

Competing effects of soil fertility and toxicity on tropical greening

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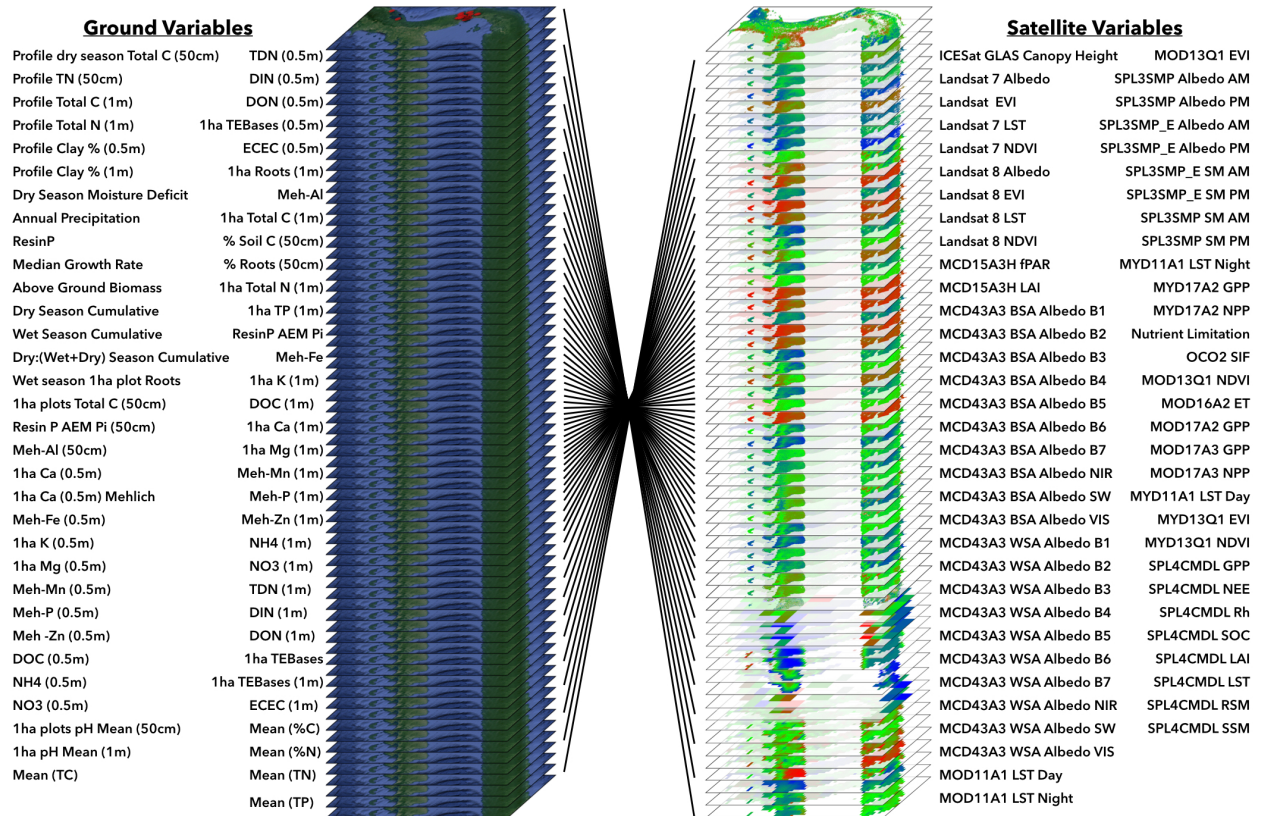
Author contributions: JBF and DFC formulated idea; JBF designed research; JBF and NVP performed research; DFC and BT provided data; all authors contributed to the writing of the paper.

The authors declare no conflict of interest.

