

## **Maize Crop 2024 – Grainseed Weather Summary of the Year**

It is safe to say it has been a very wet and cold year and we have seen one of the coldest summers since 2015, and some of the wettest months, especially in the key Maize growing period with May and September being the wettest. Despite this the maize has performed for most growers when care was taken in creating the seedbeds.

The maize area in the UK jumped from 220k Ha to 250k this year following a wet autumn and winter. There was a small drilling window for some areas in April, but many crops were drilled in the 3<sup>rd</sup> week of May through into June once soils dried out. Early seedling growth once drilled was good, but with hindsight a lot of fields had leached nutrients resulting in underfered crops.

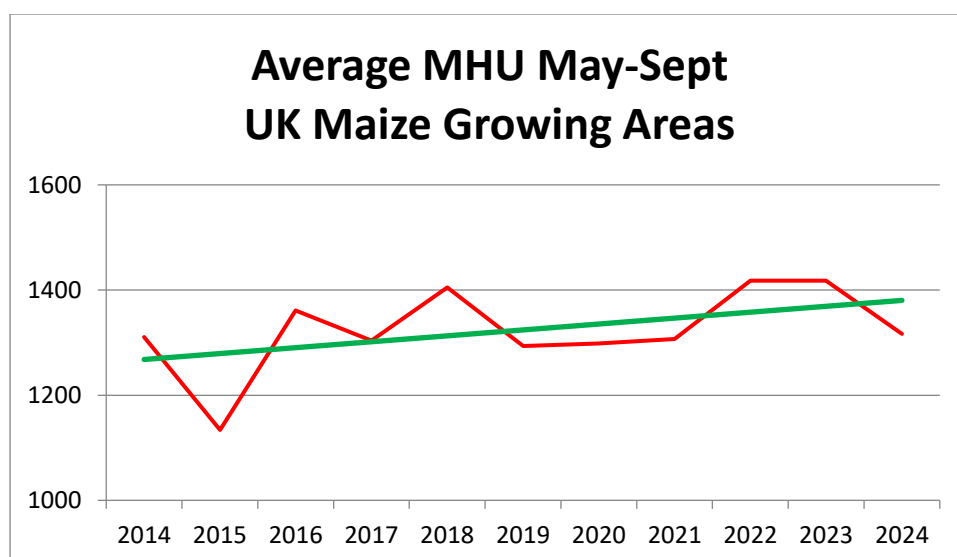
Tasselling was at the normal time at the end of July which seemed late as in the last 2 years June and July heat waves were so early. The growth in July was very rapid and plants have grown tall, but stems were not as thick as usual so in exposed areas we did see some lodging especially in gateways. We have also seen some crops with smaller root balls on moisture retentive soils as the plant has not had to search for water and so the root ball is shallow with less buttress roots.

As the crop approached full maturity in some regions there was an early frost nipping off the top leaves, and it also started raining (again) frustrating harvesting teams. By mid October the rain stopped allowing the maize to be chopped and fields ploughed or cultivated for drilling winter corn.

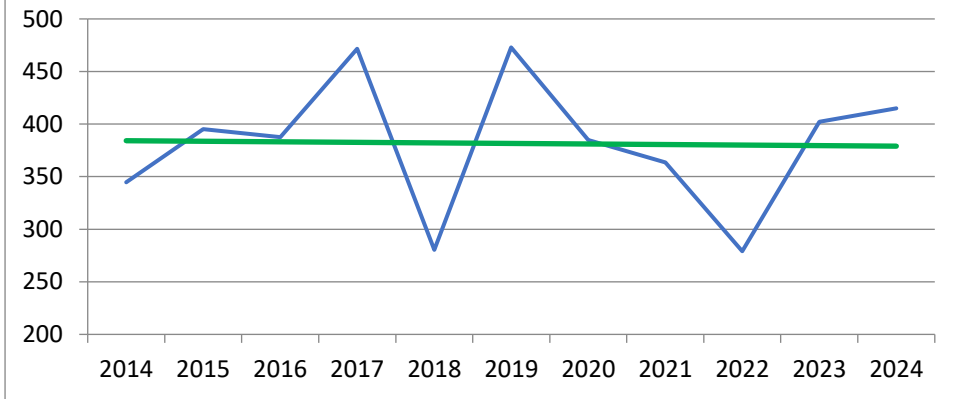
Unusually very little grass was drilled after maize harvest so we may see more undersowing in established maize crops next June.

