



Yield Enhancement Network

Oilseed Rape YEN Welcome Pack 2023

Thank you for participating in the Oilseed Yield Enhancement Network.

This guide will provide you with the information you need to complete your 2023 sample submissions. You will receive a separate pack for each YEN entry you have.

Welcome Pack checklist

- Soil Sample:** Sampling instructions on page 2. Collect a representative soil sample of ~600g from across the whole field or area to be entered in YEN and send to NRM using the labelled sample bag and **BLACK** NRM pre-paid postage bag. Include the enclosed analysis request form with your sample and apply the grey NRM soil analysis label to this.
- Leaf Samples:** At the **Bud set (GS 3.3 - 3.5)** send your first leaf sample to Lancrop. Send the second leaf sample at **flowering (GS 4.1 - 4.5)**. Include the corresponding analysis request form with each sample. Details on these forms are prepopulated for your entry but please amend if any details are incorrect. Labelled sample bags and pre-paid postage bags are provided. Instructions on how to take tissue samples can be found at the below link: <https://www.yara.co.uk/siteassets/crop-nutrition/farmers-toolbox/analysis/how-to-take-a-sample-for-soil-or-tissue-analysis.pdf/>
- Grab Sample:** Instructions on page 3 with a link to guidance video. 2-3 weeks before harvest, collect 8 plants cut at ground level from the YEN entry area. Place the Grab Sample in the potato sacks provided, attach the **WHITE** return address labels to EACH SACK and return to ADAS High Mowthorpe via your local Post Office.
- Seed Samples:** At harvest, collect a representative sample of seed from the combine.
Fill the seed sample bags and send one bag to each of the three laboratories for analysis, using the appropriate coloured labels and return pre-paid packaging.
 - Use the **BLUE** labels for NRM nutrient analysis
 - Use the **RED** labels for Sciantec % Oil content analysis
 - Use the **GREEN** labels for ADAS TSW analysis
- Yield Data:** Attach the **YELLOW** label to your Yield Entry Form (page-7) and record harvest area, fresh weight, moisture content and a stubble count of average plants per m².
- Obtain weighbridge tickets at the time of harvest and then take photos of (or scan) these along with the completed Yield Entry form and upload them at <https://www.yen.adas.co.uk/yen-2023-yield-form-submission>. If using your mobile to upload the documents, you can scan the QR code on the form to open this link automatically.
- Yield Competition:** Entries without yield verification (i.e. weighbridge tickets) will still receive a YEN Report but will not be eligible for any awards. If you are not competing just enter the yield and supporting evidence.
- If competing, ensure that the yield form includes your YEN field area (minimum 2ha), your harvested weight (keep all your weighbridge tickets), your seed moisture and that your seed sample is sent to Sciantec (to analyse % Oil content to allow us to determine Gross Output yield).

Returning samples

The enclosed address labels and packaging provide pre-paid returns; you will not be charged when using these labels. *The final grab sample package must be no more than 600mm long.* If necessary, cut the stems to reduce the overall length – but ensure all parts of the plant are included in the sack, and minimise disturbance of the pods. If you need additional labels, please contact yen@adas.co.uk. Alternatively, you can arrange for a courier to collect the samples, which should be sent to the address mentioned at the end of this guide, however **you will not be reimbursed** for using courier services.

SOIL SAMPLE INSTRUCTIONS

A soil sample of the field or area to be entered in YEN should ideally be taken before any organic manure or inorganic fertiliser applications have been made. **If it is necessary to sample following an application a minimum period of 3 weeks should be allowed to pass** before doing so and details of any application(s) made provided on the analysis request form.

