|  |  |  |  |
| --- | --- | --- | --- |
| Define | Notation | Unit | Remark |
| Planned soak away depth |  | mm |  |
| Required water layer height |  | cm |  |
| Soak away time |  | d |  |
| Initial water layer height |  | cm |  |
| Effective precipitation coefficient |  | Dimensionless |  |
| Light energy-biomass conversion ratio |  | % |  |
| Actual harvest index |  | Dimensionless |  |
| N volatility |  | % |  |
| Potential harvest index |  | Dimensionless |  |
| Drought sensitivity factor |  | Dimensionless |  |
| Carbon emission factor |  | kg CO2 eq kg-1 | Fertilizer 1.3, pesticides 18.08, agricultural film 18.99, agricultural diesel 2.63, irrigation 0.8 |
| C-equivalent conversion factor |  | Dimensionless |  |
| N2O emission factor |  | Dimensionless | Direct 0.0178, indirect 0.01, leaching 0.0075 |
| N volatility |  | % |  |
| N leaching rate |  | % |  |
| N2O conversion  factor |  | Dimensionless |  |
| CH4 emission factor |  | Kg ha-1 |  |
| CH4 conversion factor |  | Dimensionless |  |
| Soil carbon content |  | g m-2 |  |
| Soil carbon pool turnover rate |  | d |  |
| Dry weight to carbon conversion ratio |  | t CO2eq |  |
| Economic factor |  | Dimensionless |  |
| Soil capacity |  | g cm-3 | Take the average value of 0~60cm |
| Saturated water content |  | mm | 0~10~20cm：6.08mm, 20~30~40cm：5.64mm, 40~50~60cm：6.89mm |
| Field water holding capacity |  | mm | 0~10~20cm：5.39mm, 20~30~40cm：4.90mm, 40~50~60cm：5.28mm |
| Wilting water content |  | mm | 0~20~40~60:2mm |
| Critical water content |  | mm | 75%(75% field water holding capacity) |
| Total Calorie Units |  | Dimensionless |  |
| Minimum temperature for crop growth |  | ℃ |  |