

Nitrogen rates and *Cyperus rotundus* density effects on papaya transplant production

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Greenhouse experiments were conducted to determine the effect of soil-applied nitrogen (N) rates and *Cyperus rotundus* (purple nutsedge) densities on the growth of papaya seedlings for transplant production. In weed-free papaya, increasing N resulted in increased overall plant growth (height, leaf area, stem diameter, and shoot and root dry weights). When *C. rotundus* grew with papaya, increasing weed density resulted in reduced papaya growth, as compared to weed-free papaya. Increasing N rates in *C. rotundus*-infested papaya exacerbated the detrimental effect of *C. rotundus* on papaya growth. These results indicate that *C. rotundus* must be suppressed in papaya transplant production systems, particularly when intensive N fertilization programs are implemented.