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## Petunia Yellowing:

### *Lush light green growth*

*Vegetatively propagated petunias are considered heavy feeders, needing a higher nitrogen rate of 200 to 300 ppm. When fertility rates become excessive, lush growth can occur.*

On a greenhouse visit, a group of petunia hanging baskets were observed with lush growth and the leaf coloration was a lemon yellow (Fig. 1). A large quantity of slow release fertilizer had been supplied to the plants (Figs. 2 and 3). A few of the plants exhibited lower leaf burn (Fig. 4).



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Figure 1. Lush leaf growth and yellowish-green coloration indicate a fertilizer overdose, primarily from excessive ammoniacal-nitrogen. (Photo: © Brian Whipker, 2020)

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## Background Information

The plants were being grown in hanging baskets on the floor. The growing temperatures had been cool. This group of plants had been fertilized heavily with nitrogen fertilizer. In addition, slow release fertilizer had also been applied. These two factors lead to an accumulation of nutrients in the plants.

A tissue test indicated that nitrogen was in excess at 8.07%. Phosphorus was also high at 0.70%, along with potassium at 6.18%, calcium at 2.06% and magnesium at 0.76%. Normally petunia leaf tissue ranges are 25 to 50% lower for actively growing plants.

## Management

Matching the fertilizer rate to the needs of the plant is an important first step. In the case of this grower, the plants were also being grown cool. This allowed for the development of lush growth. Decreasing the amount of fertilizer provided to the plant during early growth would help in matching the rate supplied with the uptake needs of the plant. Avoiding high rates of ammoniacal-nitrogen would also be recommended.

(Photos: © Brian Whipker, 2020)



Figure 2. Yellow coloration of petunias.



Figure 3. Close-up of yellow leaf coloration.



Figure 4. Lower leaf spotting was the result of excessive slow release fertilizer being supplied.

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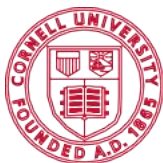
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