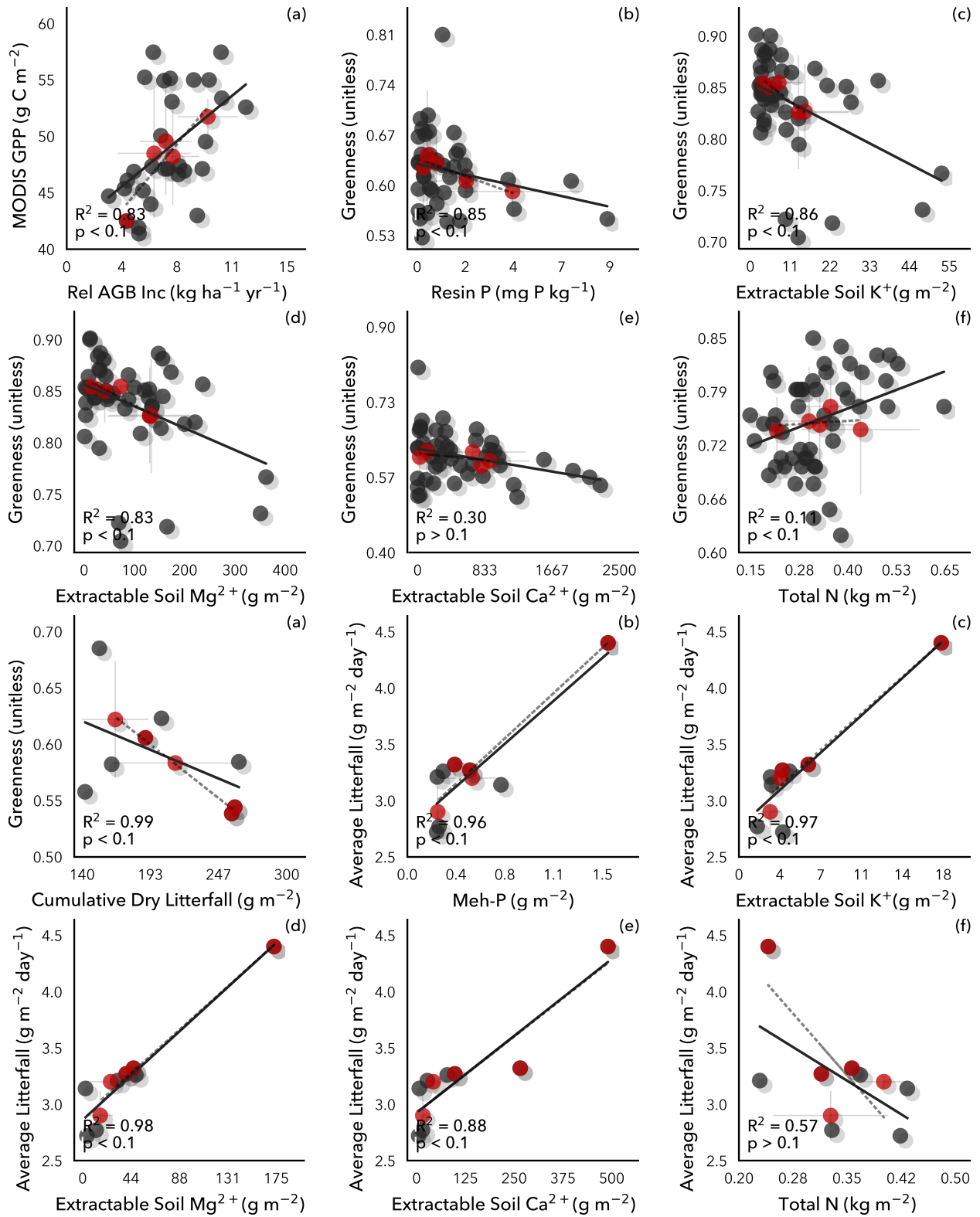
Supplementary Information

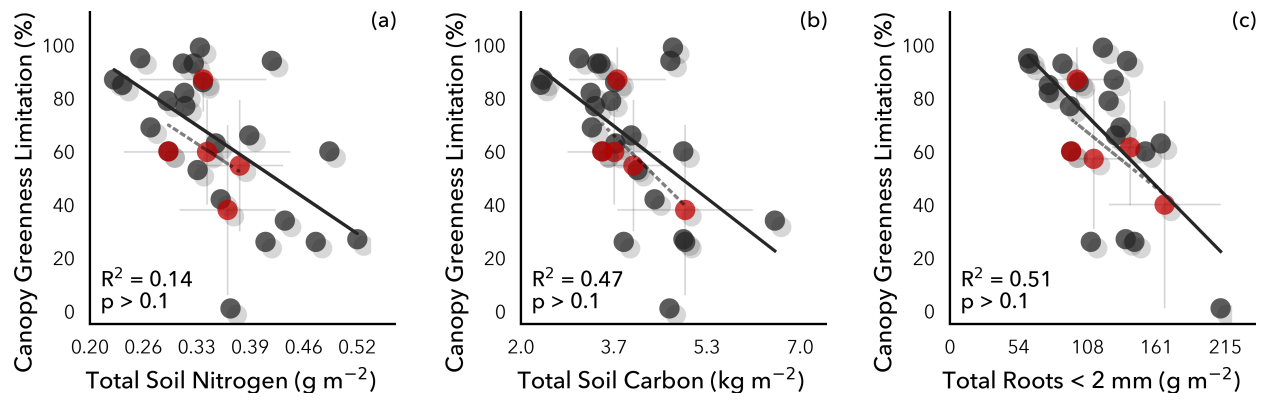
Supplementary Table 1. All correlation coefficients and p-values for Figures 1-4.

