**TABLE 1.** Parameter key, values and descriptions to be applied to domestic cattle in the AAT AMR emergence and transmission model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Notation** | **Parameter Description** | **Value** | **Range** | **Reference** |
| μ | Birth rate | 1/365 |  |  |
| λ | Death rate | 1/365 |  |  |
| d | Duration of feeding cycles | 4 | 1/3 – 1/2 | (Rogers, 1988) |
| b | Probability infected fly bite causes infection |  |  |  |
| pi | Proportion of blood meals from i | 0.7 |  |  |
| ai |  | pi/d |  |  |
| σi | Duration of immunity | 100 |  |  |
| εi | Time to infectiousness |  | 1/15 – 1/5 |  |
| τ | Time to treatment |  |  |  |
| η | Resistance emergence |  |  |  |
| γ | Recovery | 100 |  |  |

**TABLE 2.** Parameter key, values and descriptions to be applied to wildlife in the AAT AMR emergence and transmission model

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter Name** | **Parameter Description** | **Value(s)** | **Reference** |
| μ | Birth rate |  |  |
| λ | Death rate |  |  |
| d | Duration of feeding cycles | 4 | Rogers 88 |
| b | Probability infected fly bite causes infection |  |  |
| pi | Proportion of blood meals from i |  |  |
| ai |  | pi/d |  |
| σi | Loss of immunity |  |  |
| ε | Time to infectiousness |  |  |
| η | Resistance emergence |  |  |
| γ | Recovery |  |  |

**TABLE 3.** Parameter key, values and descriptions to be applied to tsetse flies in the AAT AMR emergence and transmission model

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter Name** | **Parameter Description** | **Value(s)** | **Reference** |
| μ | Birth rate |  |  |
| λ | Death rate |  |  |
| d | Duration of feeding cycles | 4 | Rogers 88 |
| b | Probability infected fly bite causes infection |  |  |
| pi | Proportion of blood meals from i |  |  |
| ai |  | pi/d |  |
| σi | Loss of immunity |  |  |
| ε | Time to infectiousness |  |  |
| η | Resistance emergence |  |  |
| γ | Recovery |  |  |

**REFERENCES**

Rogers, D.J., 1988. A general model for the African trypanosomiases. Parasitology 97, 193–212. https://doi.org/10.1017/S0031182000066853