### **Weather Analysis May – September 2024**

The Maize Heat Unit trend line below shows that in the last 10 years there has been satisfactory level of Maize Heat Units (Maize requires a minimum of 1200 units for the earliest varieties to reach full maturity without the use of film). 3 years out of the last 10 MHU have exceeded 1400MHU, unfortunately that has not been the case for the 2024 Maize growing period with the average in UK Maize growing area being 1316.6MHU, this is about 7.4% lower than 2023 but still remains higher than the 30 year average.

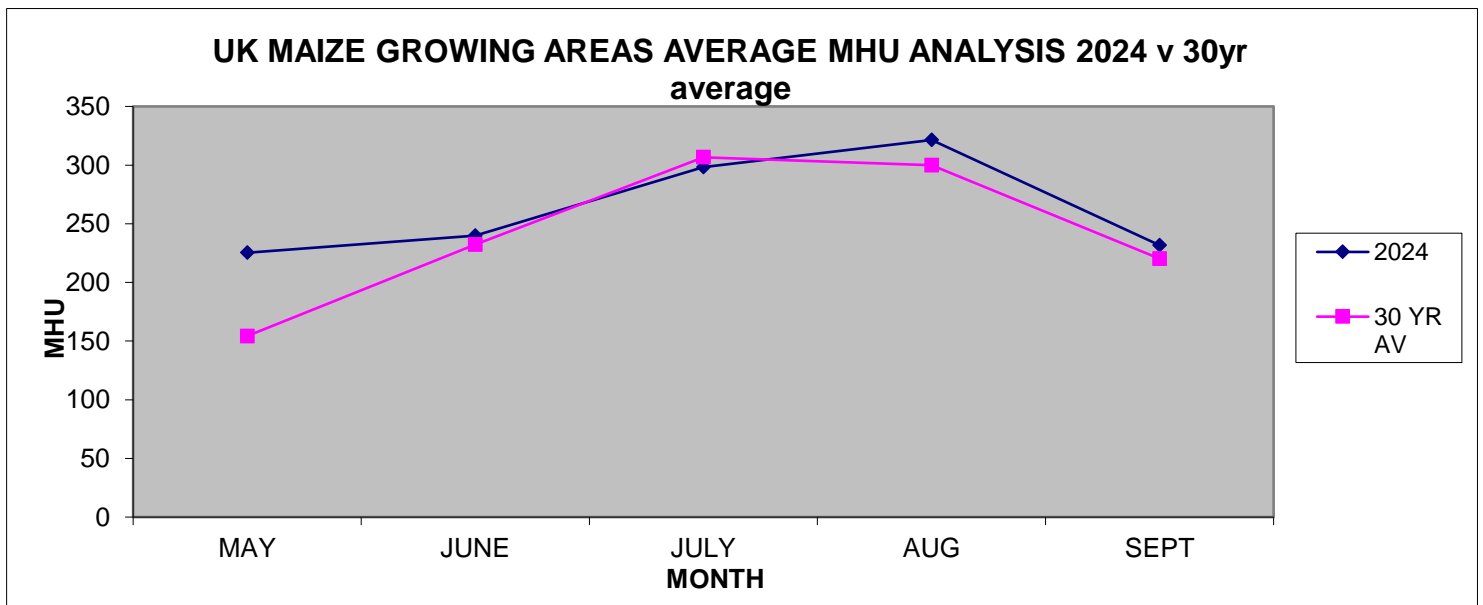


## Average Rainfall May - Sept UK Maize Growing Areas



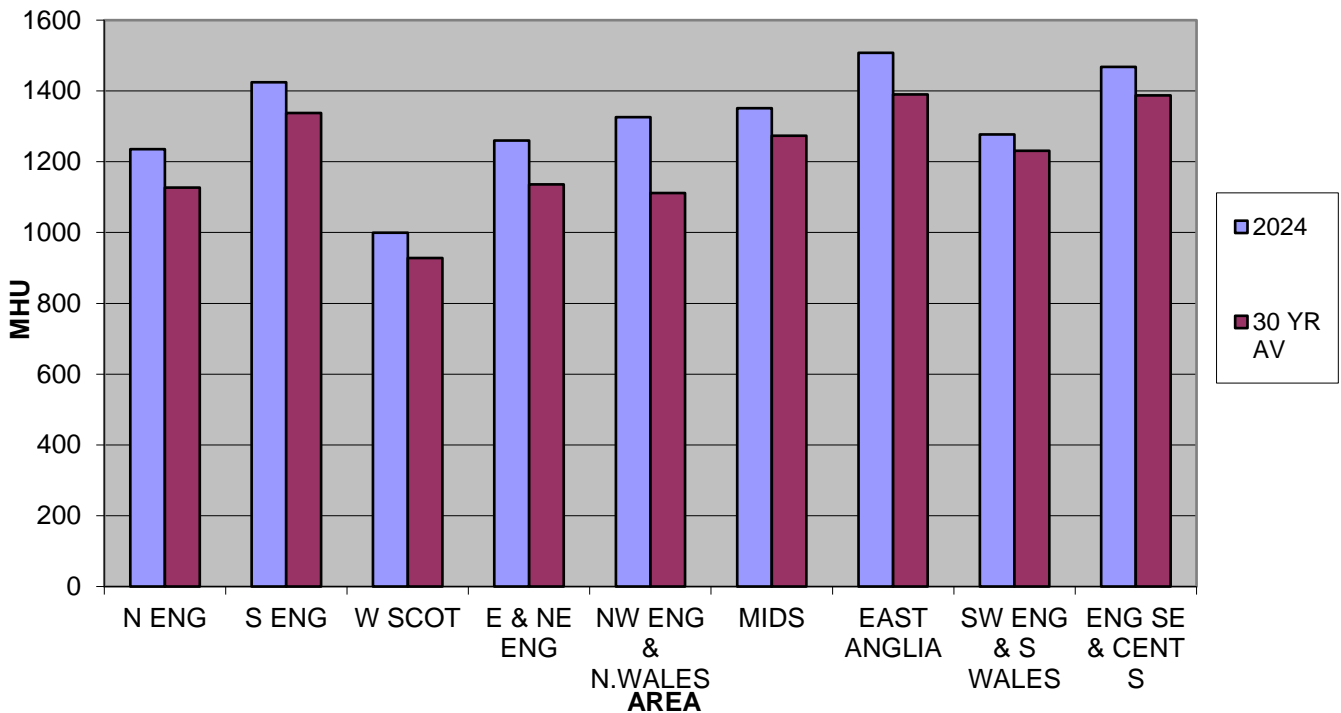
