GrowerFacts Extra

SALVIA BIG BLUE

Additional Culture Research

from

PanAmerican Seed®

Salvia Big Blue

Culture Research, published 2019

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INTRODUCTION

Provide culture details for Salvia Big Blue.

PLUG CULTURE

- Sow 1 seed per cell in 288 or 128 cell trays
- Vermiculite cover optional

PLUG CULTURE: Stage 1

- 68-77 °F (20-25 °C)
- Moisture level 4
- Light optional
- 4 days

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PLUG CULTURE: Stage 2

- 68-77 °F (20-25 °C)
- Moisture level 3-4

PLUG CULTURE: Stage 3

- 68-72 °F (20-22 °C)
- Moisture level 2-4
- Apply PGR 2 weeks from sow:
  - Daminozide 2,500 ppm spray **or**
  - Ancymidol 5 ppm spray **or**
  - Paclobutrazol 5 ppm spray

Control | A-Rest 5 ppm | B-Nine 2500 ppm | Bonzi 5 ppm

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PLUG CULTURE: Stage 4

- 62-65 °F (17-18 °C)
- If using daminozide, repeat every 7-10 days as needed
- In general, ancymidol and paclobutrazol do not require repeat applications

PLUG CROP TIME

- 288-cell: 3-4 weeks, 128 cell 4-5 weeks
- Add one week when growing plugs in low light or cool temperatures

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FINISH CULTURE: Pinching

- Salvia Big Blue growth shows strong apical dominance
- Pinching is required
  - Soft pinch (pinch the tip, leaving 4 nodes) at 6 weeks from sow

  OR

  - Hard pinch (leave 4 nodes at the base) at 8-9 weeks from sow

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FLOWERING TIME

- Temperature
- Photoperiod
- Daily light integral (DLI)

TEMPERATURE

- Prefers warm growing and flowers faster as average daily temperature (ADT) increases

PHOTOPERIOD AND DAYLENGTH

- Salvia Big Blue is a facultative intermediate plant with a light accumulating response

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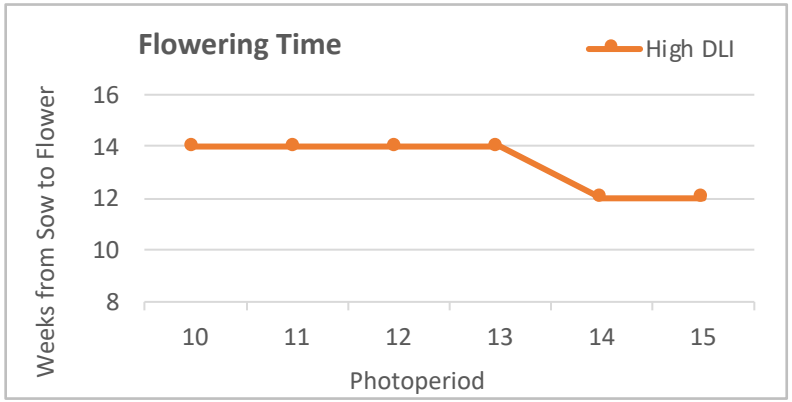
PHOTOPERIOD RESPONSE

- Facultative intermediate plant
- Optimal daylength of 14-15 hours. 16 hours and night interruption (NI) delays flowering by up to 1 week than at 14-15 hours
- 2-3 weeks faster flowering under 14 and 15 hours than SDs



Floriculture MICHIGAN STATE UNIVERSITY

8 weeks after transplant & start of treatments at 68 ºF
Pinched to 4 nodes 1 week after transplant

*Seedlings received 20 LDs in 288s and 22 SDs in 50s prior to transplant in 6”

