Recommended Lists: Looking Beyond Headline Yield

Jenna Watts
Outline

• How are varieties recommended?
  • How has the system evolved?
• Planning for the future of the RL:
  • What has been done?
  • Results

The AHDB Recommended List are managed by a project consortium of AHDB Cereals & Oilseeds, BSPB, MAGB and nabim.
How are varieties recommended?

Is it all about yield?
Criteria for Recommendation

Does the variety have a balance of features that are sufficiently better than existing varieties & such that it could potentially provide a more economic return in the market?

Comparator varieties

UK yield in ranked order

- **Recommend**
  - If variety meets minimum standards

  +2% Automatic selection

- **Expect to Recommend**
  - Unless variety has weaknesses compared to comparator varieties

  Yield target

- **Expect not to Recommend**
  - Variety needs additional strengths and no weaknesses

  -2% Recommendation unlikely below here

- **Expect not to Recommend**
  - Variety needs something special (innovative traits)

Some characteristics have a greater weighting than yield when recommending varieties
Minimum standards and target specifications

Minimum standards:
- Must be met
- Diseases

Target specifications:
- Should normally be met
- Agronomics inc. lodging
- Quality
- Set in accordance with industry standards

Yellow rust development

% leaf area affected

- Below minimum
- RL 3-5
- RL 6-7
- RL 8-9

Dates:
- 11-Jun
- 25-Jun
- 09-Jul
Is it all about yield?
- A look to the past

Voting plinth at 2011 Cereals Event

Recommended Lists: what are you looking for?

<table>
<thead>
<tr>
<th>Category</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional information</td>
<td>189</td>
</tr>
<tr>
<td>New varieties</td>
<td>184</td>
</tr>
<tr>
<td>Agronomic features</td>
<td>254</td>
</tr>
<tr>
<td>Quality/end use suitability</td>
<td>77</td>
</tr>
<tr>
<td>Disease and pest ratings</td>
<td>340</td>
</tr>
<tr>
<td>Yield data</td>
<td>399</td>
</tr>
</tbody>
</table>
Recommendations made in 2011
- The 2012/13 RL

Automatic: above yield threshold & meets other requirements and minimum standards

Excludes varieties with a specific recommendation

No. varieties

Winter wheat
Spring wheat
Winter barley
Spring barley
Winter oats
Spring oats
Winter OSR (East/West)
Winter OSR (North)

Total new
Total automatic
Changes of requirements for automatic recommendation

<table>
<thead>
<tr>
<th>Crop</th>
<th>2011</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Oats</td>
<td>Yield target + 2%</td>
<td>Yield target +2% &amp; 52 kg/hl min. spec. weight</td>
</tr>
<tr>
<td>Spring Oats</td>
<td>Yield target + 2%</td>
<td>Yield target +2% &amp; 52 kg/hl min. spec. weight</td>
</tr>
<tr>
<td>Winter barley</td>
<td>Malt yield target + 2%</td>
<td>Yield target + 2% (malting)/ +3% (feed) &amp; Malt &amp; feed 66 kg/hl min spec weight &amp; 4 min. rhynchosporium rating</td>
</tr>
<tr>
<td></td>
<td>Feed yield target + 2% &amp; 66 kg/hl min spec weight</td>
<td></td>
</tr>
<tr>
<td>Spring barley</td>
<td>Malt yield target + 2%</td>
<td>Yield target + 2% &amp; 66 kg/hl min spec. weight</td>
</tr>
<tr>
<td></td>
<td>Feed yield target + 2% &amp; 66 kg/hl min spec weight</td>
<td></td>
</tr>
<tr>
<td>Winter OSR</td>
<td>GO target + 2%</td>
<td>GO target + 2% &amp; for E/W min. 6 rating for LLS and phoma stem canker (min. standard of 6 for LLS in north)</td>
</tr>
<tr>
<td>Winter wheat</td>
<td>Target + 2%</td>
<td>Target + 2% &amp; 5.0 min. rating for septoria tritici</td>
</tr>
<tr>
<td>Spring wheat</td>
<td>Target + 2%</td>
<td>Target + 2%</td>
</tr>
</tbody>
</table>