Rainfall has been constant throughout the summer and if it wasn't actually raining then we had complete cloud cover – or that's how it seems. Following on from the excessive winter rainfall this did lead to the leaching of nutrients and the requirement for bagged fertiliser or foliar feeding to optimise yields.

### Maize Heat Units/Distribution May-Sep 2024



The overnight temperatures in May helped increase early season MHU accumulation, but many crops were not drilled due to the inability to create a seedbed. Only July experienced more MHU's than the long term average and the key months of August and September for accumulating yield and starch were below average. This highlights the importance of selecting varieties with a good cob ripeness so that starch is laid down early.

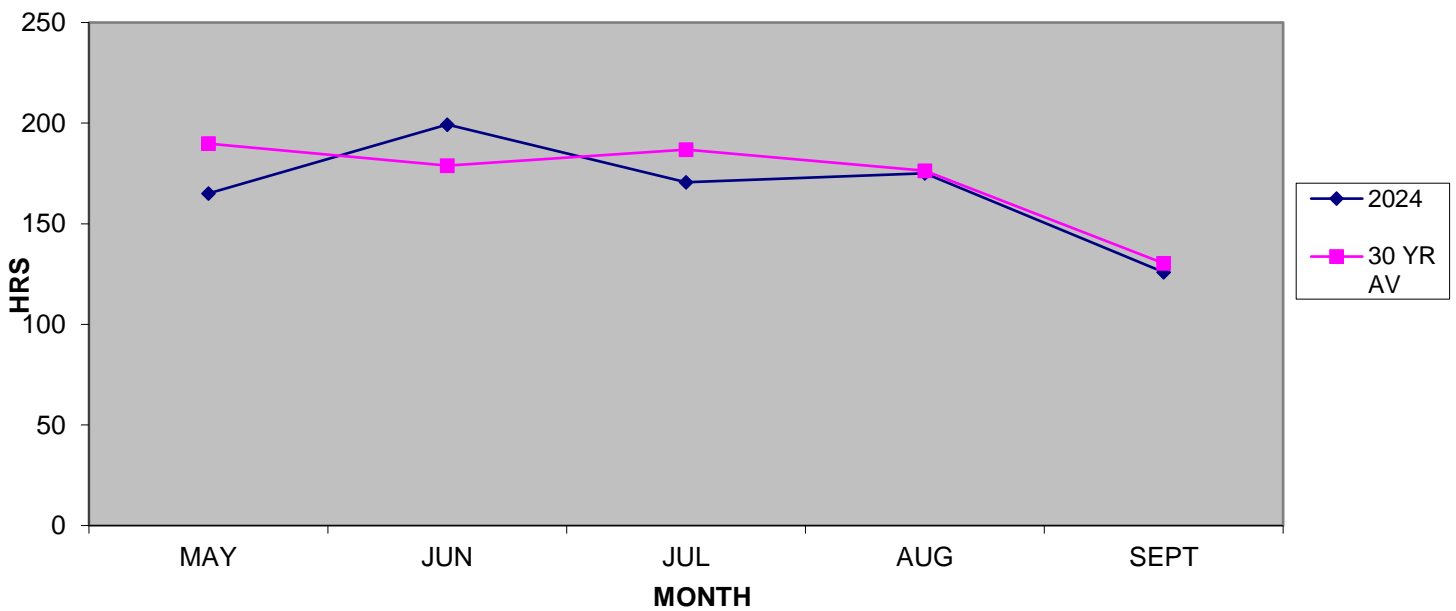
### MHU MAY - SEPT 2024 V 30 YR AV BY AREA