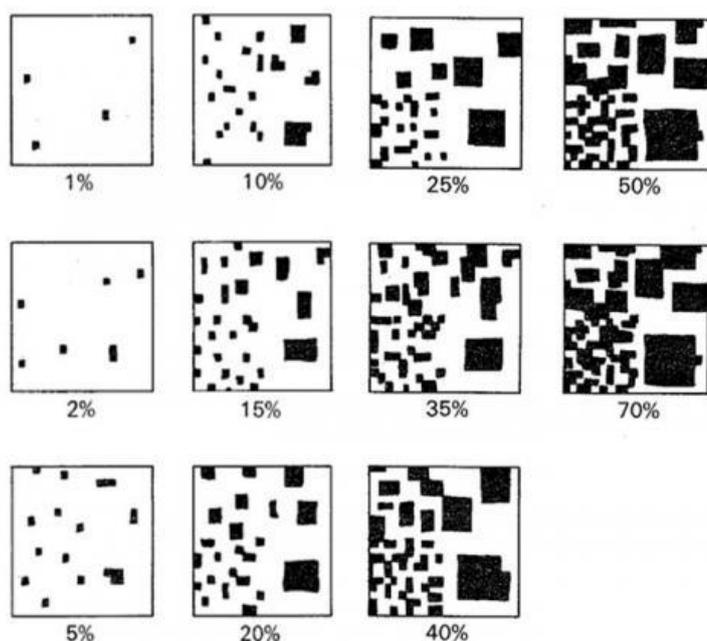
Please complete details on the form of current and previous cropping and whether previous crop residues have been removed or returned to the soil, if the field has a history of regular organic manure applications, please also detail this. The more information you provide with your sample the better the analysis NRM will be able to complete ensuring more reliable, trustworthy and useful results.

Walk a **'W' pattern** across the sample area as in the figure below avoiding any irregular patches such as gateways, headlands, and trees, collect about **25-30 soil cores to 15cm depth** and bulk the cores together in the labelled sample bag provided to give a **~600g sample**. Place the soil sample and analysis form into the **BLACK NRM return postage bag** and drop it off at your local post office.

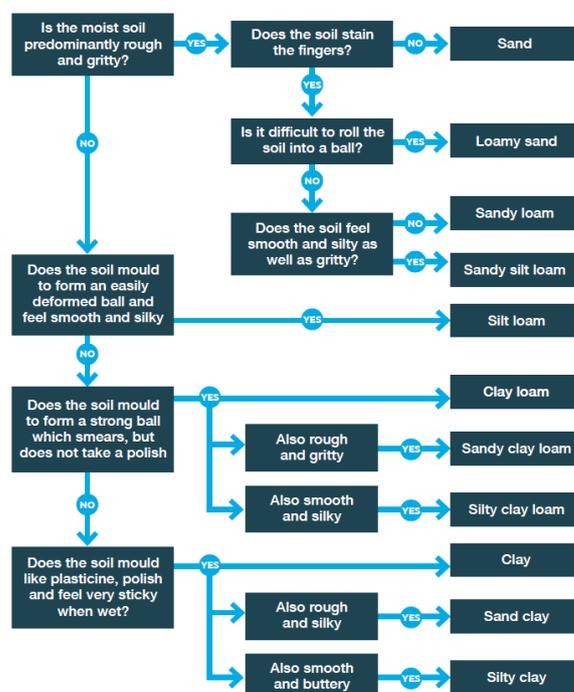


When taking your soil sample please also **record the texture and approximate % stone content of the topsoil** (guidelines for assessing soil texture by hand and estimating stone content are given below). These details should be provided when completing your field and crop details form online, information about which will be emailed to you separately.

Good soil descriptions are vital in allowing us to estimate soil water holding capacity which along with rainfall data we use to determine available water for your crop, a key component in calculating yield potential.



Each quarter of any one square has the same area of black



The results of the soil analysis carried out by NRM on this sample will be included in your annual report. These are also used to calculate various other metrics in the report, including available crop nutrients and efficiency of nutrient uptake.

GRAB SAMPLE INSTRUCTIONS

The potato sacks enclosed are for use in sending whole-crop 'grab' samples to ADAS High Mowthorpe for analysis. It will help ensure trustworthy results if you follow these instructions carefully.

