Nutrient Benchmarking Report 2023

NAME & ADDRESS:
ADAS Example, ADAS, Example Farm
YEN Nutrition Membership ID: YN02023

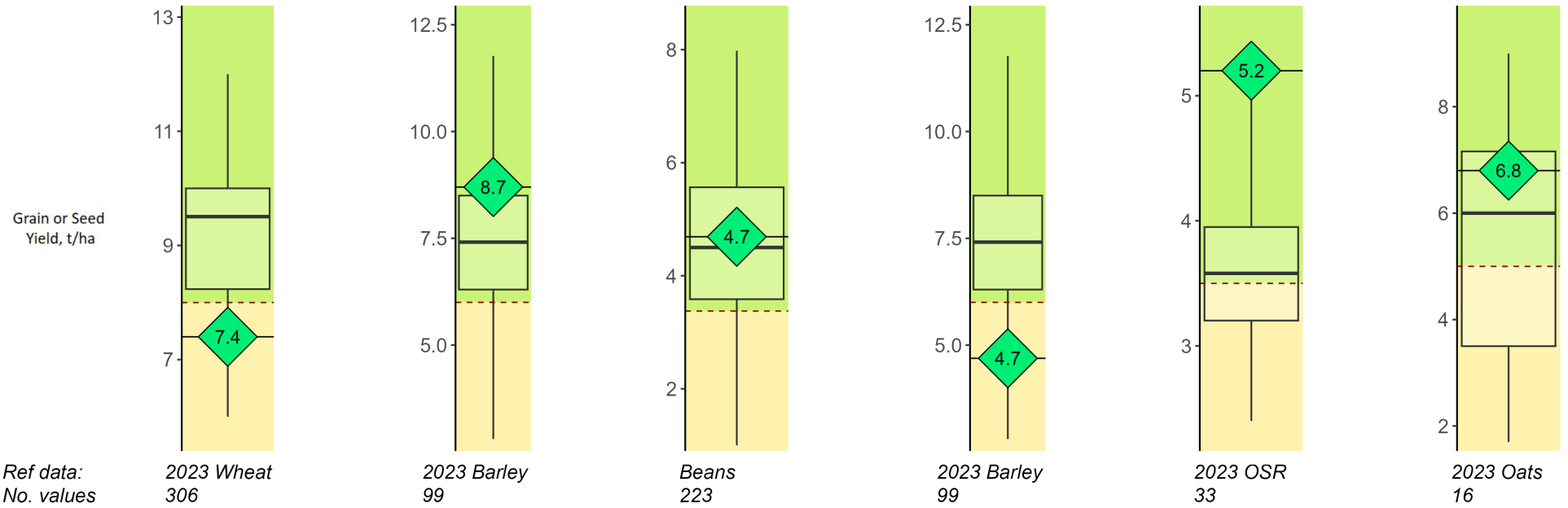
Date ADAS benchmark reported: 06 June 2024

Further information can be found on the YEN Nutrition website: www.yen.adas.co.uk/projects/yen-nutrition
Please make any further enquiries to: yen@adas.co.uk
YEN Dynamic Benchmarking is now available from the YEN member's area: www.yen.adas.co.uk/dashboard

Your Grain Yields benchmarked… …

Conditions for the vital crop and soil processes that enable crop nutrition commonly differ substantially from season to season and year to year: particularly nutrient retention in soil, nutrient release from organic sources, topsoil rooting and moisture for nutrient capture, and nutrient demand for green canopy expansion. So, it is best to gauge each of your crops against concurrent, similar crops. The diagrams below benchmark your crop yields against all yields of the same crop type registered for YEN Nutrition in the same harvest year. The reference datasets and their sizes are shown below each diagram. The same reference dataset is used for each field on later pages.

If you'd like to make more specific comparisons (e.g. by region or soil type), you can do this through our free 'Dynamic Benchmarking' tool on the YEN website.