		Raw (Black Points)		Soil Order (Red Points)	
		R ²	P	R ²	P
Figure 1	A	0.22	0.01	0.72	0.07
	B	0.05	0.17	0.85	0.02
	C	0.19	0.00	0.79	0.04
	D	0.14	0.01	0.77	0.05
	E	0.09	0.05	0.36	0.28
	F	0.14	0.01	0.01	0.85
Figure 2	A	0.37	0.11	0.94	0.01
	B	0.87	0.00	0.97	0.00
	C	0.87	0.00	0.97	0.00
	D	0.91	0.00	0.98	0.00
	E	0.83	0.00	0.88	0.02
	F	0.10	0.45	0.28	0.36
Figure 3		0.08	0.05	0.97	0.00
Figure 4	A	0.65	0.00	0.48	0.19
	B	0.64	0.00	0.71	0.07
	C	0.57	0.00	0.62	0.11

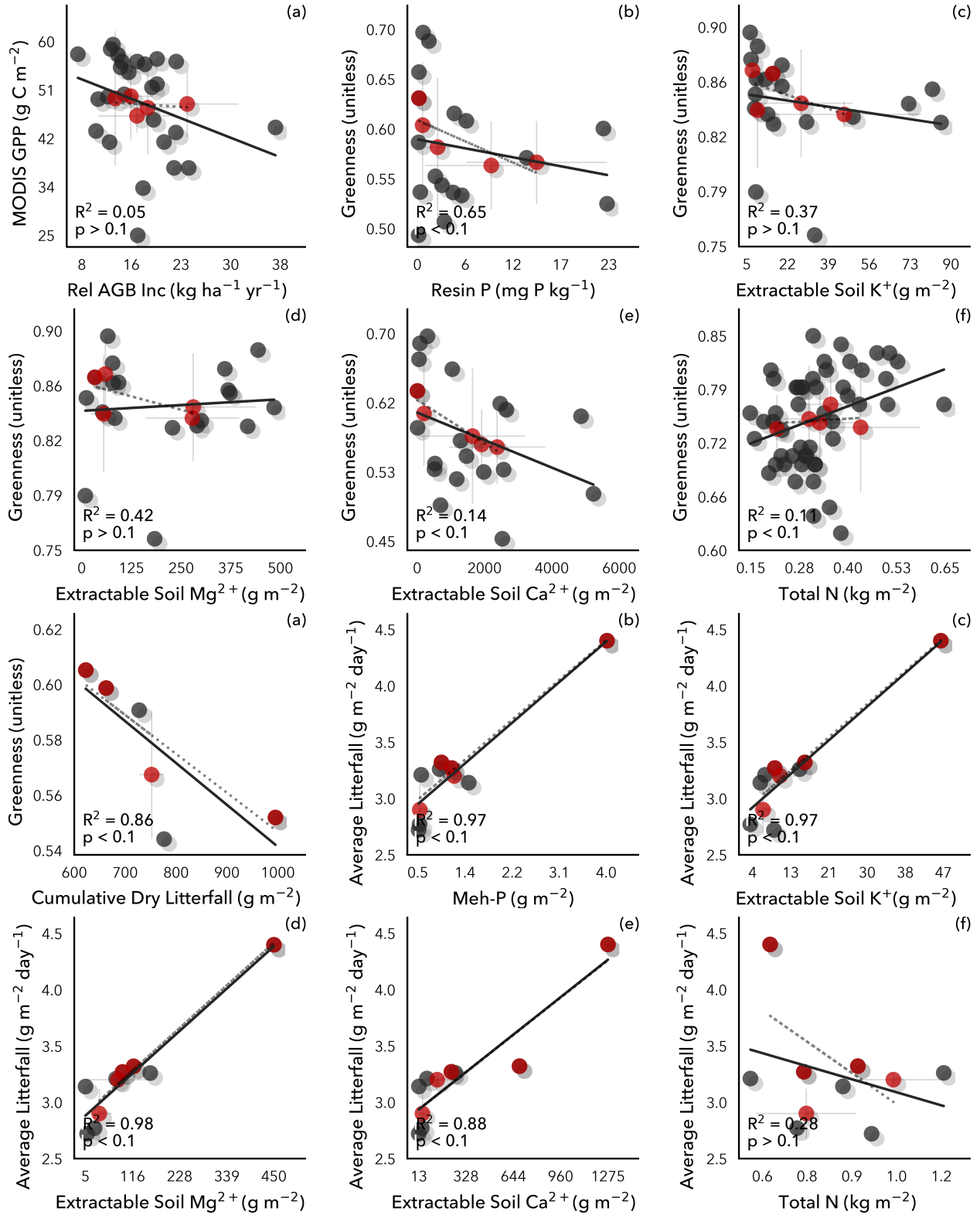


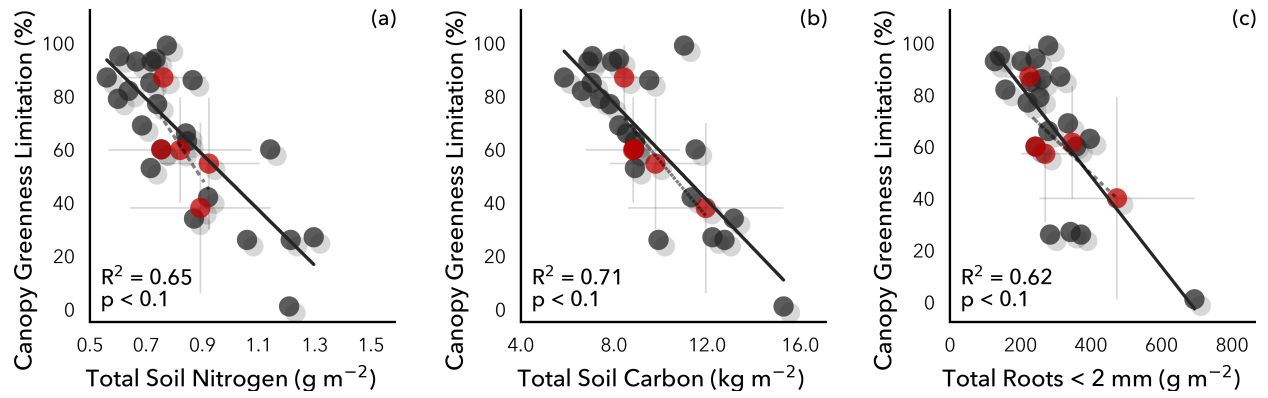
Supplementary Figure 1. This analysis combined among the most extensive single tropical forest soils datasets (>70 variables) with