



Chromosome Number of  
Colchicine-Altered  
St. Augustinegrass

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# Colchicine-Altered 'Raleigh' St. Augustinegrass

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- Released from NC State in 1980
- Diploid ( $2n=2x=18$ )
- Cold Tolerance



# Polyploid St. Augustinegrass

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- Increased resistance to gray leaf spot



- Increased water use efficiency



- Increased resistance to southern chinch bug

# Polyploidy Induced Lines

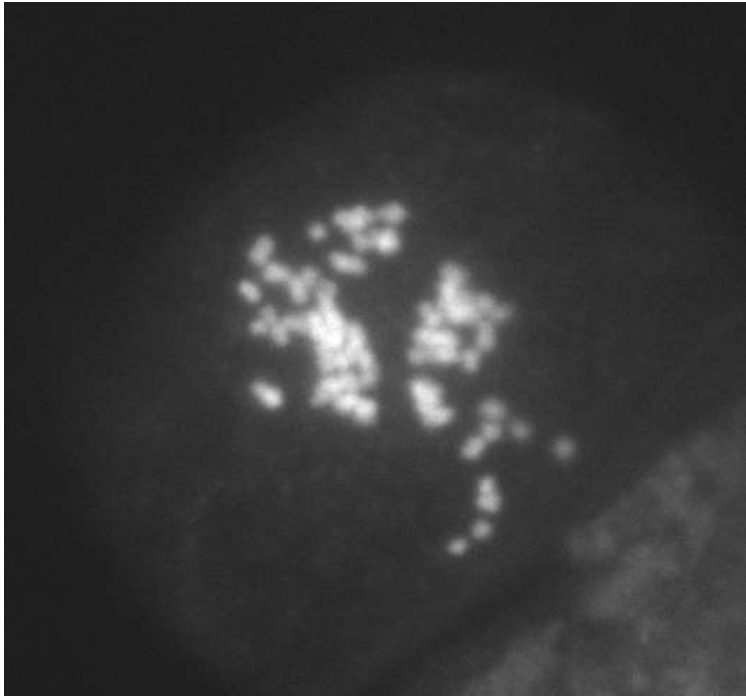
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- Putative tetraploids ( $2n = 4x = 36$ )

# Chromosome Visualization

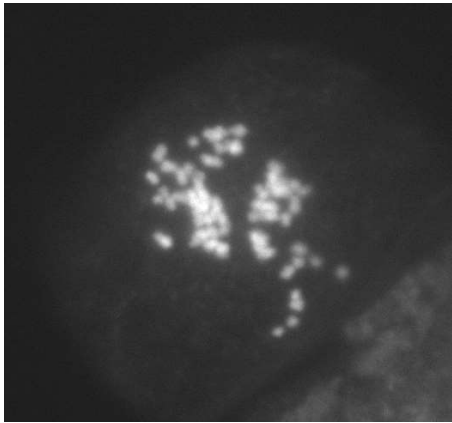
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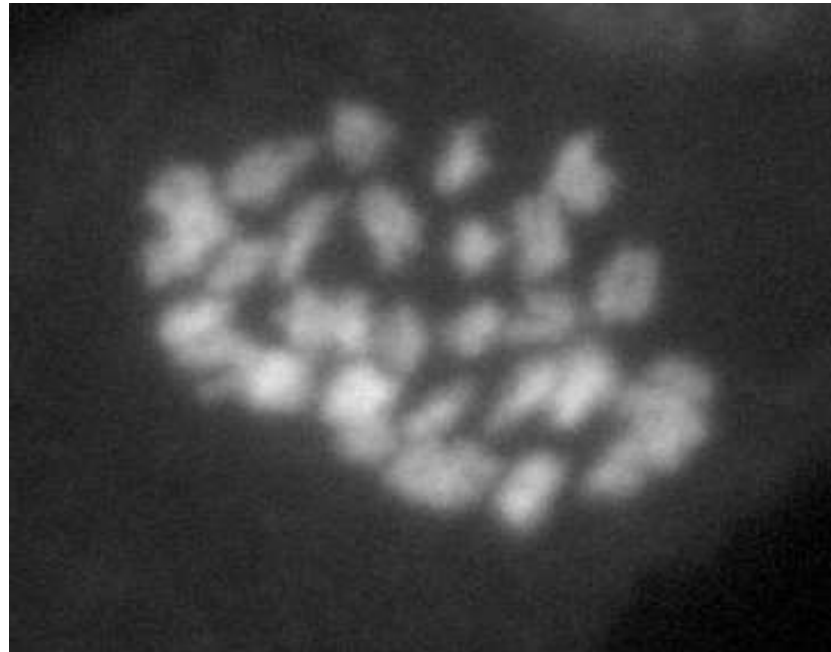
- DSA 13005  
 $2n = 4x = 36$

