Alfalfa Trial Protocol and Notes:

Alfalfa and other forage trials are planted in New York each spring. Trials planted in Ithaca NY on the Cornell University Agricultural Experiment Station each year are to test conventional trial entries (cultivars and experimental populations), roundup ready trial entries, and insect resistant entries. A field day is held in Ithaca each year either just before or just after July 4th. A conventional entry trial is also planted at a second location away from Ithaca. These locations are on commercial farms, at State University of New York College farms, or at William H. Miner Institute Agricultural Research Institute in Northern New York.

Trials are seeded with a 6 row seeder and harvested with a Carter Harvester with a 1 meter cutting width head. The trials are planted in randomized complete block designs if the number of trial entries are 8 or less. If there are 9 or more trial entries, then the trial design is an incomplete block design. All trials are planted with 5 or 6 replicates. Trials are harvested 3 or 4 times each year. At each harvest, one third to one fifth of the plots are sampled for dry matter determination. A digital hanging scale is used to measure plot weights. A portable platform scale is used to weigh the samples taken for dry matter determination. Samples are oven dried for 7 days at 55 degrees C.

Trial applications and summaries are found at:
https://blogs.cornell.edu/varietytrials/forage/

2019 Notes:

With over 9 inches of rain in October plus November 2018, field work was not completed in fall 2018. November, January and March were colder than normal (average -2.6 degrees F). Some forage trials had winter injury. November 2018 and January 2019 averaged 157% of normal precipitation. March, April, and May were colder than normal with 114 % of normal precipitation. Several trials were planted in mid-June. Starting in July and continuing through October, each month had above normal temperature. July through September averaged 87% of normal precipitation. New seedings in Ithaca NY and Aurora NY are well established with excellent stands going into the fall.
# 2019 New York Alfalfa Yield Trials

Cornell University Agricultural Experiment Station, Tompkins County, Ithaca, Central New York

Sown May 2016

## Released And Experimental Varieties

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>3-Yr Stand</th>
<th>2019</th>
<th>3-Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Checks Mean</td>
<td></td>
<td></td>
<td></td>
<td>Ck. Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td>Ck. Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2019 Harvest (yields reported in tons/acre)</td>
<td></td>
<td></td>
<td></td>
<td>Ck. Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ck. Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ck. Mean</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Varieties

- **msSunstra-143146**
- **HYBRIFORCE-3430**
- **msSunstra-144108**
- **SW5210**
- **RED FALCON**
- **HYBRIFORCE-4400**
- **55V50**
- **SW 315LH**
- **msSunstra-144109**
- **55Q27**
- **SW4209**
- **msSunstra-144123**
- **REBOUND 6XT**
- **55H64**
- **ROBIN**
- **ONEIDA VR**
- **VERNAL**
- **PLUS III**
- **KINGBIRD**
- **LIGHTNING BOLT**
- **DKG41-HRR**
- **SW005**
- **HS MULTI**
- **HF MULTI**

### Footnotes

- Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively.