Collecting your Grab samples

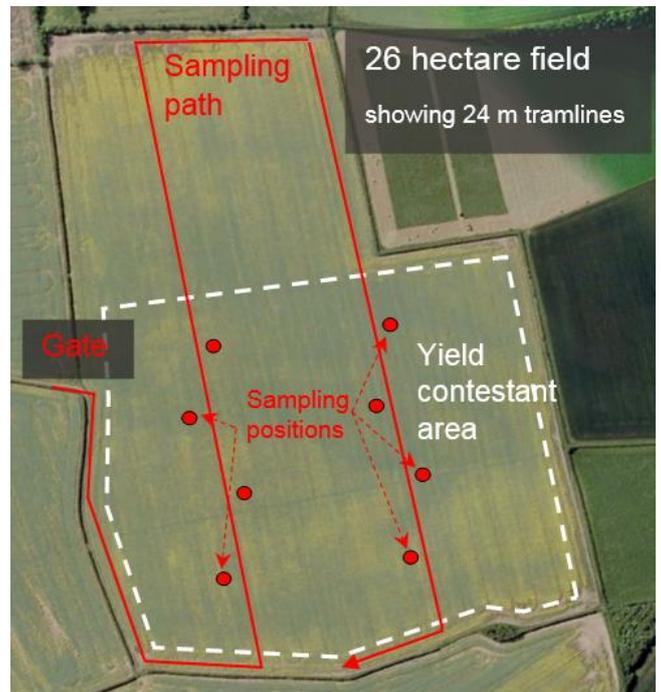


A grab sample of the whole above-ground crop must be taken soon after the crop has reached the stage when glyphosate desiccant would normally be applied (2-3 weeks before harvest). Sampling at this stage will coincide with the end of yield formation and the pods should still be pliable enough not to shatter during sampling. Sampling soon after the desiccant has been applied will make it easier to walk along the tramlines. It is best to sample the crop when the foliage is dry.

You will need the potato sacks and a serrated knife or secateurs.

Please scan the above QR code to watch video on how to collect a grab sample

- Collect **8** randomly selected plants from within the area entered into YEN.
- Select two typical tramlines running through the intended area for yield measurement.
 - Walk about one fifth of the tramline length, then force your way a couple of metres into the crop.
 - Randomly select a raceme and follow this down to the main stem and cut this off **at ground level**. Retrieve the whole plant, taking care to untangle racemes from neighbouring plants, and to recover all plant parts.
 - Place the plant (pods first) into a sack. **The final package must be no more than 600mm long**. If necessary, cut the stems to reduce the overall length – but ensure all parts of the plant are included in the sack, and minimise disturbance of the pods.
 - Repeat for the next 3 points along the first tramline, on alternate sides of the tramline, and then repeat on alternate sides as you walk back along the second tramline.



Packing your grab samples

- Once the plants are placed pod-first into the sacks provided, slip a second sack over the mouth of the first, seal with strong tape, and attached a **WHITE** pre-paid address label. We have provided 4 sacks; you may need to split your sample between two packages (2 pairs of sacks). Ensure all packages are clearly labelled. Take it to your local post office to be sent to ADAS High Mowthorpe. **The final package must be no more than 600mm long.**

What will your grab sample tell you?

Data collected from your grab sample will be fed back to you in the end of year report. The metrics we derive from your grab sample include:

- Total Crop Biomass
- Harvest Index – the proportion of total biomass that is seed
- Estimated use of available water
- Estimated % solar radiation captured

SEED SAMPLE INSTRUCTIONS

We request three seed samples at harvest, each sent directly to separate laboratories for analysis.

Collecting your seed sample

- Take an appropriate size sub-sample (~100g) from each trailer-load of seed close to the time it is being weighed – for example, straight afterwards as it is being tipped. The sample should represent the seed being weighed, so it should be taken from several parts of the trailer load and it should not be cleaned, dried or otherwise changed before it is sent for analysis.
- Amalgamate and thoroughly mix the sub-samples, and from this fill each of the plastic bags provided (~200g). Send one to each of the laboratories below with the appropriate request form, using the postage return packs provided.

NRM Seed Sample

- Attach one of the BLUE NRM labels to one of the bags of seed. Attach the second BLUE NRM label to the NRM analysis request form. Place the seed sample and form into the BLUE / GREEN NRM return postage bag and drop it off at your local post office.

Nutrient analysis carried out by NRM on this sample will be included in your annual report.

Sciantec Seed Sample

- Attach one of the RED Sciantec labels to one of the bags of seed. Attach the second RED Sciantec label to the Sciantec analysis request form. Place the seed sample and form into the Sciantec return postage bag and drop it off at your local post office.

% oil content analysis carried out by Sciantec on this sample will be included in your annual report.

Note that you must provide this sample to be eligible for Oilseed YEN awards, to enable us to calculate gross output yield (t/ha).

