The Animal and Plant Health Agency
Scottish Government
Welsh Government
Department of Agriculture and Rural Development

Official Use Only				
Ref.	AFP	2 /		
GM	Yes		No	
Other Restrictions	Yes		No	

Technical Questionnaire (BARLEY)

Plant Varieties Act 1997 and
The Seeds (National Lists of Varieties) Regulations 2001 (as amended)

Please note:

- The completed TQ and the application will form part of the public record for this variety
- The seed submitted for DUS in the first year will be regarded as the definitive stock
- All relative sections of this form **must** be completed. An incomplete form may result in a delay in processing the application
- Completed forms should be e-mailed to NLPBR-Applications@apha.gov.uk
- Alternatively forms may be sent to:

The Animal and Plant Health Agency, Eastbrook, Shaftesbury Road, Cambridge, CB2 8DR
Telephone 0208 026 5993.

Section 1 - Application Details

(a) **National Listing (NL)** ☐ **Plant Breeders' Rights (PBR)** ☐ **Parental Line (PL)** ☐

(b) Species: Latin name ***Hordeum vulgare* L.**

(c) Common name (incl. season)

(d) Please give details of applications already made or to be made in any other countries

Country	Date	Application No.	NL	PBR	Variety name or Breeders' reference

(e) Has an application for European Community Plant Breeders' Rights (ECPBR) been made?.....Yes ☐ No ☐

If '**Yes**', Please state date of application

Section 2 – Applicant details

(a) Name and address of applicant for

- National Listing:
- Plant Breeders' Rights (if different)

Name and address of breeder:

Name and address for correspondence:
Is the address for:

- service ☐ or
- agent ☐

An agent is authorised to act for the applicant on all aspects of an application, including instructions to withdraw applications, delete from a National List or surrender Plant Breeders' Rights

Section 3 - Variety denomination

(a) Where appropriate proposal for a variety denomination

(b) Provisional designation (breeder's name/reference)

Section 4 - **Information on origin, maintenance and reproduction of the variety**

4.1 **Do you wish the details and data relating to components of hybrid varieties including data related to their cultivation to be treated as confidential?** Yes ☐ No ☐

If 'yes', please give this information on the separate form for confidential information.

If 'no', please give information on data relating to the components of hybrid varieties including data related to their cultivation.

Breeding scheme (indicate female component first)

4.2 **Origin**

(a) Seedling (indicate parent varieties) ☐

(b) Mutation (indicate parent variety) ☐

(c) Discovery (indicate where, when and how the variety has been developed) ☐

(d) Other (please specify) ☐

4.3 **Method of propagation**

(a) Cuttings ☐

(b) *In vitro* propagation ☐

(c) Seed ☐

(d) Other (please specify) ☐

4.4 **Other information**

In the case of seed propagated varieties: method of production:

(a) Self-pollinated ☐

(b) Cross-pollinated (please give details) ☐

(c) Hybrid (please give details) ☐

4.5 **Geographical origin of the variety:** the region and the country in which the variety was bred or discovered and developed

Section 5 – Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in the CPVO Protocol; please mark the state of expression which best corresponds).

Characteristic	Example varieties	Note
5.1 (29) Seasonal type		
Winter type	Henriette	1 ☐
Alternative type	Farandole	2 ☐
Spring type	Grace	3 ☐

Characteristic	Example varieties	Note
5.2 (4) Lowest leaves: hairiness of leaf sheath		
Absent	Grace, California	1 ☐
Present	Henriette	9 ☐

5.3 (7) Time of ear emergence (first spikelet visible on 50% of ears)
(quote mean date of heading of variety as well as two well known comparable varieties)

Candidate variety	Comparable varieties	

5.4 (9) Awns: anthocyanin colouration of tips		
Absent or very weak	California	1 ☐
Very weak to weak		2 ☐
Weak	Pirona, Lomerit	3 ☐
Weak to medium		4 ☐
Medium	Ebson, Marielle	5 ☐
Medium to strong		6 ☐
Strong	Grace, Semper	7 ☐
Strong to very strong		8 ☐
Very strong	Willma	9 ☐