**Allfalfa Check Cultivars are** VERNAL, ONEIDA VR

**Experimental Entries** Overall means are for 36 trial entries.
## 2019 New York Alfalfa Yield Trials

**SUNY Cobleskill, Schoharie County, Cobleskill, Eastern New York**

Sown May 2016

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>3-Yr</th>
<th>% Stand</th>
<th>2019 3-Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26-Jun</td>
<td>29-Jul</td>
<td>10-Sep</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
</tr>
<tr>
<td>AFX144174*</td>
<td>2.78</td>
<td>1.87</td>
<td>1.46</td>
<td>6.11</td>
<td>6.50</td>
<td>6.85</td>
<td>19.93</td>
</tr>
<tr>
<td>SW107*</td>
<td>2.69</td>
<td>1.87</td>
<td>1.39</td>
<td>5.95</td>
<td>6.64</td>
<td>6.44</td>
<td>19.38</td>
</tr>
<tr>
<td>55Q27</td>
<td>2.70</td>
<td>1.90</td>
<td>1.41</td>
<td>6.00</td>
<td>6.57</td>
<td>6.42</td>
<td>19.06</td>
</tr>
<tr>
<td>SWS213*</td>
<td>2.92</td>
<td>1.97</td>
<td>1.44</td>
<td>6.33</td>
<td>6.27</td>
<td>6.09</td>
<td>19.00</td>
</tr>
<tr>
<td>AFX144176*</td>
<td>2.86</td>
<td>1.71</td>
<td>1.50</td>
<td>6.07</td>
<td>6.10</td>
<td>6.55</td>
<td>18.95</td>
</tr>
<tr>
<td>55V50</td>
<td>3.05</td>
<td>1.90</td>
<td>1.35</td>
<td>6.30</td>
<td>6.32</td>
<td>6.40</td>
<td>18.79</td>
</tr>
<tr>
<td>SWS210*</td>
<td>2.75</td>
<td>1.94</td>
<td>1.37</td>
<td>6.06</td>
<td>6.52</td>
<td>6.23</td>
<td>18.71</td>
</tr>
<tr>
<td>PLISS III</td>
<td>2.48</td>
<td>1.80</td>
<td>1.36</td>
<td>5.64</td>
<td>6.43</td>
<td>6.00</td>
<td>18.30</td>
</tr>
<tr>
<td>LIGHTNING BOLT</td>
<td>2.53</td>
<td>1.88</td>
<td>1.35</td>
<td>5.75</td>
<td>6.03</td>
<td>5.98</td>
<td>17.83</td>
</tr>
<tr>
<td>PERSIST III</td>
<td>2.63</td>
<td>1.58</td>
<td>1.29</td>
<td>5.50</td>
<td>6.02</td>
<td>6.04</td>
<td>17.75</td>
</tr>
<tr>
<td>REBOUND 6AT</td>
<td>2.47</td>
<td>1.70</td>
<td>1.33</td>
<td>5.50</td>
<td>6.27</td>
<td>6.05</td>
<td>17.68</td>
</tr>
<tr>
<td>ONEIDA VR</td>
<td>2.69</td>
<td>1.64</td>
<td>1.32</td>
<td>5.66</td>
<td>5.85</td>
<td>5.66</td>
<td>17.33</td>
</tr>
<tr>
<td>VERNAL</td>
<td>2.53</td>
<td>1.64</td>
<td>1.26</td>
<td>5.43</td>
<td>5.80</td>
<td>5.56</td>
<td>16.76</td>
</tr>
<tr>
<td>SW 315LH</td>
<td>2.10</td>
<td>1.10</td>
<td>0.91</td>
<td>4.11</td>
<td>5.61</td>
<td>6.27</td>
<td>16.12</td>
</tr>
</tbody>
</table>

| Mean | 2.65 | 1.71 | 1.32 | 5.68 | 6.23 | 6.17 | 18.13 | 70 | 5.55 | 17.04 |
| 5% LSD | 0.57 | 0.46 | 0.39 | 0.71 | 0.43 | 0.29 | 1.10 | 3 |
| CV (%) | 7.4 | 7.5 | 7.3 | 5.5 | 5.4 | 3.7 | 4.1 | 7.6 |

*Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively.

Alfalfa Check Cultivars are VERNAL, ONEIDA VR

*EXPERIMENTAL ENTRIES Overall means are for 16 trial entries.

