1.98±0.13
SS NBRI 25	38.88±0.38	2.66±0.39	0 ± 0.00	4.52±0.05	21.12±0.15	1.38±0.11
SS NBRI 26	33.88±0.98	3.64 ± 0.06	0 ± 0.00	7.71±0.05	22.66±0.53	2.34±0.17
SS NBRI 27	43.54±0.14	4.68±0.19	0 ± 0.00	6.96±0.26	20.16±0.79	1.99±0.29
SS NBRI 29	47.32±0.00	3.31±0.19	0.5 ± 0.00	4.57±0.21	13.72±0.10	1.47±0.38
SS NBRI 32	33.46±0.28	27.235±0.19	0.5 ± 0.00	1.06±0.00	7.34 ± 0.00	1.37±0.068
SS NBRI 33	29.96±0.14	18.85±0.06	0 ± 0.00	31.70±0.63	38.78 ± 0.58	1.13±0.056
SS NBRI 34	21.21±0.14	11.765±0.65	1 ± 0.00	39.84 ± 0.37	40.32±2.12	1.05 ± 0.089
SS NBRI 35	21±0.28	3.86 ± 0.55	0 ± 0.00	15.21±0.31	91.82±3.61	1.26±0.17
SS NBRI 36	31.36±0.07	21.61±0.22	0.4 ± 0.00	37.45±1.70	273.07±3.03	2.08±0.12
SS NBRI 37	20.23±0.14	18.26±0.97	0.6 ± 0.00	10.69 ± 0.05	58.41±3.08	1.53±0.13
SS NBRI 38	31.99±1.05	17.25±0.29	0.4 ± 0.00	46.55±3.99	69.90 ± 0.74	1.64 ± 0.086
SS NBRI 39	21.21±0.14	17.84±0.35	1±0.006	$38.78 \pm .05$	38.67±0.58	1.017±0.17
SS NBRI 40	26.74±0.21	6.63±3.9	0.1 ± 0.00	7.71±0.26	27.82±3.67	2.29±0.18
SS NBRI 41	27.825±0.38	4.12±0.61	0 ± 0.00	9.15±0.63	57.61±1.11	0.81 ± 0.05

SS NBRI 42	31.92±1.54	4.35±0.39	0±0.00	9.20±0.47	62.08±0.58	2.87±0.19
SS NBRI 43	28.805 ± 0.24	3.70 ± 0.06	0.2 ± 0.00	15.21±0.31	50.00±1.48	1.57 ± 0.05
SS NBRI 45	36.89 ± 4.27	3.99±0.13	0.3 ± 0.001	8.88 ± 0.15	27.23±1.80	2.17 ± 0.04
SS NBRI 47	21.245±0.24	3.18 ± 0.06	0 ± 0.00	17.76±0.10	43.51±4.25	1.49 ± 0.07
SS NBRI 48	19.005±0.59	2.47 ± 0.35	0.8 ± 0.004	27.66±1.48	65.91±1.22	1.26 ± 0.11
SS NBRI 49	35.385 ± 0.10	3.47 ± 0.29	0.5 ± 0.00	18.62±0.10	45.75±1.48	1.18 ± 0.23
SS NBRI 50	27.23±0.49	5.88 ± 0.0	0.8 ± 0.003	14.09±1.33	65.38±2.07	1.31±0.05
SS NBRI 51	26.14±0.73	0.71 ± 0.74	0 ± 0.00	$4.68 \pm .042$	40.21±2.13	0.73 ± 0.04
SS NBRI 53	56.73±0.03	3.80 ± 0.91	0.2 ± 0.00	16.91±0.10	29.20±3.88	1.15±0.006
SS NBRI 55	40.04±0.00	30.48±0.34	0 ± 0.00	5.21±0.53	17.60±1.86	0.31±0.041