the most extensive satellite remote sensing compilation (>70 products) to date to assess linkages between canopy spectral properties and soil characteristics from 50 1-ha plots throughout Panama.



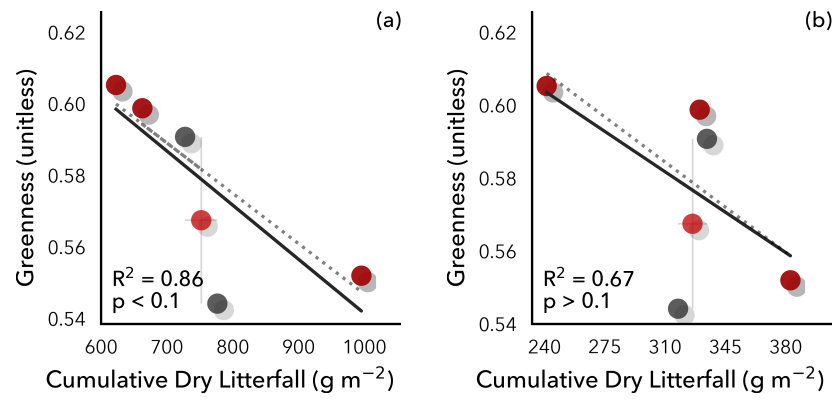


Supplementary Figure 2. As in Figures 1, 2, and 4, but all plots are normalized by mean annual precipitation.





Supplementary Figure 3. As in Figures 1, 2, and 4, but using only wet season months (May – Dec). m – o remain unchanged due to the model requirement of a full year of data.



Supplementary Figure 4. Wet season cumulative litterfall versus albedo (MODIS black-sky) (a) original, and (b) normalized by precipitation.