[back to top](#)
## 2019 New York Alfalfa Yield Trials

Cornell U. Agricultural Experiment Station, Tompkins Co., Ithaca, NY

Sown May 2017

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019</th>
<th>2018</th>
<th>2-Yr % Stand</th>
<th>2019</th>
<th>2-Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B-Jun</td>
<td>24-Jul</td>
<td>5-Sep</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
</tr>
<tr>
<td>SW3407</td>
<td>2.01</td>
<td>1.93</td>
<td>1.22</td>
<td>5.17</td>
<td>6.63</td>
<td>11.74</td>
</tr>
<tr>
<td>5Q24</td>
<td>1.73</td>
<td>1.66</td>
<td>1.16</td>
<td>4.54</td>
<td>6.72</td>
<td>11.36</td>
</tr>
<tr>
<td>HYBRIFORCE-4400</td>
<td>1.64</td>
<td>1.76</td>
<td>1.29</td>
<td>4.68</td>
<td>6.46</td>
<td>11.32</td>
</tr>
<tr>
<td>SW4107</td>
<td>1.64</td>
<td>1.72</td>
<td>1.35</td>
<td>4.70</td>
<td>6.43</td>
<td>11.09</td>
</tr>
<tr>
<td>GALAXY</td>
<td>1.56</td>
<td>1.76</td>
<td>1.26</td>
<td>4.57</td>
<td>6.13</td>
<td>10.77</td>
</tr>
<tr>
<td>FSIG 415 BR</td>
<td>1.54</td>
<td>1.75</td>
<td>1.28</td>
<td>4.57</td>
<td>6.24</td>
<td>10.76</td>
</tr>
<tr>
<td>SW5210</td>
<td>1.40</td>
<td>1.57</td>
<td>1.16</td>
<td>4.12</td>
<td>6.53</td>
<td>10.66</td>
</tr>
<tr>
<td>AFJ 429</td>
<td>1.31</td>
<td>1.57</td>
<td>1.18</td>
<td>4.05</td>
<td>6.36</td>
<td>10.42</td>
</tr>
<tr>
<td>CW 104014*</td>
<td>1.50</td>
<td>1.58</td>
<td>1.26</td>
<td>4.35</td>
<td>6.00</td>
<td>10.31</td>
</tr>
<tr>
<td>LUKAL</td>
<td>1.04</td>
<td>1.52</td>
<td>1.08</td>
<td>3.64</td>
<td>6.42</td>
<td>10.16</td>
</tr>
<tr>
<td>REGEN</td>
<td>1.22</td>
<td>1.64</td>
<td>1.13</td>
<td>3.99</td>
<td>6.11</td>
<td>10.13</td>
</tr>
<tr>
<td>OWA113009*</td>
<td>1.36</td>
<td>1.57</td>
<td>1.24</td>
<td>4.17</td>
<td>5.90</td>
<td>10.03</td>
</tr>
<tr>
<td>EZRA</td>
<td>1.30</td>
<td>1.42</td>
<td>1.08</td>
<td>3.80</td>
<td>6.14</td>
<td>9.94</td>
</tr>
<tr>
<td>430RRLH</td>
<td>1.17</td>
<td>1.49</td>
<td>1.08</td>
<td>3.74</td>
<td>5.91</td>
<td>9.89</td>
</tr>
<tr>
<td>ONEIDA VR</td>
<td>1.03</td>
<td>1.38</td>
<td>1.08</td>
<td>3.48</td>
<td>6.02</td>
<td>9.51</td>
</tr>
<tr>
<td>LUZELLE</td>
<td>1.13</td>
<td>1.21</td>
<td>0.92</td>
<td>3.25</td>
<td>6.37</td>
<td>9.49</td>
</tr>
<tr>
<td>VERNAL</td>
<td>0.87</td>
<td>1.29</td>
<td>0.92</td>
<td>3.09</td>
<td>5.46</td>
<td>8.57</td>
</tr>
<tr>
<td>SW 315LH</td>
<td>0.65</td>
<td>1.14</td>
<td>0.94</td>
<td>2.73</td>
<td>5.65</td>
<td>8.42</td>
</tr>
</tbody>
</table>

|               |   |   |   |   |   |   |   |   |   |
| Ck. Mean     |   |   |   |   |   |   |   |   |   |

| Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively. Alfalfa Check Cultivars are VERNAL, ONEIDA VR

*EXPERIMENTAL ENTRIES Overall means are for 16 trial entries.

2019 New York Alfalfa Yield Trials
New York State Agricultural Experiment Station, Ontario Co., Geneva, NY
Sown June 2017

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019</th>
<th>2018</th>
<th>2-Yr Total t/a</th>
<th>2019 Total t/a</th>
<th>2-Yr Total t/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGEN</td>
<td>2.88</td>
<td>1.80</td>
<td>1.14</td>
<td>5.83</td>
<td>6.85</td>
<td>12.98</td>
</tr>
<tr>
<td>FSG 415 BR</td>
<td>2.65</td>
<td>1.79</td>
<td>1.25</td>
<td>5.70</td>
<td>6.77</td>
<td>12.72</td>
</tr>
<tr>
<td>EZRA</td>
<td>2.64</td>
<td>1.78</td>
<td>1.21</td>
<td>5.62</td>
<td>6.46</td>
<td>12.63</td>
</tr>
<tr>
<td>MAGNUM 8</td>
<td>2.51</td>
<td>1.64</td>
<td>1.15</td>
<td>5.30</td>
<td>6.78</td>
<td>12.54</td>
</tr>
<tr>
<td>55V50</td>
<td>2.74</td>
<td>1.71</td>
<td>1.03</td>
<td>5.48</td>
<td>6.83</td>
<td>12.49</td>
</tr>
<tr>
<td>LUZELLE</td>
<td>2.72</td>
<td>1.72</td>
<td>1.02</td>
<td>5.46</td>
<td>6.47</td>
<td>12.17</td>
</tr>
<tr>
<td>LUKAL</td>
<td>2.61</td>
<td>1.72</td>
<td>1.10</td>
<td>5.43</td>
<td>6.10</td>
<td>12.02</td>
</tr>
<tr>
<td>ONEIDA VR</td>
<td>2.35</td>
<td>1.54</td>
<td>1.14</td>
<td>5.04</td>
<td>6.39</td>
<td>11.98</td>
</tr>
<tr>
<td>54Q14</td>
<td>2.48</td>
<td>1.76</td>
<td>1.19</td>
<td>5.43</td>
<td>5.94</td>
<td>11.76</td>
</tr>
<tr>
<td>VERNAL</td>
<td>2.59</td>
<td>1.75</td>
<td>1.11</td>
<td>5.45</td>
<td>6.17</td>
<td>11.69</td>
</tr>
<tr>
<td>GALAXY</td>
<td>2.18</td>
<td>1.77</td>
<td>1.02</td>
<td>4.68</td>
<td>5.66</td>
<td>11.08</td>
</tr>
<tr>
<td>SW 315LH</td>
<td>2.41</td>
<td>1.40</td>
<td>0.88</td>
<td>4.67</td>
<td>6.20</td>
<td>10.90</td>
</tr>
</tbody>
</table>

| Mean Mean  | 2.59                                        | 1.69 | 1.09 | 5.37           | 6.38           | 12.04          | 5.25 | 11.84 |
| 5% LSD     | 0.35                                        | 0.29 | 0.20 | 0.7            | 0.71           | 0.96           |      |      |
| CV (%)     | 8.0                                         | 10.2 | 10.8 | 7.8            | 8.7            | 4.8            |      |      |

Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively. Alfalfa Check Cultivars are VERNAL, ONEIDA VR

ExPERIMENTAL ENTRIES
Overall means are for 16 trial entries.

Due to excessive field variability, 2 of 5 replicates were eliminated from analyses in 2019 and 2-Yr. total.

back to top
## 2019 New York Alfalfa Yield Trials

Cornell U. Agricultural Experiment Station, Tompkins Co., Ithaca, NY

Sown May 2018

### Released And Experimental Varieties 2019 Harvest (yields reported in tons/acre) 2019 % Stand 2019 Total % of Checks Mean 5% LSD CV (%)

<table>
<thead>
<tr>
<th>Varieties</th>
<th>14-Jun</th>
<th>30-Jul</th>
<th>17-Sep</th>
<th>Total t/a</th>
<th>21-Oct-19</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFX164046*</td>
<td>2.34</td>
<td>1.96</td>
<td>1.25</td>
<td>5.53</td>
<td>94</td>
<td>125</td>
</tr>
<tr>
<td>AFX164047*</td>
<td>2.29</td>
<td>1.89</td>
<td>1.30</td>
<td>5.46</td>
<td>92</td>
<td>123</td>
</tr>
<tr>
<td>AFX164048*</td>
<td>2.36</td>
<td>1.85</td>
<td>1.22</td>
<td>5.43</td>
<td>95</td>
<td>122</td>
</tr>
<tr>
<td>PERSIST III</td>
<td>2.31</td>
<td>1.84</td>
<td>1.23</td>
<td>5.42</td>
<td>91</td>
<td>122</td>
</tr>
<tr>
<td>SW1517*</td>
<td>2.31</td>
<td>1.78</td>
<td>1.14</td>
<td>5.21</td>
<td>94</td>
<td>118</td>
</tr>
<tr>
<td>S4VQ52</td>
<td>2.21</td>
<td>1.76</td>
<td>1.18</td>
<td>5.14</td>
<td>94</td>
<td>116</td>
</tr>
<tr>
<td>SW4107</td>
<td>2.18</td>
<td>1.75</td>
<td>1.17</td>
<td>5.11</td>
<td>94</td>
<td>115</td>
</tr>
<tr>
<td>SW1520*</td>
<td>2.24</td>
<td>1.71</td>
<td>1.14</td>
<td>5.10</td>
<td>94</td>
<td>115</td>
</tr>
<tr>
<td>FORTUNE</td>
<td>2.16</td>
<td>1.76</td>
<td>1.17</td>
<td>5.07</td>
<td>88</td>
<td>114</td>
</tr>
<tr>
<td>REGEN</td>
<td>2.13</td>
<td>1.64</td>
<td>1.28</td>
<td>5.06</td>
<td>90</td>
<td>114</td>
</tr>
<tr>
<td>SW5210</td>
<td>2.22</td>
<td>1.67</td>
<td>1.14</td>
<td>5.02</td>
<td>93</td>
<td>113</td>
</tr>
<tr>
<td>BY5 5022</td>
<td>2.04</td>
<td>1.70</td>
<td>1.13</td>
<td>4.85</td>
<td>95</td>
<td>109</td>
</tr>
<tr>
<td>PLUSS III</td>
<td>2.01</td>
<td>1.68</td>
<td>1.01</td>
<td>4.68</td>
<td>92</td>
<td>106</td>
</tr>
<tr>
<td>ONEIDA VR</td>
<td>1.93</td>
<td>1.58</td>
<td>1.15</td>
<td>4.63</td>
<td>89</td>
<td>104</td>
</tr>
<tr>
<td>GEMSTONE II</td>
<td>1.86</td>
<td>1.64</td>
<td>1.05</td>
<td>4.57</td>
<td>94</td>
<td>103</td>
</tr>
<tr>
<td>CW A113005</td>
<td>1.87</td>
<td>1.61</td>
<td>0.99</td>
<td>4.49</td>
<td>91</td>
<td>101</td>
</tr>
<tr>
<td>VERNAL</td>
<td>1.75</td>
<td>1.37</td>
<td>1.08</td>
<td>4.22</td>
<td>83</td>
<td>95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ck. Mean</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Mean</td>
<td>2.12</td>
<td>1.71</td>
<td>1.16</td>
<td>4.99</td>
<td>92</td>
<td>4.43</td>
</tr>
<tr>
<td>5% LSD</td>
<td>0.19</td>
<td>0.11</td>
<td>0.08</td>
<td>0.30</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CV (%)</td>
<td>7.2</td>
<td>5.0</td>
<td>5.5</td>
<td>4.7</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

*Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively.

Alfalfa Check Cultivars are VERNAL, ONEIDA VR

*EXPERIMENTAL ENTRIES Overall means are for 24 trial entries.
2019 New York Alfalfa Yield Trials
SUNY Cobleskill, Schoharie County, Cobleskill, Eastern New York

Sown May 2018

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019 % Stand</th>
<th>% of Checks Mean</th>
<th>2019 Total t/a</th>
<th>3-Oct-19 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26-Jun</td>
<td>29-Jul</td>
<td>10-Sep</td>
<td>Total t/a</td>
<td></td>
</tr>
<tr>
<td>SW5210</td>
<td>2.57</td>
<td>1.76</td>
<td>1.48</td>
<td>5.82</td>
<td>86</td>
</tr>
<tr>
<td>54VQ52</td>
<td>2.61</td>
<td>1.73</td>
<td>1.44</td>
<td>5.78</td>
<td>83</td>
</tr>
<tr>
<td>PERSIST III</td>
<td>2.60</td>
<td>1.63</td>
<td>1.44</td>
<td>5.65</td>
<td>79</td>
</tr>
<tr>
<td>SW4107</td>
<td>2.59</td>
<td>1.64</td>
<td>1.39</td>
<td>5.63</td>
<td>80</td>
</tr>
<tr>
<td>REGEN</td>
<td>2.61</td>
<td>1.57</td>
<td>1.34</td>
<td>5.52</td>
<td>75</td>
</tr>
<tr>
<td>ONEIDA VR</td>
<td>2.52</td>
<td>1.59</td>
<td>1.38</td>
<td>5.49</td>
<td>75</td>
</tr>
<tr>
<td>BYS 5022</td>
<td>2.34</td>
<td>1.59</td>
<td>1.26</td>
<td>5.20</td>
<td>84</td>
</tr>
<tr>
<td>PLUS III</td>
<td>2.24</td>
<td>1.50</td>
<td>1.26</td>
<td>4.99</td>
<td>82</td>
</tr>
<tr>
<td>SW 315LH</td>
<td>2.46</td>
<td>1.37</td>
<td>1.07</td>
<td>4.91</td>
<td>69</td>
</tr>
<tr>
<td>VERNAL</td>
<td>2.29</td>
<td>1.41</td>
<td>1.03</td>
<td>4.74</td>
<td>70</td>
</tr>
<tr>
<td>Ck. Mean</td>
<td></td>
<td></td>
<td></td>
<td>2.42</td>
<td>1.57</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td>2.42</td>
<td>1.57</td>
</tr>
<tr>
<td>5% LSD</td>
<td>0.20</td>
<td>0.13</td>
<td>0.11</td>
<td>0.38</td>
<td>7</td>
</tr>
<tr>
<td>CV (%)</td>
<td>6.6</td>
<td>6.6</td>
<td>7.0</td>
<td>5.7</td>
<td>6.7</td>
</tr>
</tbody>
</table>

^Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively. Alfalfa Check Cultivars are VERNAL, ONEIDA VR

*EXPERIMENTAL ENTRIES Overall means are for 19 trial entries.

[back to top]
## 2019 New York Alfalfa Yield Trials - ROUNDUP READY ALFALFA

Cornell University Agricultural Experiment Station, Tompkins County, Ithaca, Central New York

Sown May 2016

<table>
<thead>
<tr>
<th>Varieties</th>
<th>1-Jul 2019</th>
<th>8-Aug 2019</th>
<th>25-Sep 2019</th>
<th>Total t/ha 2019</th>
<th>Total t/ha 2018</th>
<th>Total t/ha 2017</th>
<th>Total t/ha 3-Yr Avg</th>
<th>21-Oct-19 % Stand</th>
<th>Total 2019</th>
<th>Total 3-Yr % of Trial Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>55VR08 2.22</td>
<td>1.17</td>
<td>0.45</td>
<td>3.83</td>
<td>6.06</td>
<td>5.00</td>
<td>14.89</td>
<td>52</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RR APHATRON 2XT 2.09</td>
<td>1.08</td>
<td>0.47</td>
<td>3.64</td>
<td>5.99</td>
<td>5.19</td>
<td>14.83</td>
<td>52</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA41-18RR 2.14</td>
<td>1.09</td>
<td>0.44</td>
<td>3.68</td>
<td>5.69</td>
<td>5.29</td>
<td>14.66</td>
<td>50</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA40-51RR 2.04</td>
<td>1.08</td>
<td>0.45</td>
<td>3.57</td>
<td>5.79</td>
<td>4.87</td>
<td>14.24</td>
<td>56</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA44-16RR 1.83</td>
<td>1.00</td>
<td>0.44</td>
<td>3.27</td>
<td>5.60</td>
<td>4.85</td>
<td>13.71</td>
<td>50</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Varieties</th>
<th>26-Jun 2019</th>
<th>29-Jul 2019</th>
<th>10-Sep 2019</th>
<th>Total t/ha 2019</th>
<th>Total t/ha 2018</th>
<th>Total t/ha 2017</th>
<th>Total t/ha 3-Yr Avg</th>
<th>3-Oct-19 % Stand</th>
<th>Total 2019</th>
<th>Total 3-Yr % of Trial Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>55VR08 2.48</td>
<td>1.92</td>
<td>1.30</td>
<td>5.70</td>
<td>6.38</td>
<td>6.47</td>
<td>18.55</td>
<td>79</td>
<td>107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA40-51RR 2.14</td>
<td>1.77</td>
<td>1.24</td>
<td>5.14</td>
<td>6.17</td>
<td>6.07</td>
<td>17.39</td>
<td>73</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA44-18RR 2.00</td>
<td>1.57</td>
<td>1.14</td>
<td>4.70</td>
<td>5.98</td>
<td>6.13</td>
<td>16.81</td>
<td>62</td>
<td>97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA44-16RR 2.08</td>
<td>1.59</td>
<td>1.19</td>
<td>4.86</td>
<td>5.88</td>
<td>6.05</td>
<td>16.79</td>
<td>72</td>
<td>97</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 2019 New York Alfalfa Yield Trials - ROUNDUP READY ALFALFA

SUNY Cobleskill, Schoharie County, Cobleskill, Eastern New York

Sown May 2016

<table>
<thead>
<tr>
<th>Varieties</th>
<th>10-Jun 2019</th>
<th>25-Jul 2019</th>
<th>5-Sep 2019</th>
<th>Total t/ha 2019</th>
<th>Total t/ha 2018</th>
<th>Total t/ha 2017</th>
<th>Total t/ha 3-Yr Avg</th>
<th>23-Sep-19 % Stand</th>
<th>Total 2019</th>
<th>Total 3-Yr % of Trial Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>55VR08 1.93</td>
<td>1.84</td>
<td>1.38</td>
<td>5.15</td>
<td>7.29</td>
<td>12.45</td>
<td>78</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6424R 1.89</td>
<td>1.76</td>
<td>1.44</td>
<td>5.09</td>
<td>7.63</td>
<td>12.12</td>
<td>83</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA44-18RR 1.85</td>
<td>1.65</td>
<td>1.29</td>
<td>4.79</td>
<td>6.64</td>
<td>11.42</td>
<td>77</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54HVX42 1.63</td>
<td>1.54</td>
<td>1.26</td>
<td>4.43</td>
<td>6.83</td>
<td>11.26</td>
<td>76</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>430RRLH 1.59</td>
<td>1.36</td>
<td>1.09</td>
<td>4.04</td>
<td>6.72</td>
<td>10.76</td>
<td>65</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Varieties</th>
<th>10-Jun 2018</th>
<th>25-Jul 2018</th>
<th>5-Sep 2018</th>
<th>Total t/ha 2018</th>
<th>Total t/ha 2017</th>
<th>Total t/ha 3-Yr Avg</th>
<th>23-Sep-19 % Stand</th>
<th>Total 2018</th>
<th>Total 3-Yr % of Trial Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>55VR08 1.93</td>
<td>1.84</td>
<td>1.38</td>
<td>5.15</td>
<td>7.29</td>
<td>12.45</td>
<td>78</td>
<td>110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6424R 1.89</td>
<td>1.76</td>
<td>1.44</td>
<td>5.09</td>
<td>7.63</td>
<td>12.12</td>
<td>83</td>
<td>108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DKA44-18RR 1.85</td>
<td>1.65</td>
<td>1.29</td>
<td>4.79</td>
<td>6.64</td>
<td>11.42</td>
<td>77</td>
<td>102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54HVX42 1.63</td>
<td>1.54</td>
<td>1.26</td>
<td>4.43</td>
<td>6.83</td>
<td>11.26</td>
<td>76</td>
<td>94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>430RRLH 1.59</td>
<td>1.36</td>
<td>1.09</td>
<td>4.04</td>
<td>6.72</td>
<td>10.76</td>
<td>65</td>
<td>86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2019 New York Alfalfa Yield Trials - Trials not sprayed with Insecticides
Cornell University Agricultural Experiment Station, Tompkins County, Ithaca, Central New York
Sown May 2016

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>3-Yr % Stand</th>
<th>2019</th>
<th>3-Yr PLH Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-Jul</td>
<td>6-Aug</td>
<td>25-Sep</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
</tr>
<tr>
<td>55H94</td>
<td>2.11</td>
<td>0.98</td>
<td>0.59</td>
<td>3.68</td>
<td>5.76</td>
<td>5.63</td>
<td>15.60</td>
</tr>
<tr>
<td>N-R-GEE</td>
<td>2.12</td>
<td>0.94</td>
<td>0.51</td>
<td>3.57</td>
<td>6.06</td>
<td>4.84</td>
<td>14.47</td>
</tr>
<tr>
<td>SW 315LH</td>
<td>1.52</td>
<td>0.71</td>
<td>0.54</td>
<td>2.76</td>
<td>5.58</td>
<td>5.93</td>
<td>14.27</td>
</tr>
<tr>
<td>VERNAL</td>
<td>1.56</td>
<td>0.75</td>
<td>0.57</td>
<td>2.88</td>
<td>5.69</td>
<td>5.55</td>
<td>14.12</td>
</tr>
<tr>
<td>SCIMITAR*</td>
<td>1.42</td>
<td>0.73</td>
<td>0.53</td>
<td>2.69</td>
<td>5.26</td>
<td>4.43</td>
<td>12.37</td>
</tr>
<tr>
<td><strong>Trial Mean</strong></td>
<td><strong>1.69</strong></td>
<td><strong>0.76</strong></td>
<td><strong>0.54</strong></td>
<td><strong>3.00</strong></td>
<td><strong>5.60</strong></td>
<td><strong>5.51</strong></td>
<td><strong>14.10</strong></td>
</tr>
</tbody>
</table>

Potato leafhopper (PLH) damage score was from 1 (no damage) to 5 (severe damage), means are for 11 trial entries.

### 2019 New York Alfalfa Yield Trials - Trials not sprayed with Insecticides
Cornell University Agricultural Experiment Station, Tompkins County, Ithaca, Central New York
Sown May 2017

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>2-Yr % Stand</th>
<th>2019</th>
<th>2-Yr PLH Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10-Jun</td>
<td>25-Jul</td>
<td>6-Sep</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
</tr>
<tr>
<td>55H94</td>
<td>1.94</td>
<td>1.80</td>
<td>1.29</td>
<td>5.03</td>
<td>7.21</td>
<td>12.24</td>
<td>75</td>
</tr>
<tr>
<td>SCIMITAR</td>
<td>1.67</td>
<td>1.73</td>
<td>1.18</td>
<td>4.58</td>
<td>7.09</td>
<td>11.67</td>
<td>82</td>
</tr>
<tr>
<td>N-R-GEE</td>
<td>1.95</td>
<td>1.64</td>
<td>1.11</td>
<td>4.70</td>
<td>6.87</td>
<td>11.57</td>
<td>77</td>
</tr>
<tr>
<td>430RRLH</td>
<td>1.53</td>
<td>1.65</td>
<td>1.20</td>
<td>4.38</td>
<td>6.65</td>
<td>11.03</td>
<td>73</td>
</tr>
<tr>
<td>SW 315LH</td>
<td>1.19</td>
<td>1.39</td>
<td>1.08</td>
<td>3.66</td>
<td>6.62</td>
<td>10.28</td>
<td>63</td>
</tr>
<tr>
<td>VERNAL</td>
<td>1.13</td>
<td>1.09</td>
<td>0.96</td>
<td>3.17</td>
<td>6.78</td>
<td>9.94</td>
<td>60</td>
</tr>
<tr>
<td><strong>Trial Mean</strong></td>
<td><strong>1.61</strong></td>
<td><strong>1.54</strong></td>
<td><strong>1.13</strong></td>
<td><strong>4.28</strong></td>
<td><strong>6.96</strong></td>
<td><strong>11.23</strong></td>
<td><strong>71</strong></td>
</tr>
</tbody>
</table>

Potato leafhopper (PLH) damage score was from 1 (no damage) to 5 (severe damage), means are for 7 trial entries.