Supplementary Table 5. Growth of phosphate accumulating bacteria in 1M salt

S.No.	Strains	1 Day	2 Day	3 Day	5 Day	7 Day	10 Day
1	SSNBRI 1	+++	+++	+++	+++	+++	+++
2	SSNBRI 2	+++	+++	+++	+++	+++	+++
3	SSNBRI 3	+++	+++	+++	+++	+++	+++
4	SSNBRI 4	+++	+++	+++	+++	+++	+++
5	SSNBRI 5	+++	+++	+++	+++	+++	+++
6	SSNBRI 6	+++	+++	+++	+++	+++	+++
7	SSNBRI 7	+++	+++	+++	+++	+++	+++
8	SSNBRI 8	+++	+++	+++	+++	+++	+++
9	SSNBRI 9	+++	+++	+++	+++	+++	+++
10	SSNBRI 10	+++	+++	+++	+++	+++	+++
11	SSNBRI 11	+++	+++	+++	+++	+++	+++
12	SSNBRI 12	+++	+++	+++	+++	+++	+++
13	SSNBRI 13	+++	+++	+++	+++	+++	+++
14	SSNBRI 14	+++	+++	+++	+++	+++	+++
15	SSNBRI 15	+++	+++	+++	+++	+++	+++
16	SSNBRI 16	+++	+++	+++	+++	+++	+++
17	SSNBRI 17	+++	+++	+++	+++	+++	+++
18	SSNBRI 18	+++	+++	+++	+++	+++	+++
19	SSNBRI 19	+++	+++	+++	+++	+++	+++
20	SSNBRI 20	+++	+++	+++	+++	+++	+++
21	SSNBRI 22	+++	+++	+++	+++	+++	+++
22	SSNBRI 23	+++	+++	+++	+++	+++	+++
23	SSNBRI 24	+++	+++	+++	+++	+++	+++
24	SSNBRI 25	+++	+++	+++	+++	+++	+++
25	SSNBRI 26	+++	+++	+++	+++	+++	+++
26	SSNBRI 27	+++	+++	+++	+++	+++	+++
27	SSNBRI 29	+++	+++	+++	+++	+++	+++

			1	1		1	
28	SSNBRI 32	+++	+++	+++	+++	+++	+++
29	SSNBRI 33	+++	+++	+++	+++	+++	+++
30	SSNBRI 34	+++	+++	+++	+++	+++	+++
31	SSNBRI 35	+++	+++	+++	+++	+++	+++
32	SSNBRI 36	+++	+++	+++	+++	+++	+++
33	SSNBRI 37	+++	+++	+++	+++	+++	++
34	SSNBRI 38	+++	+++	+++	+++	+++	+++
35	SSNBRI 39	+++	+++	+++	+++	+++	++
36	SSNBRI 40						
30	55NDKI 40	+++	+++	+++	+++	+++	+++
37	SSNBRI 42	+++	+++	+++	+++	+++	+++
38	SSNBRI 43	+++	+++	+++	+++	+++	+++
39	SSNBRI 45	+++	+++	+++	+++	+++	+++
40	SSNBRI 47	+++	+++	+++	+++	+++	+++
41	SSNBRI 48	+++	+++	+++	+++	+++	+++
42	SSNBRI 49	+++	+++	+++	+++	+++	+++
43	SSNBRI 50	+++	+++	+++	+++	++	+++
44	SSNBRI 51	+++	+++	+++	+++	+++	+++
45	SSNBRI 53	+++	+++	+++	+++	+++	+++
46	SSNBRI 55	+++	+++	+++	+++	+++	+++

+++: Excellent growth; ++: Good growth; +: Fair growth

Supplementary Table 6. Growth of phosphate accumulating bacteria at 45 $^{\circ}\text{C}$ temperature

S.No.	Strains	1 Day	2 Day	3 Day	5 Day	7 Day	10 Day
1	SSNBRI 1	+++	+++	+++	+++	+++	+++
2	SSNBRI 2	+++	+++	+++	+++	+++	+++
3	SSNBRI 3	+++	+++	+++	+++	+++	+++
4	SSNBRI 4	+++	+++	+++	+++	+++	+++
5	SSNBRI 5	+++	+++	+++	+++	+++	+++
6	SSNBRI 6	+++	+++	+++	+++	+++	+++
7	SSNBRI 7	+++	+++	+++	+++	+++	+++
8	SSNBRI 8	+++	+++	+++	+++	+++	+++
9	SSNBRI 9	+++	+++	+++	+++	+++	+++
10	SSNBRI 10	+++	+++	+++	+++	+++	+++
11	SSNBRI 11	+++	+++	+++	+++	+++	+++
12	SSNBRI 12	+++	+++	+++	+++	+++	+++
13	SSNBRI 13	+++	+++	+++	+++	+++	+++
14	SSNBRI 14	+++	+++	+++	+++	+++	+++
15	SSNBRI 15	+++	+++	+++	+++	+++	+++
16	SSNBRI 16	+++	+++	+++	+++	+++	+++
17	SSNBRI 17	+++	+++	+++	+++	+++	+++
18	SSNBRI 18	+++	+++	+++	+++	+++	+++
19	SSNBRI 19	+++	+++	+++	+++	+++	+++
20	SSNBRI 20	+++	+++	+++	+++	+++	+++
21	SSNBRI 22	+++	+++	+++	+++	+++	+++
22	SSNBRI 23	+++	+++	+++	+++	+++	+++
23	SSNBRI 24	+++	+++	+++	+++	+++	+++
24	SSNBRI 25	+++	+++	+++	+++	+++	+++
25	SSNBRI 26	+++	+++	+++	+++	+++	+++
26	SSNBRI 27	+++	+++	+++	+++	+++	+++
27	SSNBRI 29	+++	+++	+++	+++	+++	+++

