|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Competition Default Value** | **Mutualism Default Value** | **Description** |
|  | 1 | 1 | Mutualistic coefficient, benefit of prey species *i* to prey species *j* |
|  | 0.9 | 0 | Competition coefficient, effect of prey species *i on* prey species *j* |
|  | 0.5 | 0.5 | Intrinsic growth rate of prey species *i* |
|  | 20 | 20 | Burst size of phage *x* on prey species *i* |
|  | 0.001 | 0.001 | Attachment rate of phage *x* on prey species *i* |
|  | 0.03 | 0.03 | Intrinsic death rate of species *i* |
|  | 0 | 1 | Half-saturation constant of species *i* |
|  | 2 | 1 | System carrying capacity |

**Table 1. Phenomenological model parameters, default values, and descriptions.**