ADAS Seed Sample

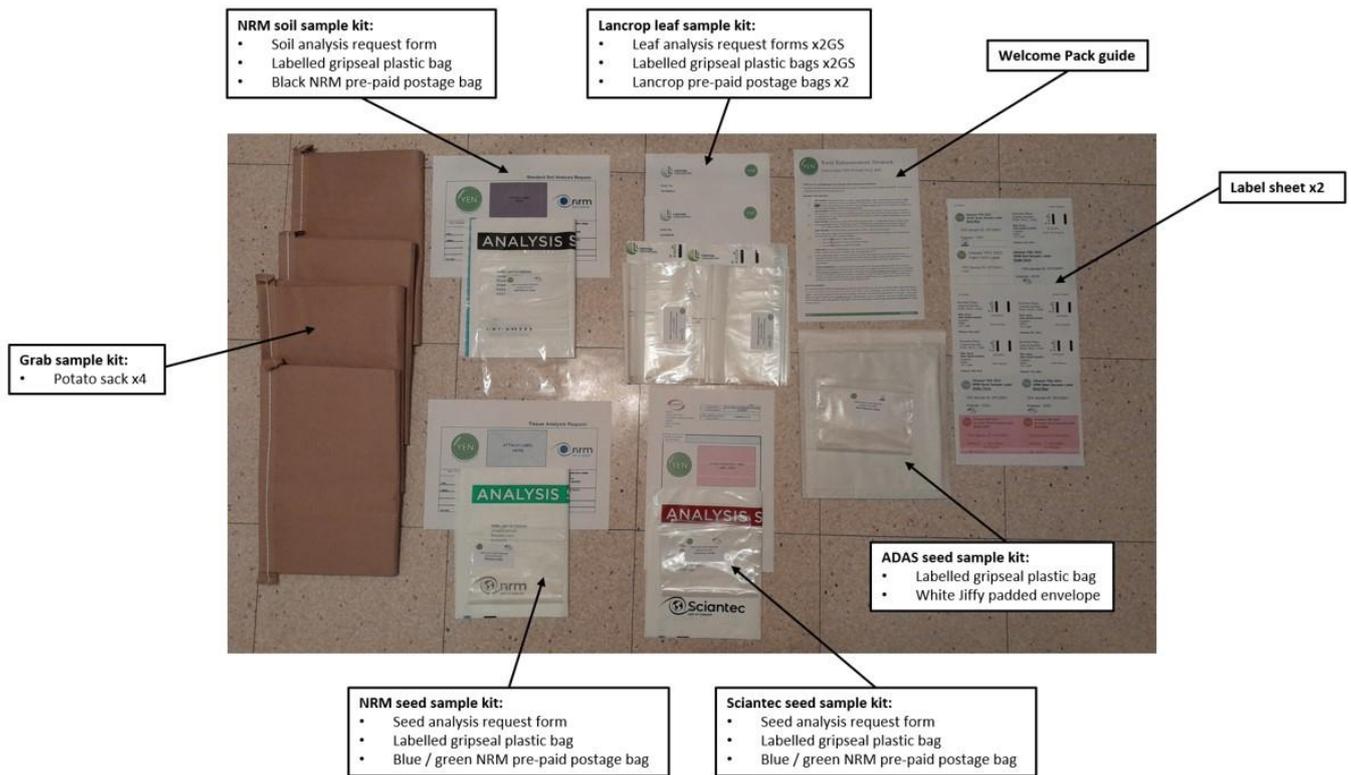
- Attach one of the GREEN ADAS labels to one of the bags of seed and place it inside the paperback envelope provided. Attach the second GREEN ADAS label, with the return address to ADAS High Mowthorpe to the paperback envelope and drop it off at your local post office.

**ADAS analysis will calculate the TSW, which will be included in your Benchmarking report.
TSW is also used to calculate various other metrics in the report, including seeds/m².**

