**Read Me**

**This cassava leaf model** is developed by Yu Wang, IGB, University of Illinois. The metabolic model part is developed based on the general C3 photosynthesis model (Zhu et al., 2007). If you want to know more details, please check the file’ Appendix cassava model equations and parameters.docx’

**Quick start**

Measured light intensity simulation:

RAC3leafMetaDriveLight(Lightinputfile,Pst,PRca)

An example command: RAC3leafMetaDriveLight('bon18182.dat',0,0)

High low light simulation:

RAC3leafMetaDriveLight2(Lightinputfile,Pst,PRca)

An example command: AC3leafMetaDriveLight2('Light150015.txt',0,0)

**Input parameters:**

Pst:

Pst=0 stomata conductance is calculated by steady state Ball-Berry model

Pst=1 Time dependent gs response, using ki and kd

PRca:

PRca=0 Rubisco always actived

PRca=1 Consider Rubisco activation process

Cassava parameter file:

cassavaP2.txt.

Cultivar Vcmax25 Jmax25 kd Ki Ball-Berry Slop Ball-Berry Intercept

**Output:**

Transpiration(mol m-2 day-1) Photosynthesis(mol m-2 day-1)