

Supplementary Information

Table S1 – Groundnut biometrics. Treatments in the same row that share a lower case letter are not significantly different according to REML mixed effects model and Tukey's post hoc testing ($p < 0.05$)

	Mean $\pm$ S.E.		
	Conventional	Organic	ZBNF
Mass kernels (kg/plot)	5.43 $\pm$ 0.83b	4.91 $\pm$ 0.59b	6.90 $\pm$ 0.94a
Dry biomass (kg/plot)	5.20 $\pm$ 0.80b	5.00 $\pm$ 0.80b	6.48 $\pm$ 1.01a
Mass pods (kg/plot)	8.19 $\pm$ 0.77b	7.84 $\pm$ 0.62b	10.03 $\pm$ 0.82a
Mass kernels (g/plant)	15.57 $\pm$ 3.18a	15.11 $\pm$ 2.93a	16.35 $\pm$ 3.09a
Dry biomass (g/plant)	47.54 $\pm$ 8.88a	46.63 $\pm$ 8.40a	51.85 $\pm$ 10.04a
Number of pods (/plant)	17.00 $\pm$ 1.73b	16.56 $\pm$ 1.61b	18.10 $\pm$ 1.91a
Mass pod (g/pod)	1.57 $\pm$ 0.27a	1.52 $\pm$ 0.29a	1.61 $\pm$ 0.29a
Proportion mature pods (mature/total pods per plant)	0.76 $\pm$ 0.06a	0.73 $\pm$ 0.06a	0.81 $\pm$ 0.07a
Plant height (cm)	37.90 $\pm$ 1.47b	36.59 $\pm$ 1.40b	40.89 $\pm$ 1.45a
Number of root nodules (/plant)	86.35 $\pm$ 10.56a	81.88 $\pm$ 9.66a	82.33 $\pm$ 10.50a

Table S2 – Tomato biometrics. Treatments in the same row that share a lower case letter are not significantly different according to REML mixed effects model and Tukey's post hoc testing ($p < 0.05$)

	Mean $\pm$ S.E.		
	Conventional	Organic	ZBNF
Mass fruits (kg/plot)	24.71 $\pm$ 2.87b	23.20 $\pm$ 2.83b	31.15 $\pm$ 2.96a
Dry biomass (kg/plot)	4.20 $\pm$ 0.40a	3.90 $\pm$ 0.37a	4.70 $\pm$ 0.38a
Number of fruits (/plant)	6.52 $\pm$ 0.60ab	6.05 $\pm$ 0.45b	7.33 $\pm$ 0.45a
Mass fruits (g/plant)	347.59 $\pm$ 44.83b	364.05 $\pm$ 39.44b	487.57 $\pm$ 58.89a
Fruit mass (g/fruit)	58.48 $\pm$ 7.61a	64.66 $\pm$ 7.50a	69.16 $\pm$ 7.70a
Dry biomass (g/plant)	47.74 $\pm$ 18.66ab	46.41 $\pm$ 17.41b	50.99 $\pm$ 18.43a
Plant height (cm)	42.99 $\pm$ 3.10a	42.48 $\pm$ 2.85a	46.43 $\pm$ 2.53a

Table S3 - Effects of farming practise on soil characteristics. Results from repeated measures ANOVA

Variable	Treatment p -values according to Repeated Measures ANOVA		
	Season 1 (Kharif)	Season 2 (Rabi)	Season 3 (Kharif)
Bulk Density	0.311	0.730	0.101
Infiltration rate	0.038	0.451	0.709
Soil Temperature	<0.001	<0.001	0.721
Soil Moisture	0.006	<0.001	0.015
pH	0.013	0.727	0.262
EC	0.082	0.272	0.644
OC	0.902	0.200	0.837
Extractable N	0.761	0.744	0.010
Extractable P ₂ O ₅	0.734	0.062	0.958
Extractable K ₂ O	0.264	0.004	0.306
Extractable Cu	0.436	0.121	0.732
Extractable Mn	0.693	0.770	0.921
Extractable Fe	0.271	0.397	0.521
Extractable Zn	0.152	0.358	0.590
Total Earthworm Abundance	<0.001	<0.001	<0.001
Total Earthworm Biomass	<0.001	<0.001	0.013

