**Southern corn Leaf Blight (Bipolaris mayidis) Infection model**

START SCLBinfection: if leaf wetness > 0 and air temperature >= 15 then begin

INCREASE of INFECTION: SCLBinfection actual hour =SCLBinfection former hour + (air temperature \* leaf wetness period in minutes)

STOP: if conditions are not given (no leaf wetness, temperature below 15°C), or if SCLBinfection > 100\*60 °C (= degreeminutes) then SCLBinfection = 100\*60 (in sum 6000 degree minutes or 100 degreehours (wich is for example about 6hours leaf wetness at 15°C or 5hours leaf wetness at 18°C), of leaf wetness at a temperature higher than 15°C is the maximum).  
(If Temperature is higher than 15°C and leaf wetness for more than 100\*60°C accumulated Temperature per minute infection is complete)

@article{gregory1978predicting,

title={Predicting yield losses in corn from southern corn leaf blight},

author={Gregory, LV and Ayers, JE and Nelson, RR and others},

journal={Phytopathology},

volume={68},

number={3},

pages={517--521},

year={1978}

}

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## Model of Gray Leaf Spot

Gray Leaf Spot of maize Cercospora zeae-maydis Risk Model:

The disease development depends on the variety of the maize hybrid and the weather conditions.

* Calculation performed in the time between stage V4 and V12
* Number of hours with temperatures from 22°C to 30°C divided by (2.305\*2) plus hours of relative humidity > 90% during night divided by (3.30\*2). This value can
* range from 0 to 100.

@article{paul2004model,

title={A model-based approach to preplanting risk assessment for gray leaf spot of maize},

author={Paul, Pierce A and Munkvold, GP},

journal={Phytopathology},

volume={94},

number={12},

pages={1350--1357},

year={2004},

publisher={Am Phytopath Society}

}