5.5 (13) Plant: length (stem, ear and awns)
(quote length of variety as well as two well known comparable varieties)

Candidate variety	Comparable varieties	

5.6 (15) Ear: development of sterile spikelets		
Non or rudimentary	Grace, California	1 ☐
Full	Quench, Casanova	2 ☐
5.7 (14) Ear: number of rows		
Two	Grace, California	1 ☐
Six	Olsok, Henriette	2 ☐
5.8 (24) Grain: rachilla hair type		
Short	Quench, KWS Joy	1 ☐
Long	Grace, California	2 ☐
5.9 (27) Grain: hairiness of ventral furrow		
Absent	Grace, Henriette	1 ☐
Present	Saffron	9 ☐

Section 6 – Similar varieties and differences from these varieties:

Denomination of similar variety	Characteristic in which the similar variety is different[1]	State of expression of similar variety	State of expression of candidate variety

[1] In the case of identical states of expression of both varieties, please indicate the size of the difference.

7.2 Special conditions for the examination of the variety

☐ Yes, please specify

☐ No

If it is agreed to carry out a special DUS test an appropriate charge will be levied

7.3 Other information

☐ Yes, please specify

☐ No

Section 8 - GMO and other Novel types

Does this application relate to a Genetically Modified Organism as defined in Section 106 of the Environmental Protection Act 1990? Yes ☐ No ☐

If "Yes" you must complete form PVS9/B Genetically Modified and other Novel Candidates.

Section 9 - Information on plant material to be examined

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides).

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

(a) Micro-organisms (eg virus, bacteria, phytoplasma) Yes ☐ No ☐

(b) Chemical treatment (eg growth retardant or pesticide) Yes ☐ No ☐

(c) Tissue culture Yes ☐ No ☐

(d) Other factors Yes ☐ No ☐

Please provide details of where you have indicated "Yes"

Section 10 - Value for Cultivation and use (VCU) information (for NL purposes only)

10.1 Standard VCU characters and agreed optional characters

The obligatory VCU characters measured for all candidates are shown in bold in the VCU procedures at https://www.gov.uk/guidance/vcu-protocols-and-procedures-for-testing-agricultural-crops, or are available from the Animal and Plant Health Agency (APHA). Agreed procedures exist for some optional characters (shown in italics in the VCU procedures). If you wish any of these to be assessed, you must request that they be measured by ticking the appropriate box – see below. Additional fees will be charged by the trial organiser.

Do you wish any optional characters to be measured? Yes ☐ No ☐

If **'Yes'** please give details

Malt ☐ Feed ☐

This information will be passed to BSPB for organisation of tests to provide data primarily for the Recommended List but which may also be used for National Listing, if required. Please note that this only applies to quality tests which BSPB routinely organises. For any other merit claim see below.

10.2 Additional VCU characters

Are there any non-standard characters to be measured? Yes ☐ No ☐

If **'Yes'** please provide details of the proposed test to APHA. The characteristic being tested for must have Value for Cultivation and Use. The test must be able to demonstrate whether the candidate has the characteristic and be statistically valid. The agreement of the UK National Authorities is required before special tests can be undertaken and additional fees will be charged.

10.3 Other factors for VCU assessment

Are there any other factors that should be taken into account for the VCU assessment (e.g. susceptibility to commercial herbicides, special uses, agronomic characteristics, pest/disease resistance)? Yes ☐ No ☐

If **'Yes'** please give details

Declaration

I/We declare that to the best of my/our knowledge and belief the statements made in this Technical Questionnaire are correct

Signature of Applicant | Date

(original signature unless emailed)

Name in BLOCK letters | Lock this form

For and on behalf of