Supplementary Material

Table S1. Summary of experimental design matrix for O&G biodegradation of soil treated with orange garbage enzymes extract solution.

Run	Factor		Response
	Enzyme conc. (%)	Pollution level% (w/w)	O&G degradation (%)
1	5.43	5	
2	1.00	10	
3	7.75	5	
4	1.00	5	
5	3.28	10	
6	10.00	5	
7	6.62	10	
8	10.00	10	
9	1.00	5	
10	10.00	10	
C_0 (Control)	-	-	
C_5 (Control)	-	5	
C_{10} (Control)	-	10	

Table S2. Summary of experimental design matrix for O&G biodegradation of soil treated with watermelon garbage enzymes extract solution.

Run	Factor		Response
	Enzyme conc. (%)	Pollution level% (w/w)	O&G degradation (%)
1	5.43	5	
2	1.00	10	
3	7.75	5	
4	1.00	5	
5	3.28	10	
6	10.00	5	
7	6.62	10	
8	10.00	10	
9	1.00	5	
10	10.00	10	
C_0 (Control)	-	-	
C_1 (Control)	-	5	
C_2 (Control)	-	10	

Table S3. ANOVA for O&G removal mathematical model for orange garbage enzymes extract solution.

Source	Sum of squares	Difference (Df)	Mean square	F value	p-value
Model	129.688	4	32.422	12.08618	0.0088
A-O_Enzyme_Conc.	97.4239	1	97.4239	36.3174	0.0018
B-pollution level	0.081944	1	0.081944	0.030547	0.8681
AB	0.055123	1	0.055123	0.020549	0.8916
A^2	33.24051	1	33.24051	12.3913	0.0169
Residual	13.41284	5	2.682568		
Lack of fit	10.98003	3	3.660011	3.008874	0.2593
Pure error	2.432811	2	1.216405		
Cor total	143.1008	9			
Std.Dev.	1.637855	R-Squared	0.90627		
Mean	48.6632	Adj R-Squared	0.831286		
C.V.%	3.365695	Pred R-Squared	0.625219		
Press	53.63147	Adeq Precision	8.141206		

Table S4. ANOVA for O&G removal mathematical model for watermelon garbage enzymes extract solution.

Source	Sum of squares	Difference (Df)	Mean square	F value	p-value
Model	181.0539	4	45.26348	9.493005	0.0148
A-O_Enzyme_Conc.	103.3777	1	103.3777	21.68117	0.0056
B-pollution level	0.00663	1	0.00663	0.00139	0.9717
AB	0.421177	1	0.421177	0.088333	0.7783
A^2	72.57179	1	72.57179	15.22032	0.0114
Residual	23.84044	5	4.768087		
Lack of fit	15.67801	3	5.226002	1.280501	0.4667
Pure error	8.162432	2	4.081216		
Cor total	204.8944	9			
Std. Dev.	2.183595		R-Squared	0.883645	
Mean	48.76411		Adj R-Squared	0.790561	
C.V.%	4.477873		Pred R-Squared	0.558319	
Press	90.498		Adeq Precision	7.367668	

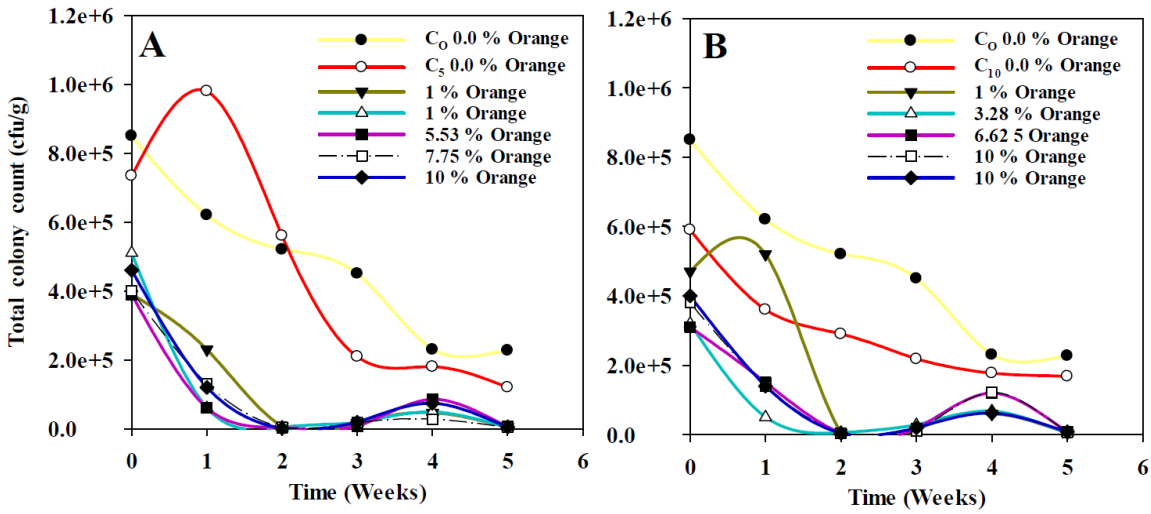

Fig. S1. Variation of total colony count (TCC) in soil samples treated with orange garbage enzymes against remediation time at 5% (A) and 10% (B) oil pollution levels.

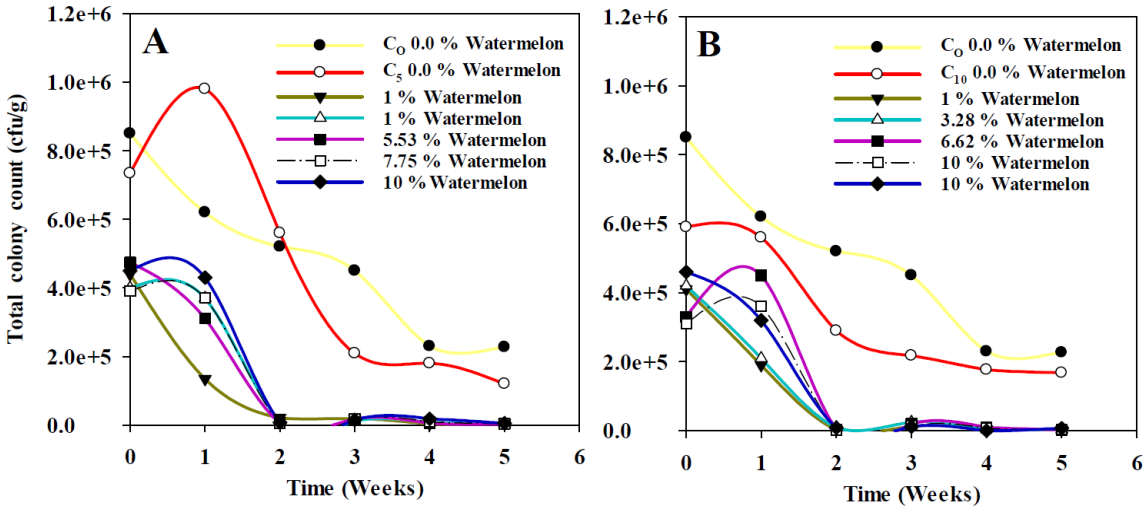

Fig. S2. Variation of total colony count (TCC) in soil samples treated with watermelon garbage enzymes against remediation time at 5% (A) and 10% (B) oil pollution levels.