**Table S1.** Summary of models for alpha and beta-diversity of different components of vegetation on Mount Rinjani, Indonesia. Models were arranged according to ∆AIC value. Variables included in the models were elevation, LAI, slope and their respective interactive terms. EL=elevation, SL=slope, LAI=leaf area index.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Type of diversity | Forest stratum | Models |  | k | AIC | ***∆AIC*** |
| alpha-diversity | Ground | Y ~EL+EL2+LAI |  | 5 | 46.2 | 0.00 |
|  | cover plants | Y~EL+EL2+LAI+SL |  | 6 | 49.74 | 3.54 |
|  |  | Y~EL+EL2+LAI+LAI:EL+LAI:EL2 |  | 7 | 54.67 | 8.47 |
|  | Understory | Y~EL |  | 3 | 81.30 | 0.00 |
|  | plants | Y~EL+LAI |  | 4 | 81.88 | 0.58 |
|  |  | Y~EL+SL |  | 4 | 84.66 | 3.35 |
|  | Subcanopy | Y~EL |  | 3 | 90.14 | 0.00 |
|  | plants | Y~EL+SL |  | 4 | 92.89 | 2.75 |
|  |  | Y~EL+LAI |  | 4 | 93.17 | 3.03 |
|  | Canopy | Y~EL |  | 3 | 89.95 | 0.00 |
|  | plants | Y~EL+SL |  | 4 | 93.15 | 3.20 |
|  |  | Y~EL+LAI |  | 4 | 93.32 | 3.36 |
| beta-diversity | Ground | Y~EL+LAI+SL+EL:LAI+EL:SL |  | 7 | -418.11 | 0.00 |
|  | Cover plants | Y~EL+LAI+SL+EL:LAI+EL:SL+LAI:SL+EL:LAI:SL |  | 9 | -411.52 | 6.59 |
|  |  | Y~EL+LAI+SL+EL:LAI+EL:SL+LAI:SL |  | 8 | -411.52 | 6.59 |
|  | Understory | Y~EL+LAI+SL+EL:LAI+EL:SL |  | 7 | -436.7 | 0.00 |
|  | plants | Y~EL+LAI+SL+EL:LAI+EL:SL+LAI:SL+EL:LAI:SL |  | 9 | -405.16 | 31,54 |
|  |  | Y~EL+LAI+SL+EL:LAI+EL:SL+LAI:SL |  | 8 | -405.16 | 31.54 |
|  | Subcanopy | Y~EL+LAI+SL+EL:LAI+LAI:SL |  | 7 | -415.16 | 0.00 |
|  | plants | Y~EL+LAI+SL+EL:LAI+EL:SL |  | 7 | -415.42 | 0.37 |
|  |  | Y~EL+LAI+SL+EL:LAI+EL:SL+LAI:SL+EL:LAI:SL |  | 9 | -400.29 | 15.51 |
|  | Canopy | Y~EL+LAI+SL+EL:LAI+EL:SL |  | 7 | -415.74 | 0.00 |
|  | plants | Y~EL+LAI+SL+EL:LAI+EL:SL+LAI:SL+EL:LAI:SL |  | 9 | -398.74 | 17.00 |
|  |  | Y~EL+LAI+SL+EL:LAI+EL:SL+LAI:SL |  | 8 | -398.74 | 17.00 |