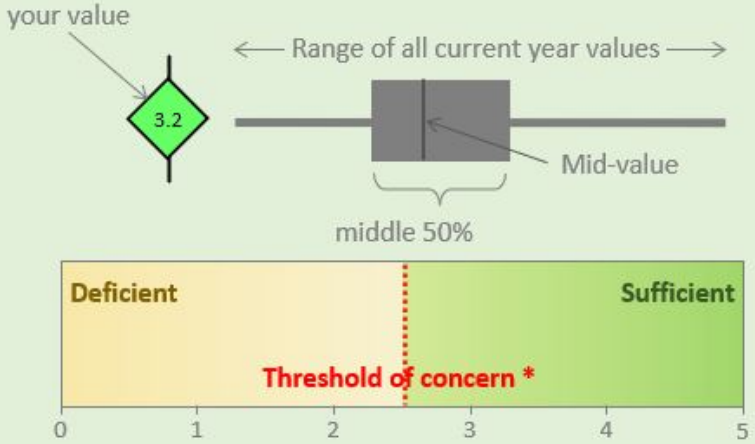
Seasonal Grain Benchmarking explained …

By anonymously sharing your results with others, your crops can be benchmarked against many comparable crops. This should enable you to identify any peculiarities of (i) this season, (ii) your farm and (iii) each field.

For wheat, barley, oats, oilseed rape and beans we benchmark against all this years data for the same crop type; for rye and triticale we use wheat, for peas we use peas, for beans and minor pulses we use beans, and for linseed we use oilseed rape. We use two different charts for benchmarking – Benchmarking Charts show your actual values from each of your fields set against all comparative data from this years growing season, and then Target Charts give a quicker overview of whether any nutrient level (black dot) was low or deficient (i.e. outside the red line).

Explanation of Benchmarking Charts:

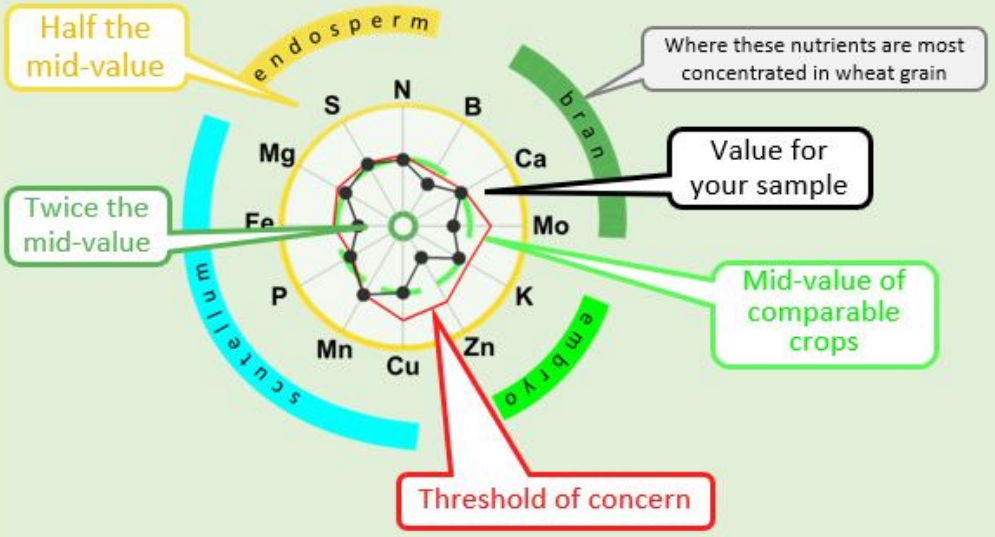
Benchmarking (or box & whisker) **charts** are used to compare your measured values to all others of the same crop type harvested in this year as below:



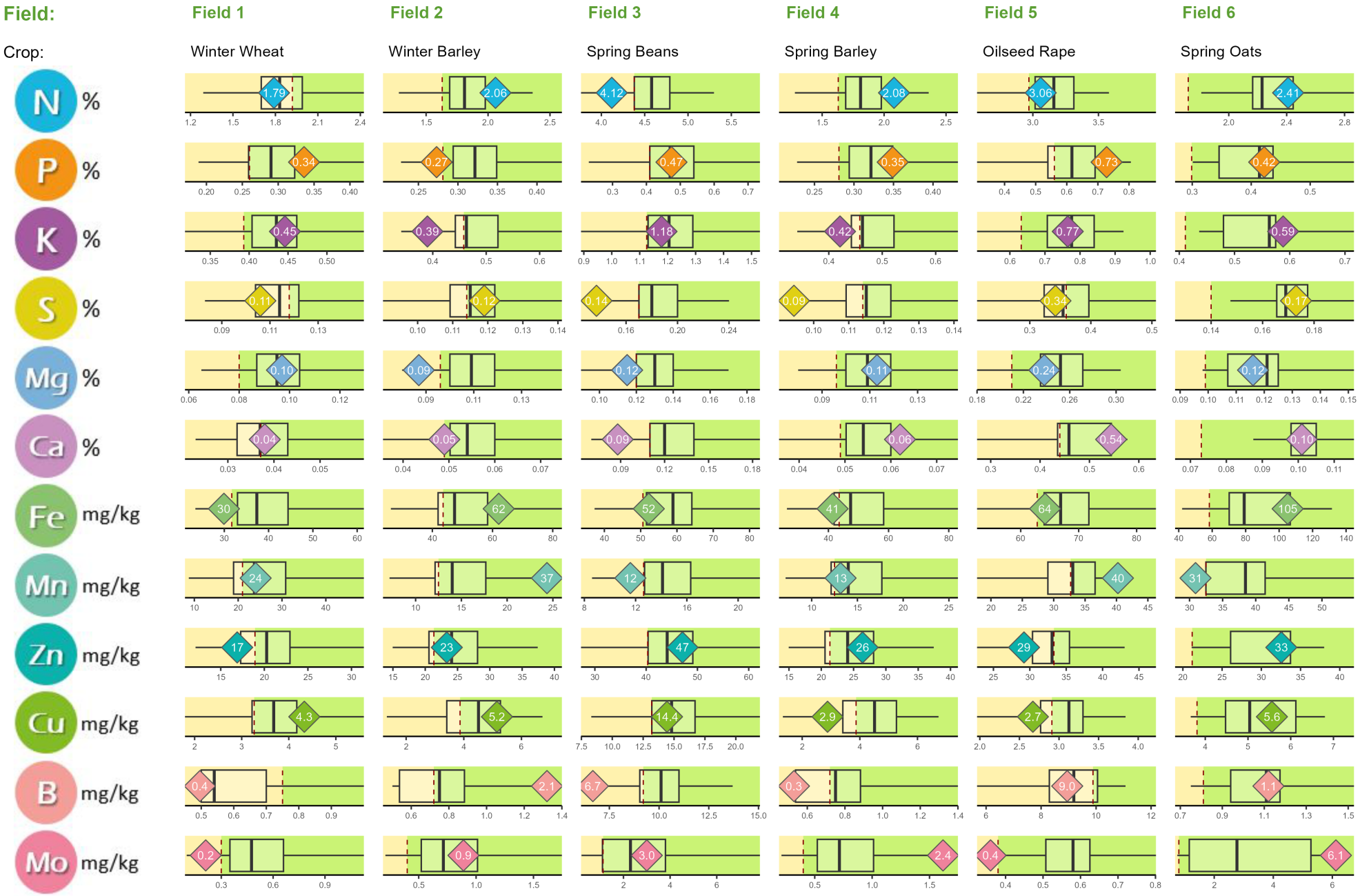
*** Thresholds of concern:** We only know a few critical values, so this year we are using YEN-low values (i.e. low quartiles from all crops of this type entered in all YENs since measurements began in 2016) as 'thresholds of concern' for all nutrients in all crops. We find YEN-low values to be very similar to the critical thresholds we have for N, P, S and Mn in wheat, as well as to less certain critical values of K, Mg, Zn & Cu, so we are using these YEN-low values instead of 'Critical values' for all nutrients in all crop types.

Explanation of Target Charts:

For a quick overview, Target Charts compare all your nutrients to mid-values from all this years crops of the same crop type (explained above). *Your aim should be for all your nutrients (black dots) to be inside their threshold of concern (red line*). If any nutrient is outside the red line, it is worth investigating factors that might have affected the supply or the capture of this nutrient.*



