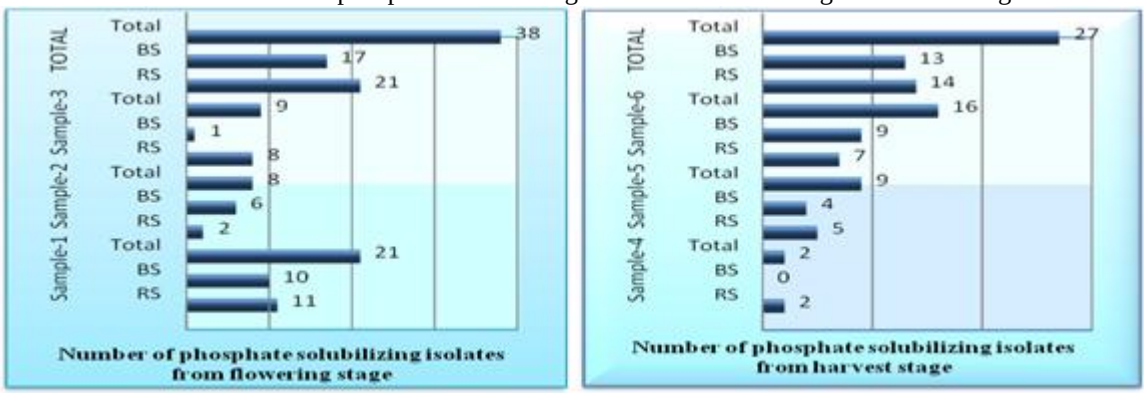
Chart 1: Number of phosphate solubilizing isolates from flowering and harvest stage:



BS= Non-rhizospheric soil, RS= Rhizospheric soil

Table 2: Solubilization of TCP by isolates from flowering and harvest stage.

Phosphate Solubilization by isolates from Flowering stage				**Phosphate Solubilization by isolates from Harvest stage**			
Isolate No.	*Conc. of soluble Phosphate in µg/ml*	*Isolate No.*	*Conc. of soluble Phosphate in µg/ml*	*Isolate No.*	*Conc. of soluble Phosphate in µg/ml*	*Isolate No.*	*Conc. of soluble Phosphate in µg/ml*
PK-1	186.00	PK-20	574.00	PK-1	453.00	PK-20	531.00
PK-2	275.00	PK-21	599.00	PK-2	352.00	PK-21	506.00
PK-3	304.00	PK-22	382.00	PK-3	282.00	PK-22	487.00
PK-4	334.00	PK-23	509.00	PK-4	505.00	PK-23	670.00
PK-5	260.00	PK-24	505.00	PK-5	282.00	PK-24	609.00
PK-6	239.00	PK-25	522.00	PK-6	575.00	PK-25	649.00
PK-7	258.00	PK-26	642.00	PK-7	473.00	PK-26	677.00
PK-8	289.00	PK-27	349.00	PK-8	705.00	PK-27	381.00
PK-9	357.50	PK-28	645.00	PK-9	531.00		
PK-10	211.00	PK-29	195.00	PK-10	616.00		
PK-11	552.00	PK-30	618.00	PK-11	547.00		
PK-12	304.00	PK-31	415.00	PK-12	569.00		
PK-13	406.00	PK-32	296.00	PK-13	616.00		
PK-14	416.00	PK-33	530.00	PK-14	530.00		
PK-15	514.00	PK-34	455.00	PK-15	629.00		
PK-16	445.00	PK-35	267.00	PK-16	483.00		
PK-17	293.00	PK-36	570.00	PK-17	571.00		
PK-18	497.00	PK-37	235.00	PK-18	580.00		
PK-19	408.00	PK-38	277.00	PK-19	571.00		

Chart 2: Percentage distribution of Phosphate solubilizing isolates as low, intermediate and high phosphate solubilizers.