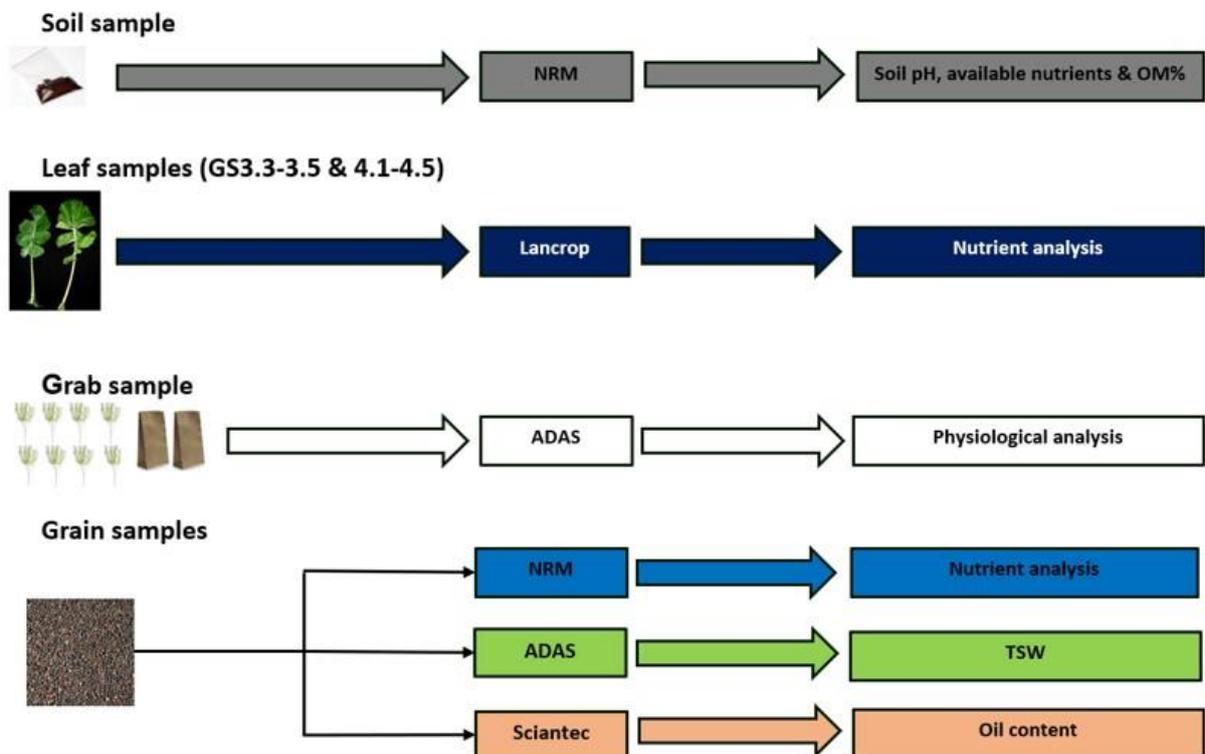
YIELD ENTRY FORM

- At harvest, complete a stubble count of the area entered into the competition. Record the average plants per m² on the Yield Entry Form; record the number of plants in three 1m lengths of row and the row width.
- Attach the YELLOW Yield Form label to your Yield Entry Form at the end of this guide and complete all details on the form, including the harvest area, fresh weight at harvest, moisture content, and plants per m².
- In order to compete in this year's competition, you must attach a weighbridge ticket to the Yield Entry Form.
- Scan or take a photo of the yield form, weighbridge tickets and any supporting materials (e.g. maps), and upload online at: <https://www.yen.adas.co.uk/yen-2023-yield-form-submission>. You can use the QR code on the Yield Form to take you to this link.

WELCOME PACK CONTENT SUMMARY



WELCOME PACK POSTAGE SUMMARY



RETURN ADDRESSES

Lancrop	NRM	ADAS High Mowthorpe	Sciantec
Yara Analytical Services Pocklington Industrial Estate Pocklington York YO42 1DN	Coopers Bridge Braziers Lane Winkfield Row Bracknell RG42 6NS	FAO Jo Scatcherd ADAS High Mowthorpe Duggleby Malton YO17 8BP	Sciantec Analytical Stockbridge Technology Centre Cawood North Yorkshire YO8 3SD

Crop samples, Yield data and Online Field
Data forms must be returned no later than
30 September

CONTACTS

Dhaval Patel	Dhaval.Patel@adas.co.uk	07502 658098
Thomas Wilkinson	Thomas.Wilkinson@adas.co.uk	
Pete Berry	Pete.Berry@adas.co.uk	
Sarah Kendall	Sarah.Kendall@adas.co.uk	

Or email yen@adas.co.uk for general enquiries.

@adasYEN 

YEN SPONSORS 2023



The YEN was initiated by industry and is entirely industry funded. We are most grateful to all our sponsors. They not only provide funding, but they are fundamentally involved in management of the YEN and in supporting individual farms in making their YEN entries. The YEN would not exist without them!

Visit www.yen.adas.co.uk for sponsors' details, news, and event updates for 2023.

