THE GEORGIA ENVIROTRON: MULTI-DISCIPLINARY STUDIES OF PLANT STRESSES USING CONTROLLED ENVIRONMENT CHAMBERS

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The Georgia Envirotron is a multi-disciplinary research facility located at the Griffin campus of the University of Georgia, and is available to both on and off campus researchers as well as to visiting scientists. The facility comprises multiple controlled environment areas, allowing researchers to study plant/environment interactions under a variety of controlled conditions and at different scales. Nine walk-in growth chambers (Conviron CG-72 and PGW 36, Winnipeg) provide researchers with opportunities to study the effects of light, temperature and CO₂ on both plants and plant pests and diseases. Treatments with enhanced levels of ozone will be available in the near future.

In addition three moveable sunlit chambers are available for field research. The chambers were developed by the University of Georgia, with temperature, humidity, and CO_2 control comparable to that obtained in the walk-in chambers. Each chamber covers 4 m² of ground and may be placed directly over an existing plant canopy. The facility also includes eight greenhouses with temperature control and supplementary lighting, and four reach-in chambers with sub-zero temperature capability