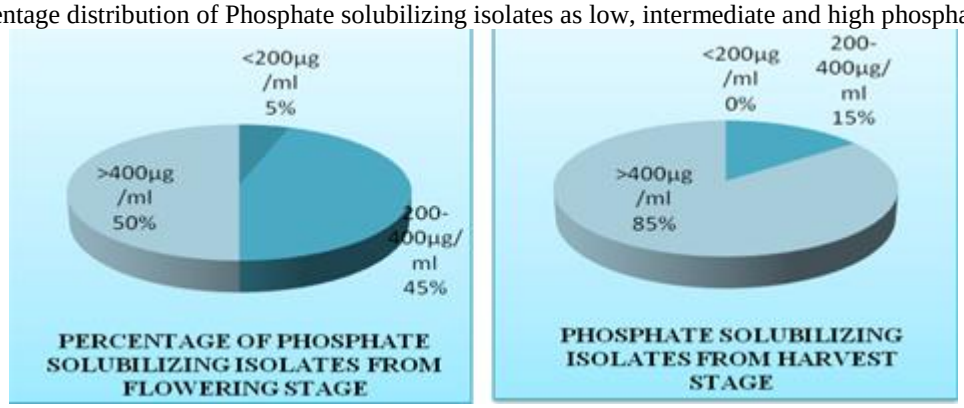


Table 3: Number of phosphate solubilizing isolates from flowering and harvest stage showing various nutrient acquisition traits

FLOWERING ISOLATES				
Sr. No.	Total No. of Isolates	Phosphate Solubilization	Nitrogen Fixing ability	Potassium Solubilization
Sample-1	21	21	15	5
Sample-2	8	8	2	4
Sample-3	9	9	6	1
TOTAL	38	38	23	10
HARVEST ISOLATES				
Sample-4	2	2	1	0
Sample-5	9	9	6	5
Sample-6	16	16	12	10
TOTAL	27	27	19	15

Chart 3: Nutrient acquisition traits of PSB isolates from flowering stage

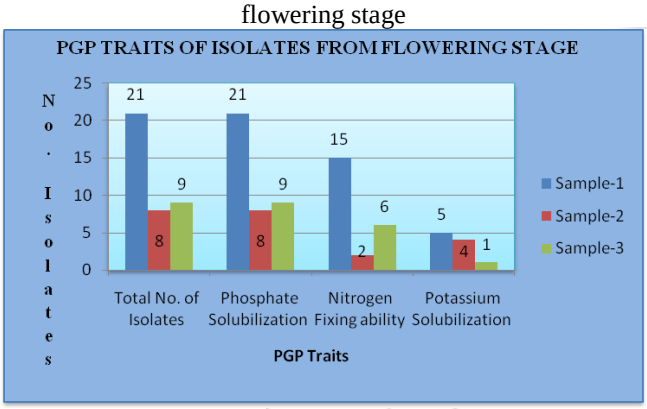
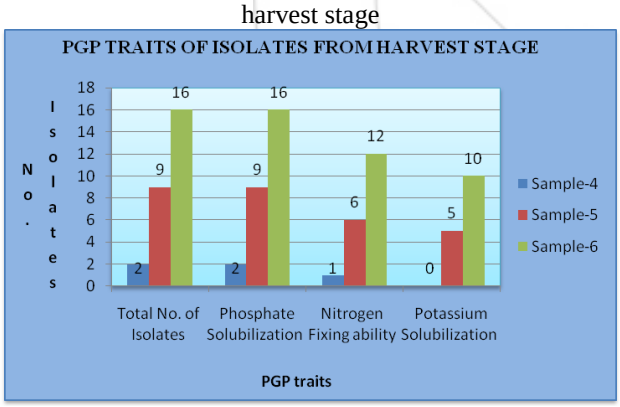


Chart 4: Nutrient acquisition traits of PSB isolates from harvest stage



5. Conclusion

Considering the worldwide importance of rice crop, application of phosphate solubilizers having other desirable traits can be an attractive approach to determine the nutrient management in eco-friendly and cost effective manner for sustainable agriculture. Duarah *et al.*, (2011) [7] have reported that treatments with PSB alone or in the form of consortia (of compatible strains) with or without the application of NPK chemicals externally improves germination index for rice and also vigour index and harvest index. They concluded that the uptake of NPK by plant and nutrient management can be improved by the use of PSB as biofertilizer in rice cultivation. In the present study, the phosphate solubilizing isolates also expressed nitrogen fixing ability and potassium solubilization which indicates their probable usefulness as biofertilizer. The findings of the present work are consistent with observations of Duarah *et al.*, (2011) [7]. Further experimentation is needed to check the most promising isolates among these for their potential as biofertilizer by the field experiments.

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