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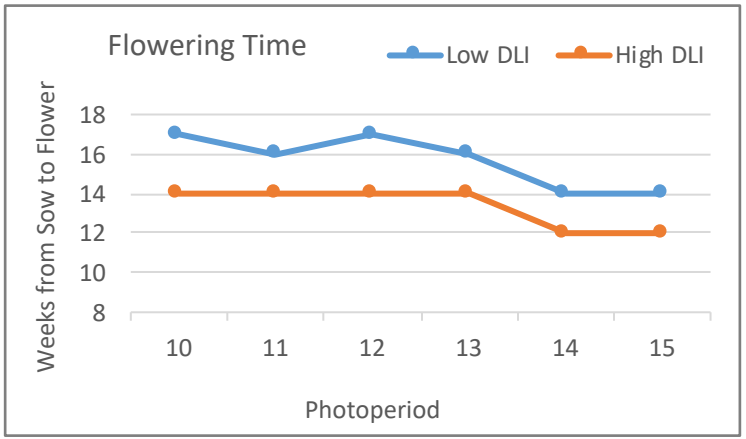
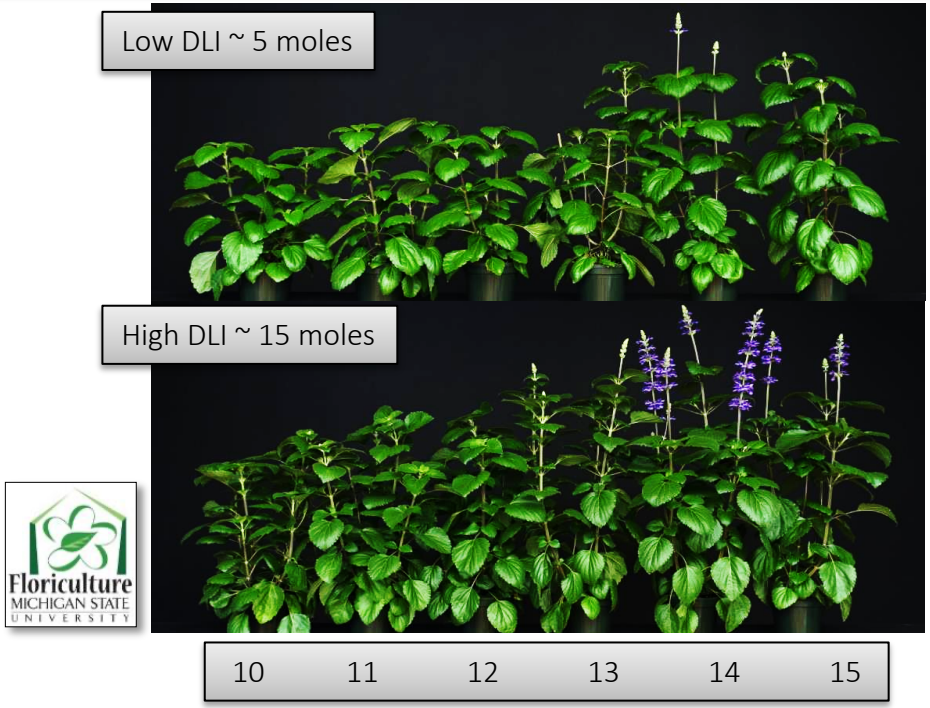
EFFECT OF DLI

- Light accumulator i.e. faster flowering under higher DLI
- 2-3 weeks faster flowering under high DLI than low DLI





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SCHEDULING

Fastest Flowering

- under 14 and 15 hours and high DLI at 12 weeks from sow to flower

Slowest Flowering

- under SDs and low DLI at 16-17 weeks from sow to flower
- The difference between fastest vs slowest flowering was 4 to 5 weeks
- Add 2 weeks to compensate for potential delay at 16 hour photoperiod in northern regions

EFFECT OF PHOTOPERIOD AND DLI		
Photoperiod (hours)	Weeks from sow to flower under low DLI of 5 moles/m²/d	Weeks from sow to flower under high DLI of 15 moles/m²/d
10	17	14
11	16	14
12	17	14
13	16	14
14	14	12
15	14	12

Grown at ADT of 68 °F

When grown warmer, flowering will be 1-2 weeks faster

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FINISH PGRs

- Highly responsive to 2,500 ppm daminozide, repeat sprays needed OR
- Can drench with 3-5 ppm paclobutrazol after axillary branches are actively growing
  - PGR rates tested in Elburn IL and Venhuizen NL
  - Higher rates might be needed at high ADTs

CONTAINERS AND PPP

- 6” or larger containers
- 1 PPP for up to 1 gallon containers