



GRAIN SAMPLING PROCEDURE

*Instructions on how to use the
YEN Nutrition
'Grain Nutrient Benchmarking'
service in 2020*

PREPARATION BEFORE HARVEST:

1. **REGISTER** farm details, no. of fields to be sampled, choice of lab., and membership fee (£250 plus £40 each for any extra samples) via the YEN Nutrition website or via your advisor or supplier. This year you can choose between Lancrop and NRM laboratories.

YEN Nutrition membership lasts until spring 2021 and provides analysis and benchmarking of nutrient concentrations and nutrient offtakes for **six fields**, plus an annual review.

ADAS's email acknowledging your payment, or your advisor's registration, will provide you with your Membership Number, and a link to the webpage where you must enter field details for benchmarking.

2. **ENTER** all Field Details into the 'Grain Nutrient Benchmarking Form' via the website.

Your chosen lab will then send you sample labels (each with your field name and lab code) and a Sample Despatch Form (listing each of your registered fields or zones for you to check before you send samples to the lab.; the form should be sent with the samples), a poster (see below), your sample bags and labels, and an addressed postage-paid transit bag for your samples.

3. **PLACE** all necessary equipment ready at your grain intake point:



- **POSTER** explaining the sampling process & copies of this leaflet
- **SAMPLE DESPATCH FORM** listing fields for sampling
- **BUCKETS or BINS**, one for each field, to collect grain from each trailer-load as that field is being harvested
- **A MARKER or LABELS** to identify buckets with field names
- **A JUG or CUP** to take samples from tipping trailers
- **BAGS with LABELS** to store grain samples ready for despatch to the lab.
- **ADDRESSED TRANSIT BAG** to send all samples to your chosen Lab.

4. **TELL ALL STAFF** involved in the harvest about the process of grain sampling, so no samples from your farm are forgotten.

SAMPLING GRAIN AT HARVEST:

1. TAKE TWO SAMPLES from each load



As each grain trailer is tipped at the farm's grain intake point, the operator should take a couple of samples (e.g. two half-cupfuls) from different points in the load (e.g. one third and two thirds through tipping), and place them in the correct labelled bucket (one for each field, or field-zone)

2. MIX & SUB-SAMPLE all grain sampled from within each field:



After the LAST trailer from a field is tipped, the operator should mix the grain in the bucket very thoroughly. Then take a subsample (~200g / 8 oz) and put it into the correct bag (pre-labelled with all essential details: field / zone name, lab code., farm address, date, etc.)

3. STORE samples from all fields until after harvest

Store all samples in a dry, vermin-proof place until harvest is complete.

4. REGISTER YIELDS for all fields & SEND all samples for analysis

Register a **YIELD** for **EACH FIELD**, its **Method of Estimation** and its **Straw Management** [via the YEN Nutrition website](#). NB Your nutrient offtake estimates will be as accurate as your yield estimate.

Check that there is one sample for each field or zone listed on the Sample Despatch Form and send all samples with the Despatch Form straight to your chosen laboratory in the transit bag provided.

REPORTING

Membership of YEN Nutrition entitles you to **three reports**. The first two are specific to the fields that you sampled; the third provides an overview of the nutrition of all crops registered for YEN Nutrition in 2020. This will update the body of detailed knowledge on crop nutrition that we will develop through YEN Nutrition using its 'share-to-learn' approach.

1. Immediate Nutrient Offtake Report

Immediately your samples have been analysed and you have registered your grain yields and straw management on the website, we will email a report for each field (or zone) of all nutrient concentrations in crop dry matter, and all grain nutrient offtakes (kg/ha).

2. Benchmarking report

When most grain analyses from harvest 2020 have been completed by the labs (probably in November), we will provide you with your bespoke and comprehensive nutrient benchmarking report for each field. Along with your soil data, this should enable you to gauge likely nutrition issues in each field you sampled.



3. YEN Nutrition Annual Review for 2020

In February 2021 we will send YEN Nutrition's review for grain crops across the UK in 2020. This will reveal which nutrients most commonly limited crop yields in 2020, whether species or varieties behaved differently, whether nutrient deficiencies were most commonly caused by poor availability, or poor capture (i.e. rooting), etc.

FOR FURTHER INFORMATION please consult the YEN Nutrition pages on the YEN website www.yen.adas.co.uk or email yen@adas.co.uk