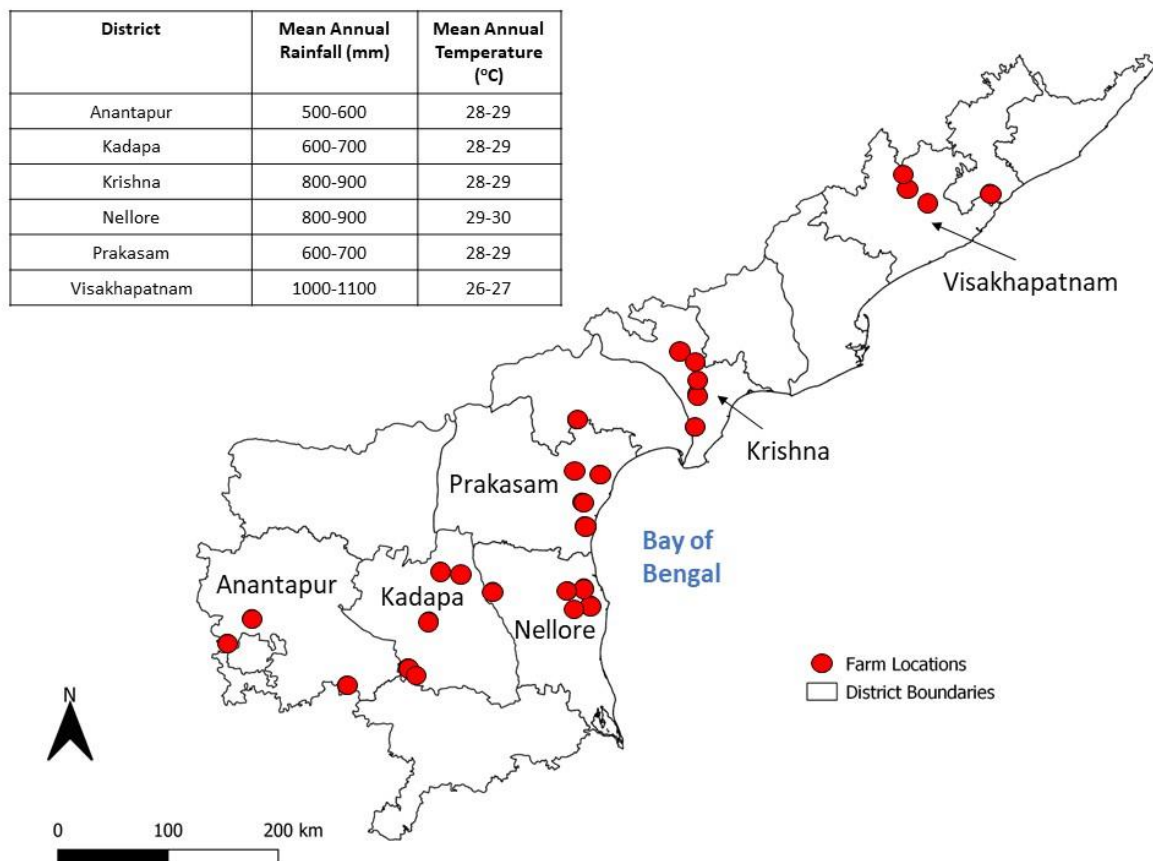


Figure S1 – Locations of experimental field sites

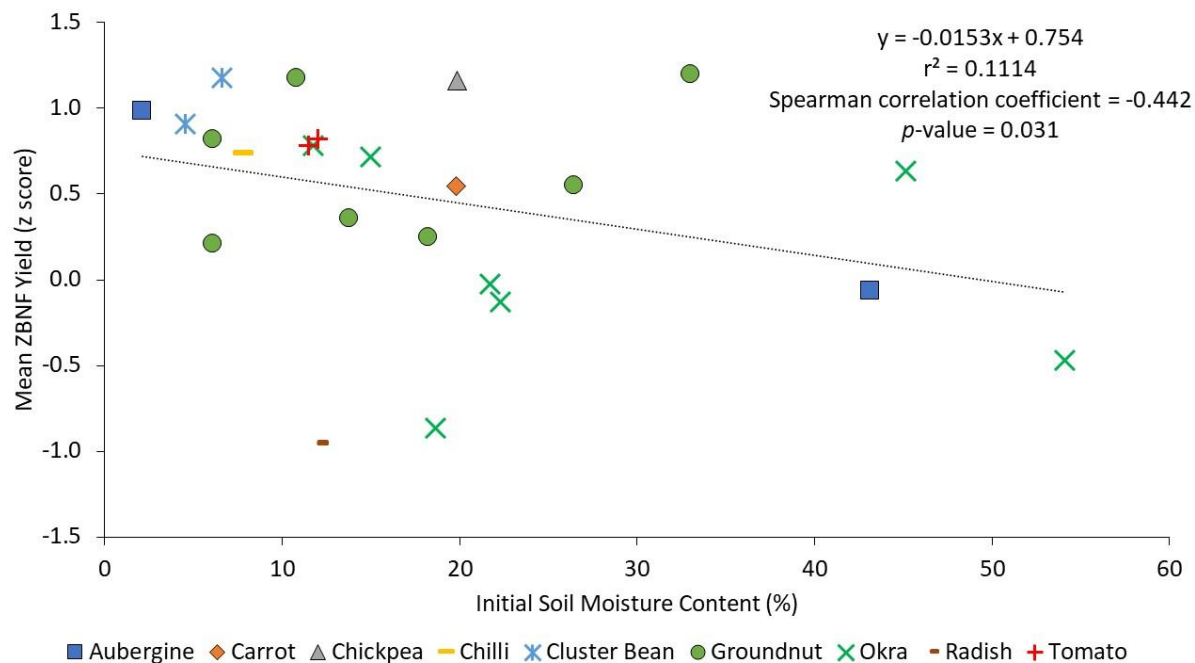


Figure S2 - Initial soil moisture content of each farm against their first seasons yield in the ZBNF treatment

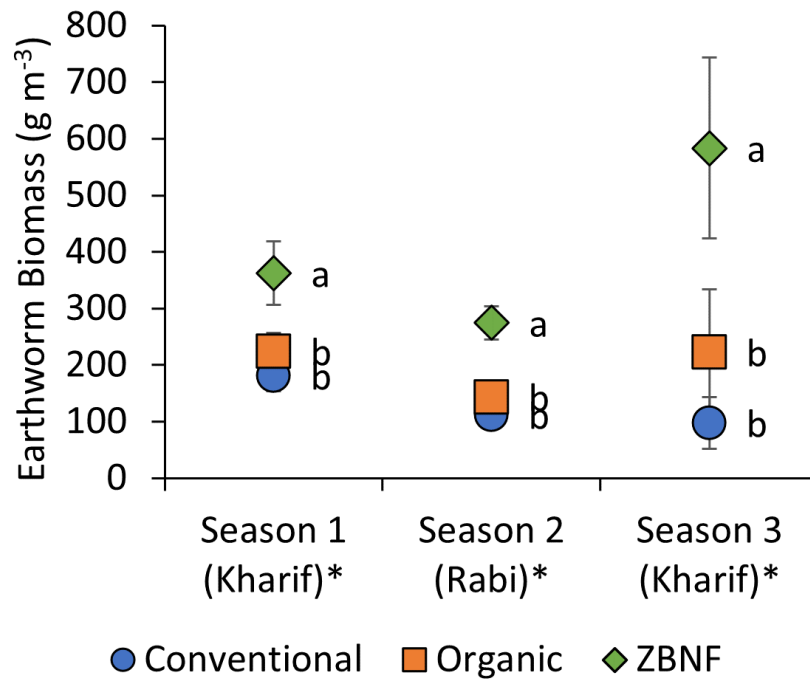


Figure S3 - Effect of farming practice on earthworm biomass across 3 seasons. Error bars represent standard error. Seasons marked with * are seasons where there was a significant treatment effect according to repeated measures ANOVA for the season, treatments that share the same letter next to symbols in a particular season are not significantly different according to LSD post-hoc testing