Protocol 007: STER & SHED 22-26 (Jan 2022)



RECOMMENDEDLISTS

AHDB Recommended Lists (RL) for cereals and oilseeds: Special plots for the assessment of winter wheat sterility (infertility) and shedding (2022–26)

This protocol was believed to comply with relevant agrochemical, environmental and other regulations at the time of writing but it is the responsibility of the contractor to ensure that it continues to comply. In the event of non-compliance the protocol should not be followed but the Field Trials Manager should be notified at once of how the protocol requirements would breach regulations.

Any deviation from this protocol other than under the circumstances described above may result in a breach of contract and should be agreed in advance.

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Changes from previous version

Page no.	Section	Details of change

CONTENTS

PART 1: GENERAL INFORMATION	4
1.1 Aim	4
PART 2: FIELD PLOTS	
2.1 Site	
2.2 Crop	4
2.3 Trial ID	
2.4 Varieties	4
2.5 Replications	4
2.6 Plot size and sowing requirements	4
2.7 Management and husbandry	5
2.8 Site data and location details	5
PART 3: ASSESSMENT OF STERILITY AND SHEDDING	5
3.1 Sterility assessment	5
3.2 Shedding assessment	5
3.3 Harvest & sampling	5

Part 1: General information

1.1 Aim

This protocol is specific to dual-purpose special plots for the assessment of sterility (infertility) and grain shedding in winter wheat varieties.

It should be used in conjunction with the main trial protocol for cereals, Protocol 001 – CER22-26 - AHDB RL Cereal trials H22-26.

Part 2: Field plots

2.1 Site

An exposed site in Scotland or Northern England with a history of grain sterility. The plots are also intended for the assessment of shedding which requires that the plots remain in the field after the crop has ripened and until natural shedding occurs which can be assessed. The site chosen should therefore be where plots can be left in the field after the normal harvest time and where delays to cultivation and the shedding of grain will not have serious consequences for the succeeding crop. It is essential that these requirements are made clear to the host farmer prior to commencement of the work.

2.2 Crop

Winter wheat.

2.3 Trial ID

WW584 & WW585.

2.4 Varieties

All varieties in RL winter wheat trials, including candidates. A comparator variety may also be sown.

2.5 Replications

Three.

2.6 Plot size and sowing requirements

Minimum plot area: 4 m². The plots must be drilled not broadcast.

2.7 Management and husbandry

The management of the plots should be as for RL trials, including the fungicide and PGR protocols and fertiliser applications to RB209 or equivalent with the plots kept substantially free of disease, lodging and weeds.

2.8 Site data and location details

A workbook and randomised plan will be supplied by RL Data Team. This workbook should be used to record all data including site, location, management and husbandry details to the requirements and deadlines given in Protocol 001 CER 22-26 - AHDB RL Cereal trials H22-26.

Part 3: Assessment of sterility and shedding

3.1 Sterility assessment

At completion of grain set each plot will be assessed for grain set failure. Ten representative heads should be chosen from each plot. All potential fertile florets and all sterile florets should be counted. Score should be expressed as a percentage.

Return the data soon after the record has been taken.

3.2 Shedding assessment

Shedding (1-9) where 9 = no shedding.

An assessment of the number of grains on the ground due to natural shedding. Record when there is a range of severity between varieties. Give the approximate number of grains lost per m² for each 1–9 score used paying particular attention to those with the highest and lowest scores.

Return the data soon after the record has been taken.

3.3 Harvest & sampling

No yield data or samples are required.