|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Parameter** | | **Prior distribution** | | | | | |
| *Cropping bite rate* | | | |  |  | | |
|  | X | | *N*(3.42, 10) | | | | | |
|  | species | | *N*(0, ) | | | | | |
|  | genus | | *N*(0, ) | | | | | |
|  | dataset | | *N*(0, ) | | | | | |
|  |  | | *Cauchy*(0, 1) | | | | | |
| *Scraping bite rate* | |  | | | |  | | |
|  | A | | *N*(3.42, 10) | | | | | |
|  | B | | *N*(0, 5) | | | | | |
|  | species | | *N*(0, ) | | | | | |
|  | genus | | *N*(0, ) | | | | | |
|  | dataset | | *N*(0, ) | | | | | |
|  |  | | *Cauchy*(0, 1) | | | | | |
| *Scraping bite area* | | |  | | | |
|  | A | | *N*(4.45, 5) | | | | | |
|  | B | | *N*(0, 2) | | | | | |

**Table S2. Model priors for grazing function models fitted to bite rate observations.** Priors are weakly informative, except for intercept priors which were set at the mean bite rate or bite area (on a log scale). Parameter symbols are defined in Eqs. 4 – 7. *N*(0, 10) is a normal distribution with mean = 0 and standard deviation = 10, *Cauchy*(0, 1) is a Cauchy distribution with location = 0 and scale = 1.