Grain Nutrient Benchmarks Charts 2023: ADAS Example, 2023

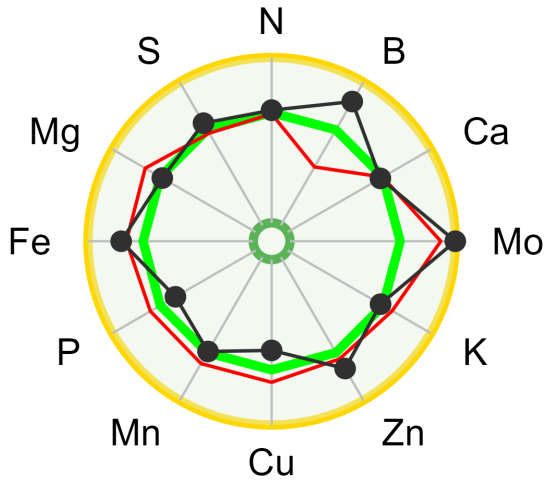


Grain Nutrient Target Charts 2023: ADAS Example, 2023

Target Key

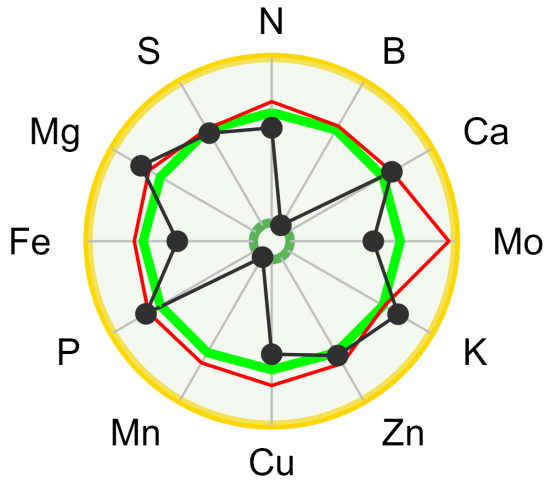
Field 1

Winter Wheat



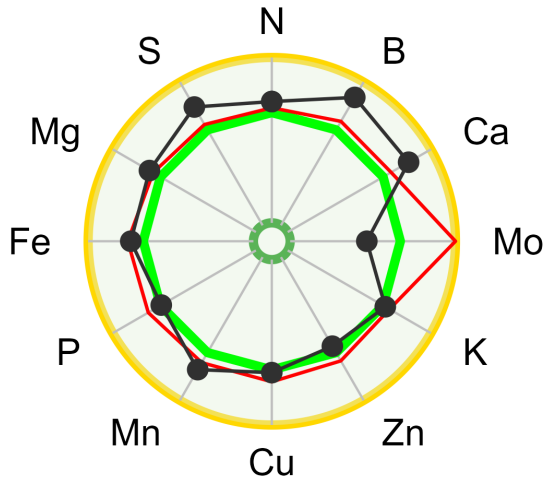
Field 2

Winter Barley



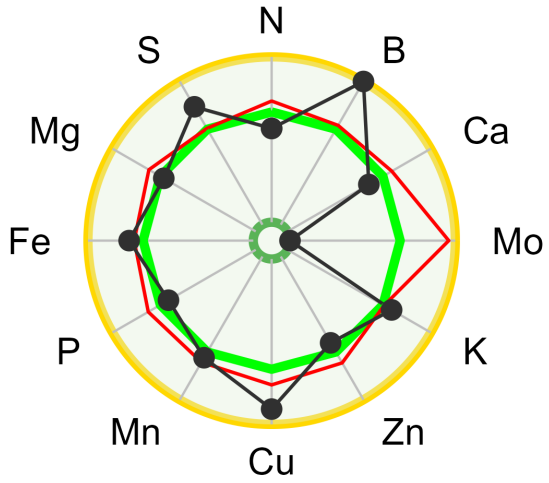
Field 3

Spring Beans



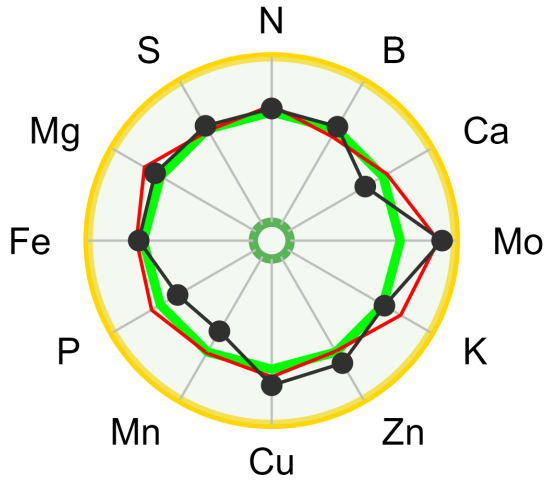
Field 4

Spring Barley



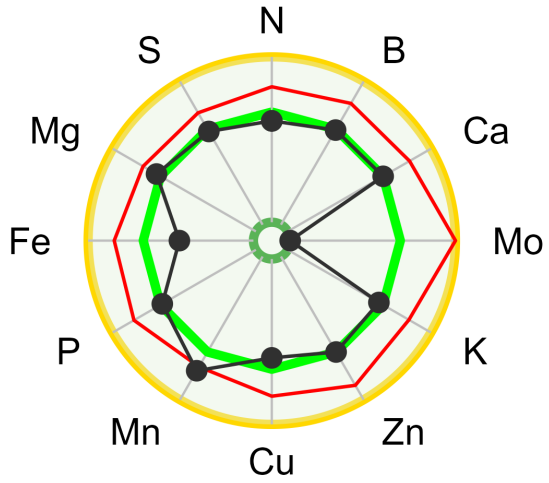
Field 5

Oilseed Rape

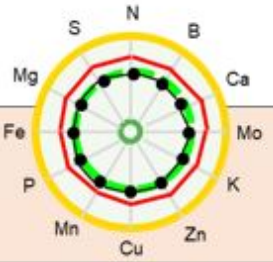


Field 6

Spring Oats



Interpreting YEN Nutrition target charts ...



