

4<sup>th</sup> International Conference on

## PLANT SCIENCE &amp; PHYSIOLOGY

March 25-26, 2019 Sydney, Australia

**Studies on the effects of relative humidity on the germination, sporulation and in vivo infection of *Sphaerotheca fuliginea* (powdery mildew) on water melon (*Citrullus lanatus* L.)****Hayatu Mohammed Suleiman**

Umaru Ali Shinkafi Polytechnic Sokoto, Nigeria

This research study was conducted to investigate the effect of relative humidity on the germination, sporulation and in vivo infection of *Sphaerotheca fuliginea* on healthy water melon plant. The experiment was laid out on Completely Randomized Design (CRD) in the laboratory with at least five replications in each case. Relative humidity effect on mycelium shows the highest mycelium number at 52% (27), but least was observed at 86% (4). There was no significant differences ( $P>0.05$ ) observed among the relative humidity values on both mycelium length as well as width. Relative humidity influence on spore formation showed the highest spores number obtained at 94% (120) and least at 52% (80). The highest disease incidence among the relative humidity values was observed at 94% (96%), but least was at 52% (40%). Significant differences ( $P<0.05$ ) obtained among the Relative humidity influence on disease severity, which shows the highest severity rate at 94%, 86% (2, 2 i.e. moderate infection respectively) and control value 75% (2 i.e. moderate infection), but least was observed at 63% and 52% (1, 1 i.e. mild infection). Therefore, understanding the optimum ranges of relative humidity for the development of powdery mildew fungus may minimized the high rate of infection to occur as well as damages cause on cucurbits.

hayatsuleiman333@gmail.com

Notes: