2-ROW SPRING

LCS Genie

The Genie Is in the Bottle
With a malting profile tailored for the craft industry and yield levels comparable with feed varieties, LCS Genie is a favorite of brewers, maltsters and farmers alike.

Dependable
fine grind extract 81.5+% d.b.

Recommended
variety by the American Malting Barley Association (AMBA)

Beta-glucan
content consistently under 100 ppm

Malting & Brewing
LCS Genie

Malting Specifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Barley</strong></td>
<td></td>
<td></td>
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<tr>
<td>Plump</td>
<td>93.2</td>
<td>99.9</td>
<td>97.5</td>
<td>96.6</td>
<td>92.4</td>
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<tr>
<td>(On 6/64) (%)</td>
<td></td>
<td></td>
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<tr>
<td>Moisture</td>
<td>10.8</td>
<td>-</td>
<td>15.1</td>
<td>8.0</td>
<td>8.3</td>
</tr>
<tr>
<td>(%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Protein</td>
<td>10.9</td>
<td>-</td>
<td>11.0</td>
<td>11.0</td>
<td>11.6</td>
</tr>
<tr>
<td>(% d.b.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Harvest Sprouting (RVA)</td>
<td>158</td>
<td>-</td>
<td>115</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DON (ppm)</td>
<td>&lt; 0.1</td>
<td>-</td>
<td>0.1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Malt</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extract: Fine Grind (% d.b.)</td>
<td>81.8</td>
<td>79.6</td>
<td>83.2</td>
<td>82.7</td>
<td>80.4</td>
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<tr>
<td>Wort Color (Deg. Lov.)</td>
<td>1.57</td>
<td>2.00</td>
<td>2.55</td>
<td>3.40</td>
<td>1.60</td>
</tr>
<tr>
<td>Diastatic Power (Deg. L.)</td>
<td>137</td>
<td>173</td>
<td>103</td>
<td>143</td>
<td>153</td>
</tr>
<tr>
<td>Alpha Amylase (D.U.)</td>
<td>54.7</td>
<td>50.1</td>
<td>59.6</td>
<td>60.0</td>
<td>61.4</td>
</tr>
<tr>
<td>Soluble Protein (% d.b.)</td>
<td>4.40</td>
<td>4.15</td>
<td>4.28</td>
<td>5.40</td>
<td>4.50</td>
</tr>
<tr>
<td>Total Protein (% d.b.)</td>
<td>10.9</td>
<td>13.2</td>
<td>10.7</td>
<td>11.6</td>
<td>11.9</td>
</tr>
<tr>
<td>Soluble/Total Protein (% d.b.)</td>
<td>40.4</td>
<td>32.4</td>
<td>42.8</td>
<td>46.9</td>
<td>38.0</td>
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<tr>
<td>Beta-Glucan (ppm)</td>
<td>66</td>
<td>67</td>
<td>36</td>
<td>48</td>
<td>51</td>
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<tr>
<td>Free Amino Nitrogen (FAN)</td>
<td>175</td>
<td>151</td>
<td>206</td>
<td>230</td>
<td>168</td>
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</tbody>
</table>

Areas of Adaptation

Primary
Secondary

Malt House Analysis<sup>1</sup>

<table>
<thead>
<tr>
<th>Chitting (%)</th>
<th>Steep Out Moisture (%)</th>
<th>Malt Yield (%)</th>
<th>96-Hour Acrospire Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>46.8</td>
<td>90.5</td>
<td>0 0 5 90 5</td>
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</table>

<sup>1</sup> LCS data, obtained from Hartwick College: hartwick.edu/about-us/centers-institutes/center-for-craft-food-and-beverage/
<sup>2</sup> Data obtained from Montana State University: plantsciences.montana.edu/crops/index.html
<sup>3</sup> Data obtained from Michigan State University: msue.anr.msu.edu/topic/malting_barley/research
<sup>4</sup> Data obtained from the American Malting Barley Association: ambainc.org/
### Agronomic Features

