

2007

Solution Days

Soybeans - Planting Less...

Get More

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Soybeans – Planting Less ... Get More

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- Mark Hamilton, Soybean Product Development and Advancement Scientist, Syngenta
- Matt Keating, Sales Representative, Syngenta Seed Treatment

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NK Variety Select Made Simple

- Pick a variety that will give you the highest yield in all soil types and environments
- Select a variety that will mature one day before the first killing frost
- Select a variety that will not abort flowers and pods
- Select a variety that is resistant to all disease and insects

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NK Weed Management



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NK Seed treatments (field activity)

- Where does seed treatment pays?
 - Disease
 - Insects
 - Fertility
- Field history

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NK Diseases (Early Season)

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NK Diseases (Late Season)

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NK Insects

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NK Fertility (field activity)


Stage of Growth	Yield, bu/a
Starter (0.33 lb)	66
Starter (0.66 lb)	70
Starter (0.33 lb) + V4 (0.33 lb)	74
V4 (0.33 lb)	66
V4 + V8 (0.33 + 0.33 lb)	72
V4 + V8 + R2 (0.33 + 0.33 + 0.33 lb)	74
Untreated Check	66
LSD (0.05)	3

- Opportunity to improve performance with fertility
 - High user of phosphorus
 - pH reduce availability
 - Micro-nutrient seed treatments
 - Foliar treatments
- Understanding the value

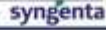
Data Courtesy of Dr. Barney Gordon - Kansas State University

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 **Foliar Treatments**

- **KSU**
 - V4 → Mn Chelate at 1 Qt./Acre
 - V8 → Mn Chelate at 1 Qt./Acre
- **ISU**
 - V5 → Elemax




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 **Take Home**


- **Know Your Field History**
 - pH
 - Disease
 - Insects
 - Soil Characteristics
- **Plant Early**
 - Population
 - Seed Treatments
 - Fertility
 - Weed Management




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 **Soybean Yield Components**


- **What are the yield components?**
- **They are:**
 - Number of Plants/Acre
 - Number of Nodes/Plant
 - Number of Pods/Node
 - Number of Seeds/Pod
 - Size of Seeds Produced



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 **Selection Factors**

<ul style="list-style-type: none"> • Soil Characteristics • SCN 	<ul style="list-style-type: none"> • pH • Rotation Value
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Variety Characteristics

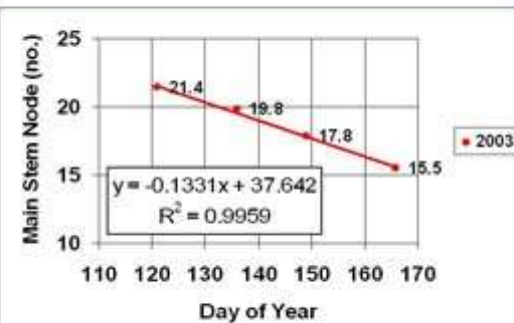
NK Brand Name	S23-B9	S30-D4	S33-T4
Plant Height	Medium	Medium	Medium-Tall
Canopy Type	Medium	Medium-Bush	Medium-Bush
Emergence	1	3	3
Standability	1	2	5
Stress Tolerance	2	3	3
Shatter Resistance	2	2	2
Narrow Row	1	1	3
Wide Row	3	2	1
Iron Chlorosis Tolerance	6	6	7
Phytophthora Race Resistance	Rps1a	Rps1a	Rps1c
Phytophthora Field Rating	4	4	3
Brown Stem Rot	3	3	3
Scierotinia Stem Rot	4	4	-
Sudden Death Syndrome	5	5	5
Soybean Cyst Nematode	S	S	MR(3)MS(14)

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Planting Date



Courtesy: Dr. Jim Specht, IRR

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University Recommendations



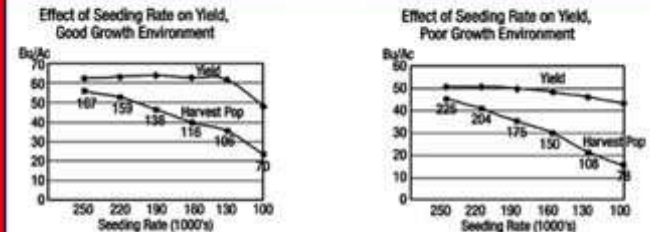
Source: NK Brand Strip Trials 2004-2006

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Yield Environments

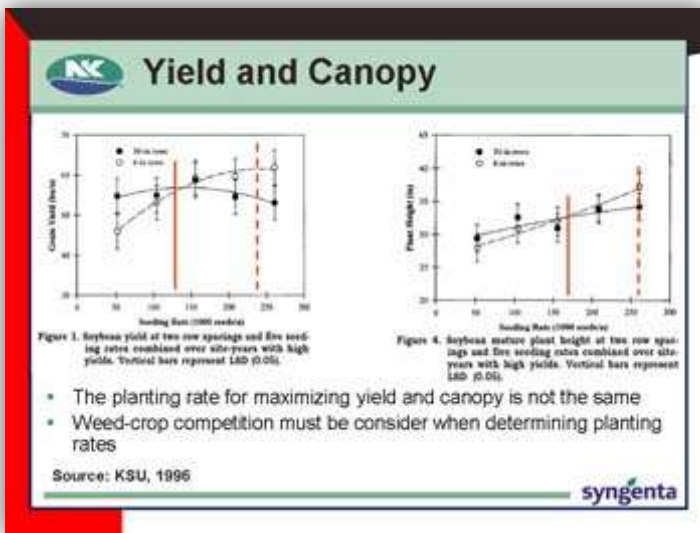


- Less vegetative growth in poor growth environments resulted in reduced competition and higher populations
- High plant populations are needed to maximize yields in poor growth environments

OSU Agronomy Guide

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Effect of Early Planting on Diseases

<i>Disease</i>	<i>Conditions</i>	<i>Growth Stage</i>	<i>Disease Risk</i>
Pythium	cool-wet	before V2	increase
Rhizoctonia	warm	before V2	decrease
Phytophthora	warm-wet	seedling	decrease
SDS	cool-wet	early growth	increase
BSR	cool-wet	all	varies
White Mold	cool-wet	flowering	varies

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