1

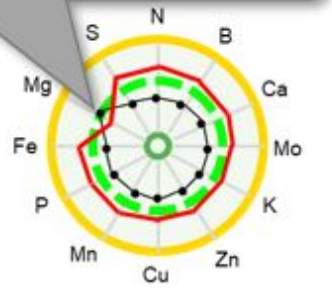
ARE ALL NUTRIENTS ON TARGET?
Ideally all your nutrient levels (black dots) exceed YEN-low levels (are within the red line), and are close to this season's norm (the green line)

2

WHICH NUTRIENT(S) ARE COMMONLY LOW THIS YEAR?
If a nutrient is low, but is also generally low on most crops in this year (green line outside red line), this is likely to be a weather effect .. so is not of urgent concern.

Seasonal weather may cause abnormal over-winter leaching (mostly of N, S & K), or topsoil dryness in spring, affecting most nutrients.
NB: Mg is highly affected by spring dryness.

One nutrient is commonly low on many crops in this year

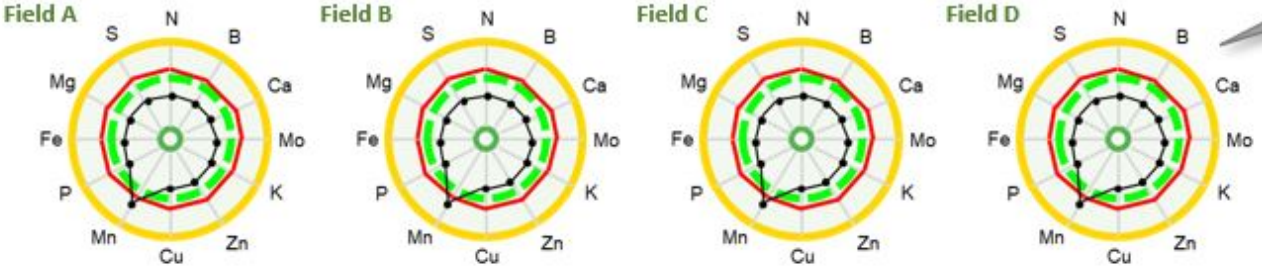


3

IS A NUTRIENT COMMONLY LOW ON MY FARM?
If a particular nutrient(s) is low on most fields and this repeats over years (black dot outside red & green lines), farm strategy may need to change.

We often see levels to be high or low for particular grain nutrients over all or most fields on a farm ... if repeated over years, this implies a need for a strategic rethink for this nutrient's management.

One nutrient is commonly low on this farm

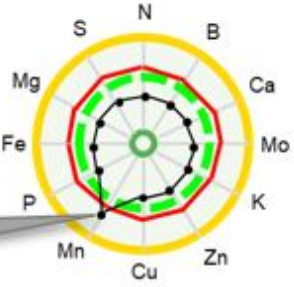


4

ON THIS FIELD, HOW MANY NUTRIENTS ARE LOW?
If only one or two, supplies may not have met demands. So check soil & leaf levels, and amounts applied, and repeat checks of this nutrient(s) on this field next year.

Most nutrients come from the topsoil ... the subsoil provides most of the crop's moisture, but rarely much nutrition, other than some N.

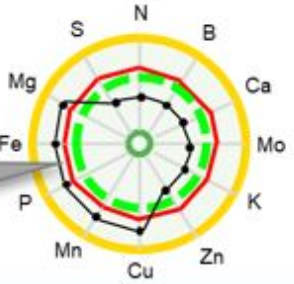
One nutrient is low here



If several nutrients are low ... check for nutrient uptake problems on this field / in this year e.g. spring dryness or poor topsoil rooting.

NB: Fertilisers, nutrient sprays & manures are not always as efficient as you'd like – maybe next year, test how well this product works?

Many nutrients are low here



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