#### University of Idaho South

<table>
<thead>
<tr>
<th>Variety</th>
<th>TW (lb/bu)</th>
<th>Height (in)</th>
<th>Heading</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCS Genie</td>
<td>49.7</td>
<td>26.7</td>
<td>3.2</td>
</tr>
<tr>
<td>CDC Copeland</td>
<td>49.1</td>
<td>34.3</td>
<td>0.5</td>
</tr>
<tr>
<td>AAC Synergy</td>
<td>48.5</td>
<td>32.7</td>
<td>-1.1</td>
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<tr>
<td>AC Metcalfe</td>
<td>50.0</td>
<td>33.7</td>
<td>-1.5</td>
</tr>
<tr>
<td>Moravian 69</td>
<td>46.0</td>
<td>27.0</td>
<td>3.2</td>
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</table>

#### Montana State

<table>
<thead>
<tr>
<th>Variety</th>
<th>TW (lb/bu)</th>
<th>Height (in)</th>
<th>Heading</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCS Genie</td>
<td>53.7</td>
<td>27.2</td>
<td>3.2</td>
</tr>
<tr>
<td>CDC Copeland</td>
<td>53.9</td>
<td>31.9</td>
<td>2.2</td>
</tr>
<tr>
<td>AC Metcalfe</td>
<td>54.0</td>
<td>32.6</td>
<td>-1.8</td>
</tr>
<tr>
<td>AAC Synergy</td>
<td>52.5</td>
<td>31.7</td>
<td>0.2</td>
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#### University of Minnesota

<table>
<thead>
<tr>
<th>Variety</th>
<th>Lodging (1-9)</th>
<th>Height (in)</th>
<th>Heading (DOM*)</th>
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<tbody>
<tr>
<td>LCS Genie</td>
<td>2.5</td>
<td>30.6</td>
<td>4.8</td>
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<tr>
<td>ND Genesis</td>
<td>3.2</td>
<td>35.2</td>
<td>-0.9</td>
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<tr>
<td>AC Metcalfe</td>
<td>4.9</td>
<td>35.0</td>
<td>0.6</td>
</tr>
<tr>
<td>AAC Synergy</td>
<td>3.7</td>
<td>34.2</td>
<td>1.1</td>
</tr>
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</table>

#### Michigan State

<table>
<thead>
<tr>
<th>Variety</th>
<th>TW (lb/bu)</th>
<th>Height (in)</th>
<th>Heading (DOM*)</th>
<th>PHS (RVA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCS Genie</td>
<td>50.7</td>
<td>22.2</td>
<td>0.7</td>
<td>115.3</td>
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<tr>
<td>CDC Copeland</td>
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<td>24.0</td>
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<td>AC Metcalfe</td>
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<td>25.6</td>
<td>-1.0</td>
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<tr>
<td>AAC Synergy</td>
<td>50.4</td>
<td>24.7</td>
<td>-1.7</td>
<td>36.7</td>
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</tbody>
</table>

#### Washington State

<table>
<thead>
<tr>
<th>Variety</th>
<th>TW (lb/bu)</th>
<th>Height (in)</th>
<th>Heading (DOM*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCS Genie</td>
<td>52.3</td>
<td>28.3</td>
<td>8.0</td>
</tr>
<tr>
<td>CDC Copeland</td>
<td>51.4</td>
<td>38.0</td>
<td>8.4</td>
</tr>
<tr>
<td>LCS Genie</td>
<td>53.1</td>
<td>26.3</td>
<td>2.5</td>
</tr>
<tr>
<td>CDC Copeland</td>
<td>51.6</td>
<td>35.0</td>
<td>3.5</td>
</tr>
<tr>
<td>LCS Genie</td>
<td>53.3</td>
<td>25.5</td>
<td>1.0</td>
</tr>
<tr>
<td>CDC Copeland</td>
<td>52.5</td>
<td>34.0</td>
<td>3.0</td>
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</table>

Data sets are available in their entirety at individual university websites. Links to these websites are listed on page 32 of this guide. 

*Days off mean of trial