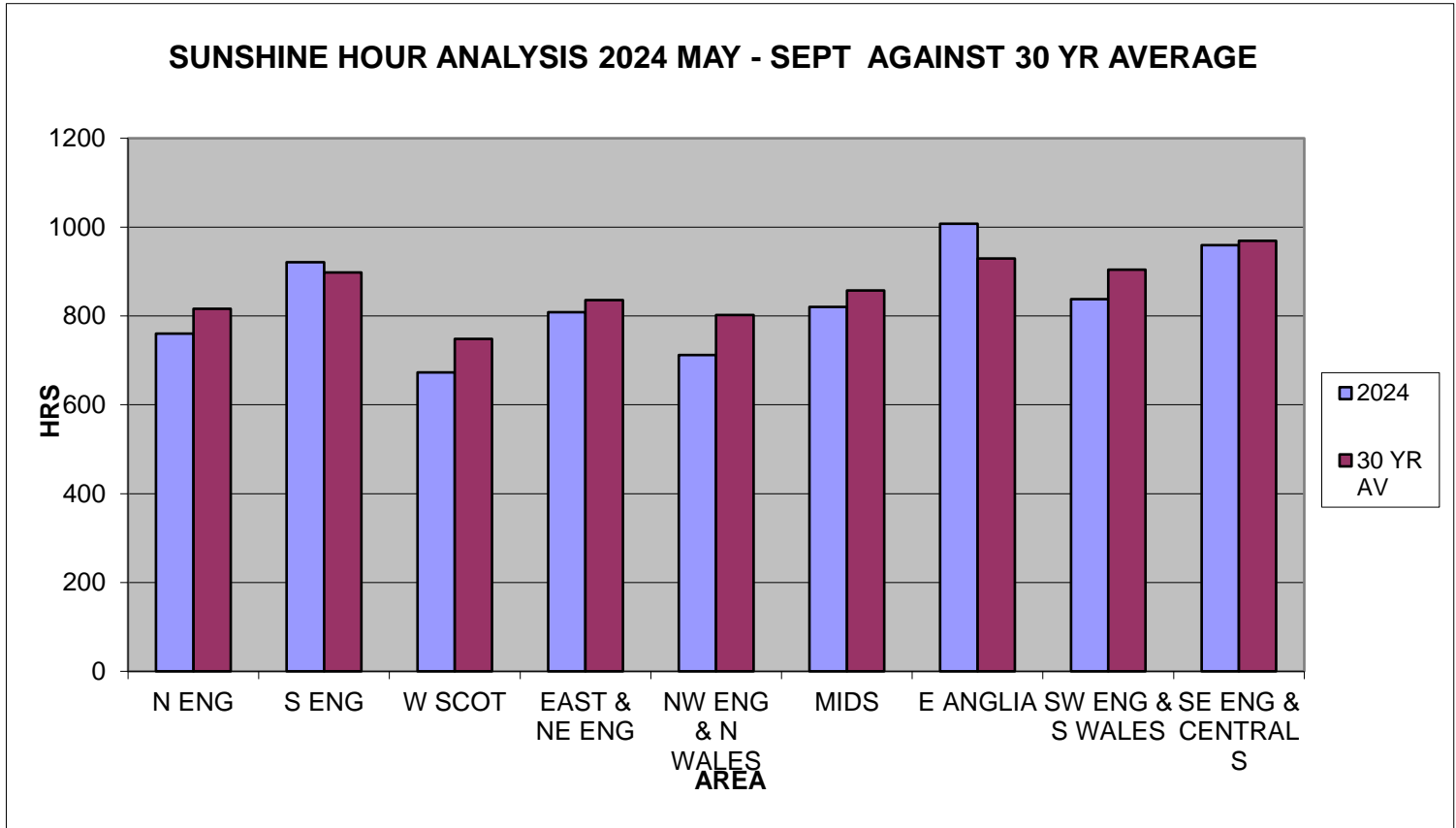
What is positive to see is, all areas except for the West of Scotland, exceeded 1200 MHU throughout the May – September growing period, but the summer of 2024 has been the COLDEST since 2015!

