

Supplemental material for

“Vascular and cryptogam richness in the world’s highest alpine zone, Tibet,” by Chitra Bahadur Baniya; published in *Mountain Research and Development* (MRD) vol 30 no 3 (August 2010).

Appendix S1. Results of regression analysis on vascular and cryptogam richness patterns in the world’s highest alpine zone, Tibet, modeled after different species, with their functional group as response variables and alpine elevation range as predictor variable. The Quasi-Poisson family of error fitted in the *GLM* model after F test statistics ($P \leq 0.05$). Each response variable was modeled up to the 3rd polynomial order.

Bold entries indicate the significant selected model, represented graphically in the text (Figure 1). Resid. Df = Residual Degree of freedom, Resid. Dev = Residual Deviance.

S.N.	Response	Predictor	Resid. Df	Resid. Dev	Deviance	F	Pr(>F)
1	Total richness	~ 1	15	2484642			
		~Elevation	14	569	2484074	70981	< 2.2E-16
		~Elevation ²	13	54	2484588	306760	< 2.2E-16
		~Elevation³	12	20	2484622	473871	< 2.2E-16
2	Vascular	~ 1	15	1912660			
		~Elevation	14	593	1912066	52996	< 2.2E-16
		~Elevation ²	13	65	1912595	199819	< 2.2E-16
		~Elevation³	12	18	1912642	397338	< 2.2E-16
3	Non-graminoid vascular	~ 1	15	1518442			
		~Elevation	14	516	1517926	47996	< 2.2E-16
		~Elevation ²	13	54	1518388	187090	< 2.2E-16
		~Elevation³	12	17	1518424	324655	< 2.2E-16
4	Graminoid	~ 1	15	22871			
		~Elevation	14	85.5	22786	4783	< 2.2E-16
		~Elevation ²	13	18	22853	9993	< 2.2E-16
		~Elevation³	12	7	22864	14846	< 2.2E-16
5	Bryophytes	~ 1	15	20523.8			
		~Elevation	14	52.9	20471	7272.5	< 2.2E-16
		~Elevation ²	13	23.6	20500	6176	< 2.2E-16
		~Elevation ³	12	19	20505	4452.9	< 2.2E-16
6	Hepatics	~ 1	15	104			
		~Elevation	14	8	95.3	196.4	1.24E-009
		~Elevation²	13	1	103	954	7.90E-015
		~Elevation ³	12	1	103	675	1.22E-013

7	Acrocarpous moss	~ 1	15	12274			
		~Elevation	14	47	12227	4828	< 2.2E-16
		~Elevation ²	13	20	12254	4370	< 2.2E-16
		~Elevation ³	12	16	12258	3169	< 2.2E-16
8	Pleurocarpous moss	~ 1	15	494			
		~Elevation	14	8	486	1199	5.80E-015
		~Elevation ²	13	7	487	577	2.02E-013
		~Elevation ³	12	4	490	594.4	2.60E-013
9	Lichen	~ 1	15	2818.9			
		~Elevation	14	7.23	2811.7	5790	< 2.2E-16
		~Elevation ²	13	5.6	2813.3	3351.9	< 2.2E-16
		~Elevation ³	12	4	2815	2849	< 2.2E-16
10	Crustose lichen	~ 1	15	1050			
		~Elevation	14	6.1	1044	2451	< 2.2E-16
		~Elevation ²	13	5	1046	1382	7.20E-016
		~Elevation ³	12	5	1046	851	3.07E-014
11	Foliose lichen	~ 1	15	368			
		~Elevation	14	18	351	387	1.34E-011
		~Elevation ²	13	8	360	339	6.05E-012
		~Elevation³	12	4	364	388	3.30E-012
12	Fruticose lichen	~ 1	15	19			
		~Elevation	14	6	13	35	3.70E-005
		~Elevation ²	13	5	14	21	8.52E-005
		~Elevation ³	12	4	15	18	0.0001039
13	Compositae	~ 1	15	35834			
		~Elevation	14	149	35685	3996	< 2.2e-16
		~Elevation ²	13	25	35808	9688	< 2.2e-16
		~Elevation³	12	5	35829	28348	< 2.2e-16
14	Ranunculaceae	~ 1	15	7610			
		~Elevation	14	41	7570	2848	< 2.2e-16
		~Elevation²	13	5.2	7605	9078	< 2.2e-16
		~Elevation ³	12	5.2	7605	5446	< 2.2e-16
15	Gentianaceae	~ 1	15	6648			
		~Elevation	14	12.3	6636	9427	< 2.2e-16
		~Elevation ²	13	7	6642	7382	< 2.2e-16
		~Elevation ³	12	6	6643	5010	< 2.2e-16

16	Primulaceae	~ 1	15	1046			
		~Elevation	14	20	1026	880	4.90E-014
		~Elevation²	13	2	1044	4637	< 2.2e-16
		~Elevation ³	12	1.5	1045	3238	< 2.2e-16
17	Brassicaceae	~ 1	15	4698			
		~Elevation	14	71	4627	1127	8.80E-015
		~Elevation ²	13	9	4689	4517	< 2.2E-16
		~Elevation³	12	3.5	4694	6848	< 2.2E-16
18	Saxifragaceae	~ 1	15	4471			
		~Elevation	14	40	4432	2050	< 2.2E-16
		~Elevation²	13	8	4464	5058	< 2.2E-16
		~Elevation ³	12	5	4467	4300	< 2.2E-16
19	Scrophulariaceae	~ 1	15	4808			
		~Elevation	14	42	4766	2159	< 2.2E-16
		~Elevation ²	13	14	4795	2833	< 2.2E-16
		~Elevation³	12	5.3	4803	4424	< 2.2E-16
20	Caryophyllaceae	~ 1	15	4889			
		~Elevation	14	59	4831	1331	2.77E-015
		~Elevation²	13	7	4883	5447	< 2.2E-16
		~Elevation ³	12	7	4883	3273	< 2.2E-16
21	Papaveraceae	~ 1	15	3570			
		~Elevation	14	28	3542	2201	< 2.2E-16
		~Elevation²	13	4	3566	7032	< 2.2E-16
		~Elevation ³	12	3	3567	5535	< 2.2E-16
22	Rosaceae	~ 1	15	4740			
		~Elevation	14	23	4717.3	3286	< 2.2E-16
		~Elevation²	13	6	4734	5938	< 2.2E-16
		~Elevation ³	12	5	4735	3665	< 2.2E-16
23	Leguminosae	~ 1	15	3334			
		~Elevation	14	53	3282	1031	1.63E-014
		~Elevation ²	13	9	3326	2896	< 2.2E-16
		~Elevation³	12	1	3333	14332	< 2.2E-16
24	Ericaceae	~ 1	15	3464			
		~Elevation	14	31	3433	1876	2.60E-016
		~Elevation²	13	4.2	3460	6545	< 2.2E-16
		~Elevation ³	12	3	3461	6134	< 2.2E-16