

# RKN Resistant Lines

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Objective: To determine RKN resistance, Yield and fiber properties of elite lines from program led by Roy Creech when was working in our lab.

Yield Tests: Two years, two locations per year in replicated plots at MSU.

RKN Res. Greenhouse test on 40 elite lines and RKN wilt nursery at Tallassee, readings on 24 lines. One greenhouse test completed and a second test is underway in the greenhouse.

I will show data on the 13 best lines from our first greenhouse test. Pedigrees vary but involve crosses of RKR lines with DES, SureGrow, or ST 213 germplasm.

# RKN Res Advanced Lines

Line	Egg/PL	% M8	2004 Yld	2003 Yld
M315	7133	6		
Nemx	15030	13		
ST474	56033	49	599	1568
M8	114625	100		

# Res, Lint Yield, & Fiber Properties

Line	% M8 Eggs	2004	2003	2.5%	G/Tex	Mic
<i>M315</i>	<i>6</i>					
<i>Nemx</i>	<i>13</i>					
<b>37</b>	<b>8</b>	<b>725</b>	<b>1370</b>	<b>1.14</b>	<b>28.09</b>	<b>4.93</b>
<b>24</b>	<b>10</b>	<b>736</b>	<b>1315</b>	<b>1.13</b>	<b>29.03</b>	<b>4.96</b>
<b>38</b>	<b>15</b>	<b>668</b>	<b>1673</b>	<b>1.15</b>	<b>28.56</b>	<b>5.04</b>
<i>St474</i>	<i>49</i>	<i>599</i>	<i>1568</i>	<i>1.13</i>	<i>29.13</i>	<i>5.36</i>

# Res, Lint Yield, & Fiber Properties

Line	% M8 Eggs	2004	2003	2.5%	G/Tex	Mic
M315	6					
<b>25</b>	<b>16</b>	<b>760</b>	<b>1275</b>	<b>1.14</b>	<b>28.70</b>	<b>4.88</b>
<b>35</b>	<b>16</b>	<b>813</b>	<b>1329</b>	<b>1.12</b>	<b>30.04</b>	<b>4.78</b>
<b>34</b>	<b>17</b>	<b>715</b>	<b>1474</b>	<b>1.13</b>	<b>28.90</b>	<b>5.25</b>
<b>1</b>	<b>18</b>	<b>811</b>		<b>1.11</b>	<b>28.98</b>	<b>5.08</b>
<i>St474</i>	<i>49</i>	<i>599</i>	<i>1568</i>	<i>1.13</i>	<i>29.13</i>	<i>5.36</i>

# Res, Lint Yield, & Fiber Properties

Line	% M8 Eggs	2004	2003	2.5%	G/Tex	Mic
M315	6					
<b>33</b>	<b>20</b>	<b>793</b>	<b>1209</b>	<b>1.14</b>	<b>28.89</b>	<b>5.04</b>
<b>32</b>	<b>22</b>	<b>711</b>	<b>1554</b>	<b>1.13</b>	<b>27.25</b>	<b>5.08</b>
<b>5</b>	<b>24</b>	<b>647</b>		<b>1.15</b>	<b>28.71</b>	<b>4.81</b>
<b>30</b>	<b>25</b>	<b>747</b>	<b>1745</b>	<b>1.13</b>	<b>27.15</b>	<b>5.19</b>
<i>St474</i>	<i>49</i>	<i>599</i>	<i>1568</i>	<i>1.13</i>	<i>29.13</i>	<i>5.36</i>

# Res, Lint Yield, & Fiber Properties

Line	% M8 Eggs	2004	2003	2.5%	G/Tex	Mic
M315	6					
<b>29</b>	<b>28</b>	<b>708</b>		<b>1.14</b>	<b>28.48</b>	<b>4.99</b>
<b>7</b>	<b>26</b>	<b>874</b>		<b>1.16</b>	<b>28.14</b>	<b>4.75</b>
<i>St474</i>	<i>49</i>	<i>599</i>	<i>1568</i>	<i>1.13</i>	<i>29.13</i>	<i>5.36</i>

## Conclusions:

It appears that some lines have a good level of resistance based on greenhouse tests.

Some of these lines seem to have acceptable yield and fiber properties.

If second greenhouse test confirms the same lines as resistant we will prepare a germplasm release of the best lines.