Pansy

Dr. Terri W. Starman
HORT 429
Greenhouse Crop Production

Pansy

• *Viola X wittrockiana*
• Hybrid origin
• Bedding plant
• Hundreds of cultivars
• 3 Groups based on flower size in inches:
  – 1.5–2.5
  – 2.5–3.5
  – 3.5–4.5

Viola

• Johnny-jump-up
• *Viola tricolor*
• European origin naturalized in North America
• Bedding plant
• 0.75-inch flower
• Yellow, purple-red, violet-blue, white

Propagation

• Seed
• Germinate in the dark
• 60–64% germination at 65–75°F
• Use primed seed in hot weather
• Violas like night temperature = 60°F

Flowering Control

• Long day decreases days to flower
• LD increases flower number and internode length
• Night interruption increases height
• Short day produces short, sturdy stems
• High summer temperatures limit flowering by causing a decline in vigor

Temperature, Light, Water

• 40 to 55°F after root establishment
• >60°F growth is weak and internodes elongate
• Use full light unless shade is needed to reduce temperature
• Supplemental HID decreases days to flower and increases flower number
• Never allow to be water stressed
Nutrition

• Moderate to low feeder
• 100 ppm N is sufficient
• Use only nitrate N
• B and Ca deficiency cause cupping & distortion of new foliage
• pH 5.5-6.0
• If >6.0 or too much Ca = B deficiency
• <5.5 = Ca deficiency or Fe & Mn toxicity = rusty mottling on foliage

Height Reduction

• Not needed if cool and high light
• Bonzi @2-25 ppm
• Sumagic @ 2-15 ppm
• Bnine @ 2500 ppm
• DIF
• Water stress

Insects, Diseases & Physiological Disorders

• Aphids and thrips
• Damping off
• Leaf spot
• Botrytis
• Root and crown root
• Insufficient flower size due to high temperature and/or late application of growth retardants