

New Crop Profile: *Eucomis* (pineapple lily)



## Bust the Winter Blahs with Pineapple Lily (*Eucomis*)



'Leia' from GSBG

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1:00 to 1:45 Eastern

## Bust the Winter Blahs with Pineapple Lily (*Eucomis*)



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### Overview

 Background	 Propagation
 Planting	 Fertilization
 Pests and diseases	 Plant growth regulators
 Cut flower production	

### Pineapple Lily

- *Eucomis*
- Bulbous perennial
- ~15 species
- Hardy to zone 6, 5 likely
  - Cornell studies
- Mostly used as a landscape plant, some pot and cut flower production



Eucomis in the landscape

### Potted Plants



Mixed containers!



'Tiny Piny Ruby'

Photos courtesy of Eddie Welsh

### Propagation – Bulbs



### Bulb Divisions



### Propagation – Cuttings

- Leaf cuttings
- Top of inflorescence



### Propagation – Cuttings & Seed



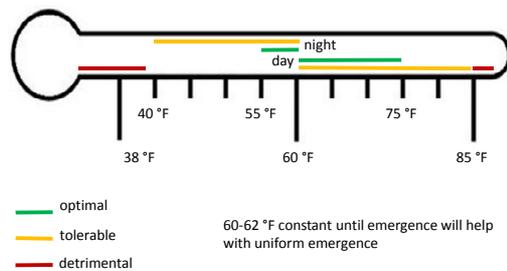
### Planting & Production

- 1 bulb/6.5" pot
- Typical peat-based substrates
- 1" bulb depth
- High light deepens colors
- 13-16 week crop time



Please reference GSBG's Aloha Lily Culture file in the supplemental material for more info

### Production Temperature



## Fertilization



Tip burn caused by over fertilization

- Light to moderate fertilization (100-150 ppm N) from shoot emergence to flowering
- Incorporate slow release pre-plant fertilizer
- Then fertigate with 50 ppm until visible bud
- 20-10-20

## Pests & Diseases

- Not highly susceptible to any one thing
- Keep environment unfavorable for bulb rots and botrytis
  - Do not overwater
  - Good airflow & substrate drainage
- Scout for insect damage & disease symptoms



Calcium oxalate crystals in *Eucomis*

## Yellow-striped Armyworm



## Potyvirus on *E. humilis*



## Other Diseases

- Ornithogalum mosaic virus
- *Xanthomonas*
- *Botrytis hyacinthi* (Blomquist and Greene 2011)
- Slugs, snails, aphids, thrips



## Plant Growth Regulators

- High light levels promote naturally compact, sturdy plants (Meshorer, 2013)
- PGRs may be necessary if pineapple lily is produced:
  - During the low light levels of the winter months
  - Under shade in high temperatures
- Prevent postharvest stretch in low light retail environments



'Leia' pineapple lily  
Photo from GSBG

## Plant Material

- Aloha Lily Series
- Dwarf for pot production
- Tropical scent
- Multi-flowering



Leia, Maui, and Nani from GSBG

## Application



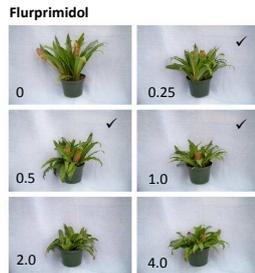
Drench stage: 5-cm height

- Flurprimidol (Topflor)
- Uniconazole (Sumagic)
- Paclobutrazol (Piccolo)
- 4 oz drench per 6.5" pot

Carlson et al., 2015.

## PGRs

- As concentration increased:
  - Plant height was shorter
  - Plants were more compact
  - Days to anthesis increased
- No phytotoxicities were observed



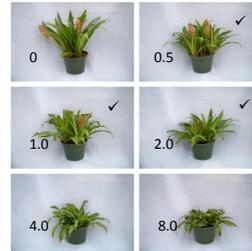
✓ = acceptable treatments

Carlson et al., 2015.

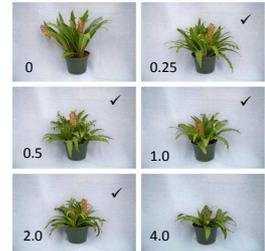
Unit = mg/pot

## PGRs

### Paclobutrazol



### Uniconazole



✓ = acceptable treatments

Carlson et al., 2015.

Unit = mg/pot

## Eucomis as a Cut Flower



'Sparkling Burgundy'



Photo courtesy of Eddie Welsh



## Cut Flower Production



'Tugela Jewel', 'Megaru', and 'Tugela Gem' at NCSU

- Field or greenhouse
- July bloom
- 12 bulbs in a lily crate
- Harvest when at least 50% open

## Cut Flower Postharvest



'Tugela Gem' and 'Megaru' in postharvest

- Plain water
- 30-60 days vase life
- Can be cold stored for a couple weeks



Photo courtesy of Eddie Welsh

## Suppliers

- ADR Bulbs Inc.
- Bill Moore & Co.
- DeGoede Bulb Farms
- Ednie Flower Bulb Inc.
- Gloeckner
- Golden State Bulb Growers  
(Has excellent production information for their hybrids)
- Plant Delights

## Thank you



ICFG/Hill Foundation



Dr. John Dole  
Dr. Brian Whipker  
Ingram McCall  
Diane Mays  
Eddie Welsh  
Brian Correiar

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Thank you for your attendance!



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Questions?  
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## Cultivar Recommendations

### Pot

- Aloha lily series from GSBG
- 'Tiny Piny Ruby'
- 'Freckles'
- *E. vandermerwei*
- Most dwarf cultivars

### Cuts

- 'Tugela' series
- 'Sparkling Burgundy'
- 'Can Can'
- 'Reuben'
- 'Oakhurst'
- 'Megaru'