# Chromosome Visualization

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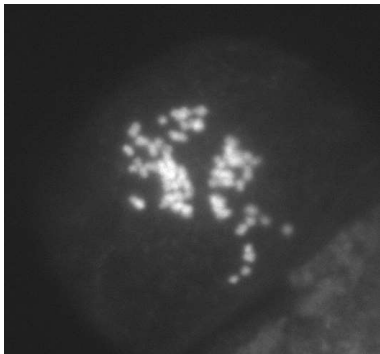
- DSA 13005  
 $2n = 4x = 36$



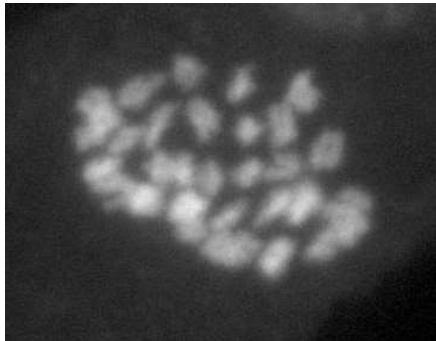
- DSA 16001  
 $2n = 4x = 36$

# Chromosome Visualization

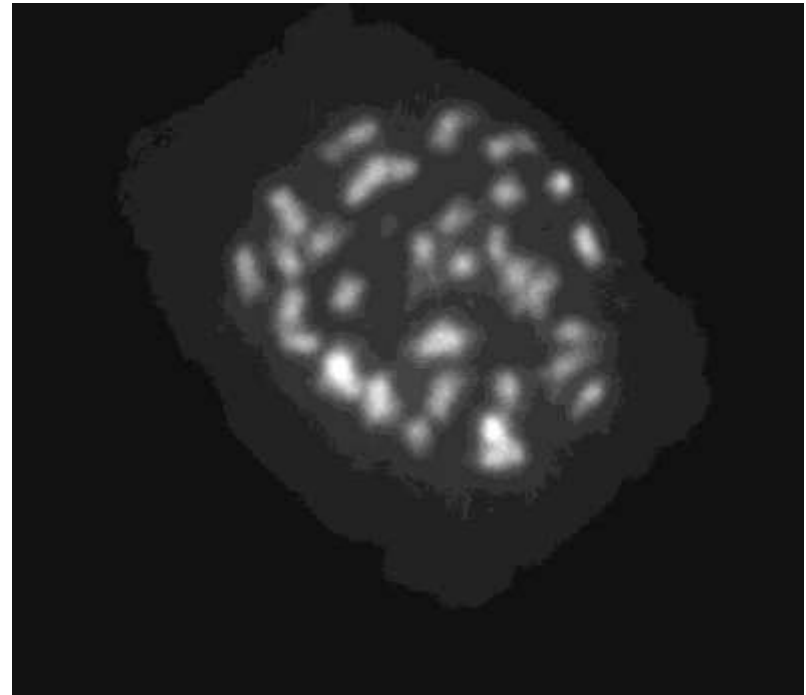
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- DSA 13005  
 $2n = 4x = 36$



- DSA 16001  
 $2n = 4x = 36$



- DSA 16016  
 $2n = 4x = 36$

# Acknowledgements

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**Institute of Plant Breeding,  
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