New specialist winter OSR categories:
- Resistance to TuYV
- Tolerance to specific herbicides

Changes in the importance of disease, quality and agronomic characteristics
Is it all about yield?
- RL 2019/20 new varieties

Bar chart showing the number of new varieties for different crop types:
- Winter wheat
- Spring wheat
- Winter barley
- Spring barley
- Winter oats
- Spring oats
- Winter OSR

Yield categorization:
- Automatic: above yield threshold & meets other requirements and minimum standards

Excludes varieties with a specific recommendation.
Planning for the future
The RL Look Ahead
The RL Look Ahead

- Current project runs until 2021, there is a need to look to the future now:
  - Is the RL providing useful information?
  - Does the RL provide an appropriate number of varieties for regional, agronomic and end-use requirements?
  - Is the balance of yield and agronomic performance appropriate?
  - Are any modifications required?
Look Ahead survey
- December 2017 to August 2018

In total 623 responses
Which of these factors are important when making a varietal selection decision? • Question answered by growers and agronomists

- My own experience (n=378)
- AHDB Recommended Lists (n=383)
- Advice from an Independent...
- Seed availability (n=376)
- Discussions with other growers...
- End users (n=368)
- I have grown the same varieties...
- AHDB Monitor Farm (n=364)
- Advice from a...
- Other publications (n=359)
- Seed merchant (n=371)
- Subscription service (n=361)
- Advert/publications from...

- Not important
- Important
How important are these characteristics to growers when making a varietal selection decision?

### Grower & Agronomist response

- **Disease resistance (n=392)**
- **Economics (n=386)**
- **Good agronomics (n=382)**
- **End user demand (n=385)**
- **End use quality (n=388)**
- **Yield/Gross Output (untreated)**
- **Yield/Gross Output (treated)**
- **Regional performance (n=389)**
- **Availability of seed (n=382)**
- **Specific trait (n=370)**
- **Availability of contract (n=376)**
- **Breeder (n=383)**

### Other stakeholder response

- **Yield/Gross Output (treated)**
- **Disease resistance (n=114)**
- **Good agronomics (n=114)**
- **End user demand (n=114)**
- **End use quality (n=113)**
- **Regional performance (n=113)**
- **Economics (n=113)**
- **Yield/Gross Output (untreated)**
- **Availability of seed (n=114)**
- **Availability of contract (n=113)**
- **Specific trait (n=110)**
- **Breeder (n=111)**

Ordered by % crucial
What new information would you like to see in the Recommended Lists?

- Demand for more regional & economic information

- Economic potential
- More regional information
- More varieties
- Fewer varieties
- Something else e.g. more agronomic information (please specify)

n=48
What new information would you like to see in the Recommended Lists?
How do you access Recommended List information?

**Grower response**

- AHDB Recommended Lists booklet
- AHDB Recommended Lists pocket books
- Recommended Lists information on AHDB website
- Harvest tools on AHDB website
- Descriptive Lists for crops with limited data e.g. Linseed
- I don't use the AHDB Recommended Lists for...

**All responses**

- AHDB Recommended Lists booklet
- AHDB Recommended Lists pocket books
- Recommended Lists information on AHDB website
- Harvest tools on AHDB website
- Descriptive Lists for crops with limited data e.g. Linseed
- I don't use the AHDB Recommended Lists for...

n=28

n=50
What action will be taken following RL Look Ahead?

Four working groups have been established by the RL Board:

1. Review of process leading to re-sowing and recommendation
2. Review of number and location of trials and the protocols that should be adopted
3. Review of potential new traits and recognition of new markets by the RL
4. KE and Communications
Summary

• The RL is continually evolving
• To be recommended automatically a variety must combine high yields with quality and disease resistance
• Other characteristics are more important than treated yield in the balance of features
• Results of the RL Look Ahead will be used to guide the future development of the project
• RL Look Ahead results have highlighted:
  • The RL is valued and used by the industry
  • The printed RL publication is the main source of RL information
  • Importance of disease resistance and quality
  • There is demand for even more information
‘Inspiring our farmers, growers and industry to succeed in a rapidly changing world’