			1	1		1	
28	SSNBRI 32	+++	+++	+++	+++	+++	+++
29	SSNBRI 33	+++	+++	+++	+++	+++	+++
30	SSNBRI 34	+++	+++	+++	+++	+++	+++
31	SSNBRI 35	+++	+++	+++	+++	+++	+++
32	SSNBRI 36	+++	+++	+++	+++	+++	+++
33	SSNBRI 37	+++	+++	+++	+++	+++	++
34	SSNBRI 38	+++	+++	+++	+++	+++	+++
35	SSNBRI 39	+++	+++	+++	+++	+++	++
36	SSNBRI 40						
30	55NDKI 40	+++	+++	+++	+++	+++	+++
37	SSNBRI 42	+++	+++	+++	+++	+++	+++
38	SSNBRI 43	+++	+++	+++	+++	+++	+++
39	SSNBRI 45	+++	+++	+++	+++	+++	+++
40	SSNBRI 47	+++	+++	+++	+++	+++	+++
41	SSNBRI 48	+++	+++	+++	+++	+++	+++
42	SSNBRI 49	+++	+++	+++	+++	+++	+++
43	SSNBRI 50	+++	+++	+++	+++	++	+++
44	SSNBRI 51	+++	+++	+++	+++	+++	+++
45	SSNBRI 53	+++	+++	+++	+++	+++	+++
46	SSNBRI 55	+++	+++	+++	+++	+++	+++

+++: Excellent growth; ++: Good growth; +: Fair growth

Supplementary Table 7. Growth of phosphate accumulating bacteria under 45% PEG simulated drought stress

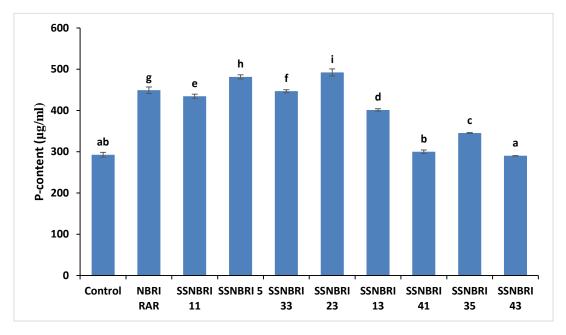
S.No.	Strains	1 Day	2 Day	3 Day	5 Day	7 Day	10 Day
1	SSNBRI 1	+	+	-	-	-	-
2	SSNBRI 2	+	-	-	-	-	-
3	SSNBRI 3	-	-	-	-	-	-
4	SSNBRI 4	-	-	-	-	-	-
5	SSNBRI 5	+++	+++	+++	+++	++	++
6	SSNBRI 6	+	-	-	-	-	-
7	SSNBRI 7	-	-	-	-	-	-
8	SSNBRI 8	-	-	-	-	-	-
9	SSNBRI 9	+	-	-	-	-	-
10	SSNBRI 10	-	-	-	-	-	-
11	SSNBRI 11	+++	+++	+++	+++	++	+++
12	SSNBRI 12	-	-	-	-	-	-
13	SSNBRI 13	+++	+++	+++	++	++	++
14	SSNBRI 14	-	-	-	-	-	-
15	SSNBRI 15	-	-	-	-	-	-
16	SSNBRI 16	-	-	-	-	-	-
17	SSNBRI 17	-	-	-	-	-	-
18	SSNBRI 18	-	-	-	-	-	-
19	SSNBRI 19	-	-	-	-	-	-
20	SSNBRI 20	-	-	-	-	-	-
21	SSNBRI 22	-	-	-	-	-	-
22	SSNBRI 23	+++	+++	+++	++	++	++
23	SSNBRI 24	+	-	-	-	-	-
24	SSNBRI 25	+	-	-	-	-	-
25	SSNBRI 26	+	-	-	-	-	-
26	SSNBRI 27	+	-	-	-	-	-

