

Klingeman, W. E., M. W. van Iersel, G. D. Buntin, and S. K. Braman. 2000. Whole-plant CO<sub>2</sub> exchange measurements on azaleas injured by azalea lace bug feeding. *Journal of Economic Entomology* 93(2): 352-356.

Whole-plant gas exchange was measured continuously for 24-hours on rooted cuttings of Girard's 'Pleasant White' azaleas. Azalea treatments were azalea lace bug, *Stephanitis pyrioides* (Scott), feeding injury-levels that averaged 6, 13, or 31% leaf-area injury throughout the plant canopies. Gas exchange parameters, including net photosynthesis, dark respiration, carbon use efficiency, and growth, were compared to undamaged control plants. Responses of Girard's 'Pleasant White' azaleas suggested that azaleas were tolerant of lace bug feeding injury levels above the aesthetic threshold. Azalea tolerance can be incorporated into an integrated management plan to reduce chemical inputs into the urban landscape.