



**GrowerFacts Extra**  
**Zinnia Zesty™**

Additional Culture Research  
from

**PanAmerican Seed®**

# Zinnia Zesty™

Plant Growth Regulator Research, published 2020

PanAmericanSeed.

## OBJECTIVE

To evaluate the effect of PGRs on Zinnia Zesty™ plugs.

## MATERIALS AND METHODS

- Varieties: Zesty Fuchsia, Pink, Purple, Scarlet, and White
- Sow date: week 12
- Plug tray size: 288 cell
- Plug PGR treatment:
  - Paclobutrazol (Bonzi) 2 ppm sprinch at sowing, then daminozide (B-Nine or Alar) 2,500 ppm spray 2 weeks after sowing
  - Daminozide (B-Nine) 2,500 ppm spray at 1 week after sowing, repeated 1 week later
  - Control



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## ANNUALS

Bonzi 2 ppm sprenc +  
B-Nine 2,500 ppm spray

2x B-Nine 2,500 ppm  
spray

Control



Zesty Fuchsia  
3 weeks after  
sowing

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## ANNUALS

Bonzi 2 ppm sprenc +  
B-Nine 2,500 ppm spray

2x B-Nine 2,500 ppm  
spray

Control



Zesty Pink  
3 weeks after  
sowing

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## ANNUALS

Bonzi 2 ppm sprenc +  
B-Nine 2,500 ppm spray

2x B-Nine 2,500 ppm  
spray

Control



Zesty Purple  
3 weeks after  
sowing

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## ANNUALS

Bonzi 2 ppm sprenc +  
B-Nine 2,500 ppm spray

2x B-Nine 2,500 ppm  
spray

Control



Zesty Scarlet  
3 weeks after  
sowing

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## ANNUALS

Bonzi 2 ppm sprenc +  
B-Nine 2,500 ppm spray

2x B-Nine 2,500 ppm  
spray

Control



Zesty White  
3 weeks after  
sowing

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## PLUG STAGE RECOMMENDATION

- Zinnia Zesty plugs are responsive to B-Nine 2,500 ppm spray at 1 week after sowing. Repeat 1 week later if necessary.
- The alternative PGR treatment is to use Bonzi 2 ppm sprinch at sowing or radicle emergence stage to control hypocotyl stretch. Follow up with a B-Nine 2,500 ppm spray 2 weeks later.



Zesty Purple

# Zinnia Zesty™

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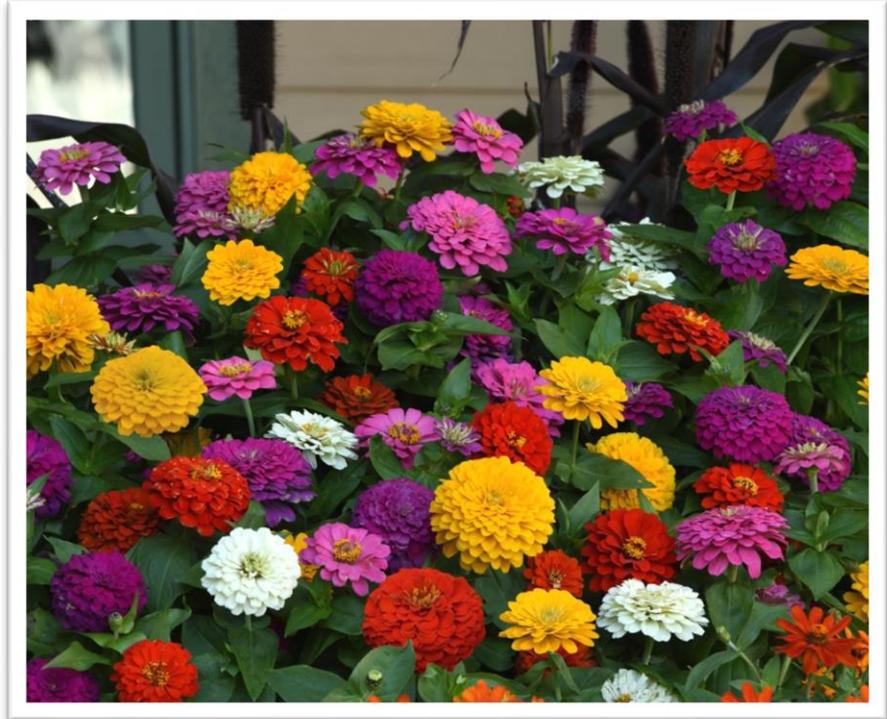
PanAmericanSeed.

## OBJECTIVE

To evaluate the effect of PGRs on Zinnia Zesty™ at finish stages.

## MATERIALS AND METHODS

- Varieties: Zesty Fuchsia, Pink, Purple, Scarlet, and White
- Transplant date: week 15
- Container size: Quart with 1 ppp
- Finish PGR treatments:
  - Paclobutrazol (Bonzi) 5 ppm drench at 2 weeks after transplant (WAT)
  - 2x daminozide (B-Nine) 2,500/chlormequat chloride (CCC) 350 ppm spray at 2 and 4 WAT
  - 2x daminozide (B-Nine) 2,500 ppm spray at 2 and 4 WAT
  - Control



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## ANNUALS

2x B-Nine 2,500/  
CCC 350 ppm

2x B-Nine  
2,500 ppm

Bonzi 5  
ppm drench

Control



Zesty Fuchsia

2x B-Nine 2,500/  
CCC 350 ppm

2x B-Nine  
2,500 ppm

Bonzi 5  
ppm drench

Control



Zesty Pink

7 weeks after transplant

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## ANNUALS

2x B-Nine 2,500/  
CCC 350 ppm

2x B-Nine  
2,500 ppm

Bonzi 5  
ppm drench

Control



Zesty Purple

2x B-Nine 2,500/  
CCC 350 ppm

2x B-Nine  
2,500 ppm

Bonzi 5  
ppm drench

Control



Zesty Scarlet

7 weeks after transplant

# Zinnia Zesty™

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## ANNUALS



Zesty White

7 weeks after transplant

# Zinnia Zesty™

Plant Growth Regulator Research, published 2020

PanAmericanSeed.

## ANNUALS

2x B-Nine 2,500 ppm

Bonzi 5 ppm dr



8 weeks after transplant

2x B-Nine 2,500 ppm

Bonzi 5 ppm dr



9 weeks after transplant

Bonzi drench had a longer residual activity.

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## FINISH STAGE RECOMMENDATION

- All PGRs elicited height reduction in Zinnia Zesty.
- B-Nine 2,500 ppm spray at 2 and 4 weeks after transplant worked well. If necessary, B-Nine and CCC tank mix can be used for stronger control. However, it is not recommended to use CCC rate higher than 350 ppm, as we have found it could reduce flower doubleness.
- Bonzi 5 ppm drench was the strongest, and the residual will last longer than B-Nine or B-Nine/CCC tank mix. This is recommended for warmer conditions.



Zesty Scarlet