### 2019 New York Alfalfa Yield Trials - Trials not sprayed with Insecticides
Cornell University Agricultural Experiment Station, Tompkins County, Ithaca, Central New York
Sown May 2018

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2019 Harvest (yields reported in tons/acre)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>% Stand</th>
<th>2019</th>
<th>PLH Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28-Jun</td>
<td>2-Jun</td>
<td>19-Sep</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
<td>Total t/a</td>
</tr>
<tr>
<td>FSG 421LH</td>
<td>2.95</td>
<td>1.76</td>
<td>1.23</td>
<td>5.94</td>
<td>92</td>
<td>105</td>
<td>1.0</td>
</tr>
<tr>
<td>SW 315LH</td>
<td>3.04</td>
<td>1.59</td>
<td>1.25</td>
<td>5.87</td>
<td>84</td>
<td>104</td>
<td>1.4</td>
</tr>
<tr>
<td>N-R-GEE</td>
<td>2.77</td>
<td>1.49</td>
<td>1.18</td>
<td>5.44</td>
<td>95</td>
<td>96</td>
<td>3.2</td>
</tr>
<tr>
<td>SCIMITAR</td>
<td>2.52</td>
<td>1.59</td>
<td>1.16</td>
<td>5.26</td>
<td>95</td>
<td>93</td>
<td>1.8</td>
</tr>
<tr>
<td>ONEIDA VR</td>
<td>2.62</td>
<td>1.39</td>
<td>1.20</td>
<td>5.21</td>
<td>90</td>
<td>92</td>
<td>4.0</td>
</tr>
<tr>
<td>VERNAL</td>
<td>2.51</td>
<td>1.40</td>
<td>1.18</td>
<td>5.08</td>
<td>82</td>
<td>90</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Trial Mean</strong></td>
<td><strong>2.9</strong></td>
<td><strong>1.54</strong></td>
<td><strong>1.23</strong></td>
<td><strong>5.67</strong></td>
<td><strong>88</strong></td>
<td><strong>5.67</strong></td>
<td><strong>1.9</strong></td>
</tr>
</tbody>
</table>

Potato leafhopper (PLH) damage score was from 1 (no damage) to 5 (severe damage), means are for 11 trial entries.
## 2019 New York Alfalfa Yield Trials

**Cornell University Agricultural Experiment Station**

Tompkins County, Ithaca

Sown June 2019

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9401</td>
<td>F2F6C-418A</td>
<td>9401</td>
</tr>
<tr>
<td>1041-2</td>
<td>F2F6C-418NC</td>
<td>1041-2</td>
</tr>
<tr>
<td>154-ANS</td>
<td>MARINER V</td>
<td>54VQ52</td>
</tr>
<tr>
<td>154-FL-1</td>
<td>ONEIDA VR</td>
<td>BY-4014</td>
</tr>
<tr>
<td>154-FL-2</td>
<td>PERSIST III</td>
<td>BY-4028</td>
</tr>
<tr>
<td>154-SD-1</td>
<td>RED FALCON BR</td>
<td>BY-4040</td>
</tr>
<tr>
<td>3510-ANS</td>
<td>REGEN</td>
<td>F2F6C-418A</td>
</tr>
<tr>
<td>3510-FL-1</td>
<td>SIGNATURE</td>
<td>F2F6C-418NC</td>
</tr>
<tr>
<td>3510-FL-2</td>
<td>SW160CAZ2*</td>
<td>ONEIDA VR</td>
</tr>
<tr>
<td>3510-SD-1</td>
<td>SW3407</td>
<td>PERSIST III</td>
</tr>
<tr>
<td>54VQ52</td>
<td>SW4107</td>
<td>REGEN</td>
</tr>
<tr>
<td>AFX155025</td>
<td>SW5511*</td>
<td>SKYLARK</td>
</tr>
<tr>
<td>AFX174083</td>
<td>TRIAD</td>
<td>SW3407</td>
</tr>
<tr>
<td>AFX174085</td>
<td>VERNAL</td>
<td>SW4107</td>
</tr>
<tr>
<td>BY-4014</td>
<td>WL 349HQ</td>
<td>TRIAD</td>
</tr>
<tr>
<td>BY-4028</td>
<td>VERNAL</td>
<td>WL 349HQ</td>
</tr>
<tr>
<td>BY-4040</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

## 2019 New York Alfalfa Yield Trials - Trials not sprayed with Insecticides

**Cornell University Agricultural Experiment Station**, Tompkins County, Ithaca, Central New York

Sown June 2019

VERNAL
ONEIDA VR
431 RRLH
SCEPTER
PAOLA
TRIADE
SW 315LH
N-R-GE
2G-2018-FU
BLUEJAY 4HR

[back to top]