

## **Soil-water stress response in cowpea at different development stages of N<sub>2</sub> fixation**

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### **Abstract**

Experiments were carried out to evaluate the effect to water stress at different development stages of N<sub>2</sub> fixation (N<sub>2</sub> D S) in cowpea, as well as to verify the adaptive physiological response to stress. The soil used was Yellow Latosol, pH 6.3 and the crop was the cowpea cv "IPA 204". Stress was applied by control of water potential through a porous cup. The sensitivity of the cowpea while under water stress varied with the plant development and with the leaf water potential ( $\psi_w$ ). There was interaction between different N<sub>2</sub> D S and water deficit. The water deficit applied in E2 stage was what most negatively interfered, in the cowpea