27	SSNBRI 29	-	-	-	-	-	-
28	SSNBRI 32	-	-	-	-	-	-
29	SSNBRI 33	+++	+++	+++	+++	++	++
30	SSNBRI 34	-	_	-	-	-	-
31	SSNBRI 35	-	-	-	-	-	-
32	SSNBRI 36	-	-	-	-	-	-
33	SSNBRI 37	-	-	-	-	-	-
34	SSNBRI 38	-	-	-	-	-	-
35	SSNBRI 39	-	-	-	-	-	-
36	SSNBRI 40	-	-	-	-	-	-
37	SSNBRI 42	-	-	-	-	-	-
38	SSNBRI 43	-	-	-	-	-	-
39	SSNBRI 45	-	-	-	-		
40	SSNBRI 47	-	-	-	-	-	-
41	SSNBRI 48	-	-	-	-	-	-
42	SSNBRI 49	-	-	-	-	-	-
43	SSNBRI 50	-	-	-	-	-	-
44	SSNBRI 51	-	-	-	-	-	-
45	SSNBRI 53	-	-	-	-	-	-
46	SSNBRI 55	-	-	-	-	-	-
47	NBRI RAR	1	E				

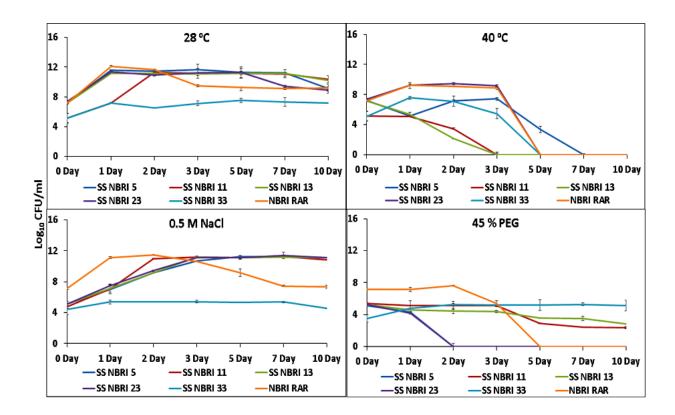
+++: Excellent growth; ++: Good growth; +: Fair growth; -: no growth



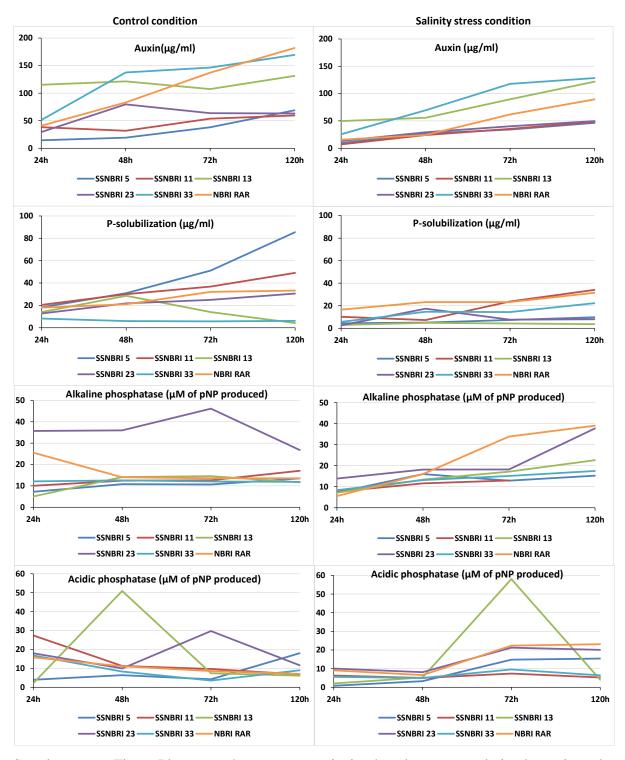
Supplementary Fig. 3. Growth of A. thaliana in presence of phosphate accumulating bacteria



Supplementary Fig. 4. Effect of phosphate accumulating bacteria inoculation on phosphate status of *A. thaliana*



Supplementary Fig. 5. Growth of phosphate accumulating bacteria under abiotic stress conditions of temperature (40 °C), salinity (0.5 M NaCl) and drought (45% PEG).



Supplementary Fig. 6. Plant growth promotary traits in phosphate accumulating bacteria under saline stress condition