### Sunshine Hours/Distribution May-Sep 2024

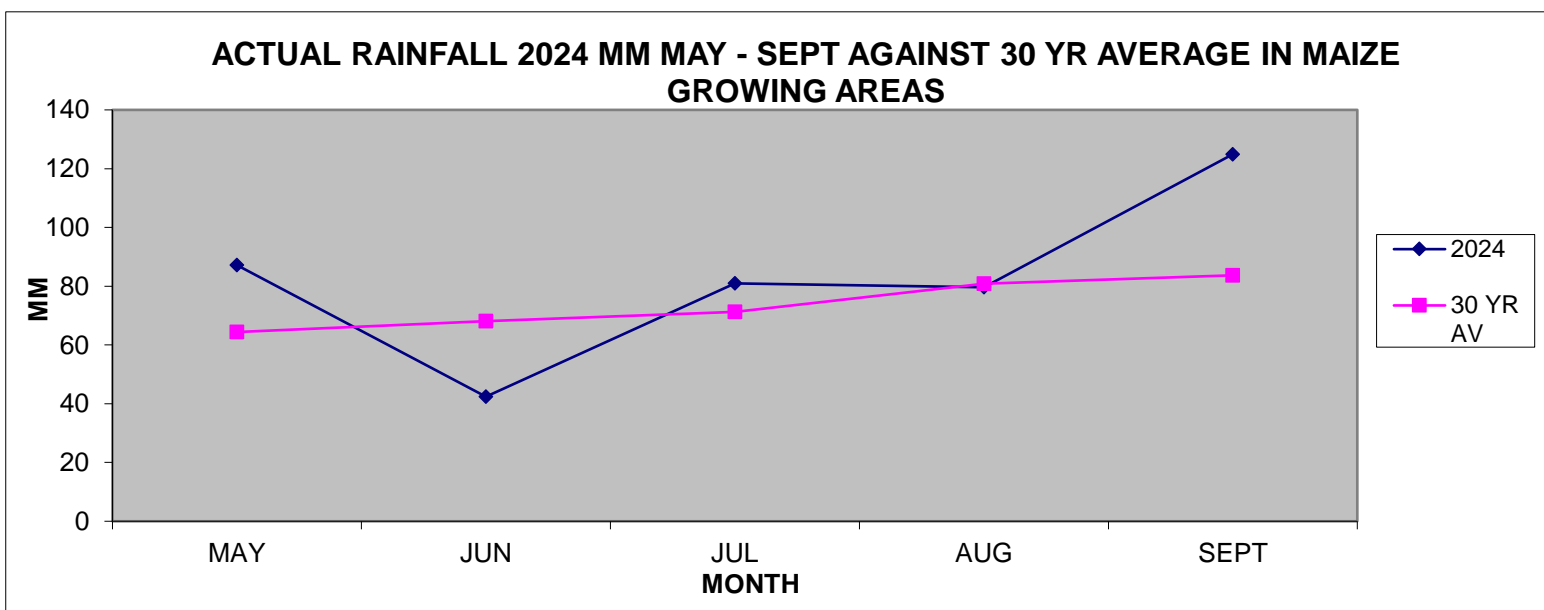
### ACTUAL SUNSHINE HOURS 2024 MAY - SEPT AGAINST 30 YR AV IN MAIZE GROWING AREAS



In the stated period, overall sunshine hours were down 3.4% against the 30-year average. Although the sunshine hours were below the 30-year average, we still saw over 800 hours of sunshine throughout the maize growing season in most areas apart from the North of England, West Scotland & NW England & North Wales. East Anglia, being the only area to exceed 1000 sunshine hours and up % over the 30 year average.

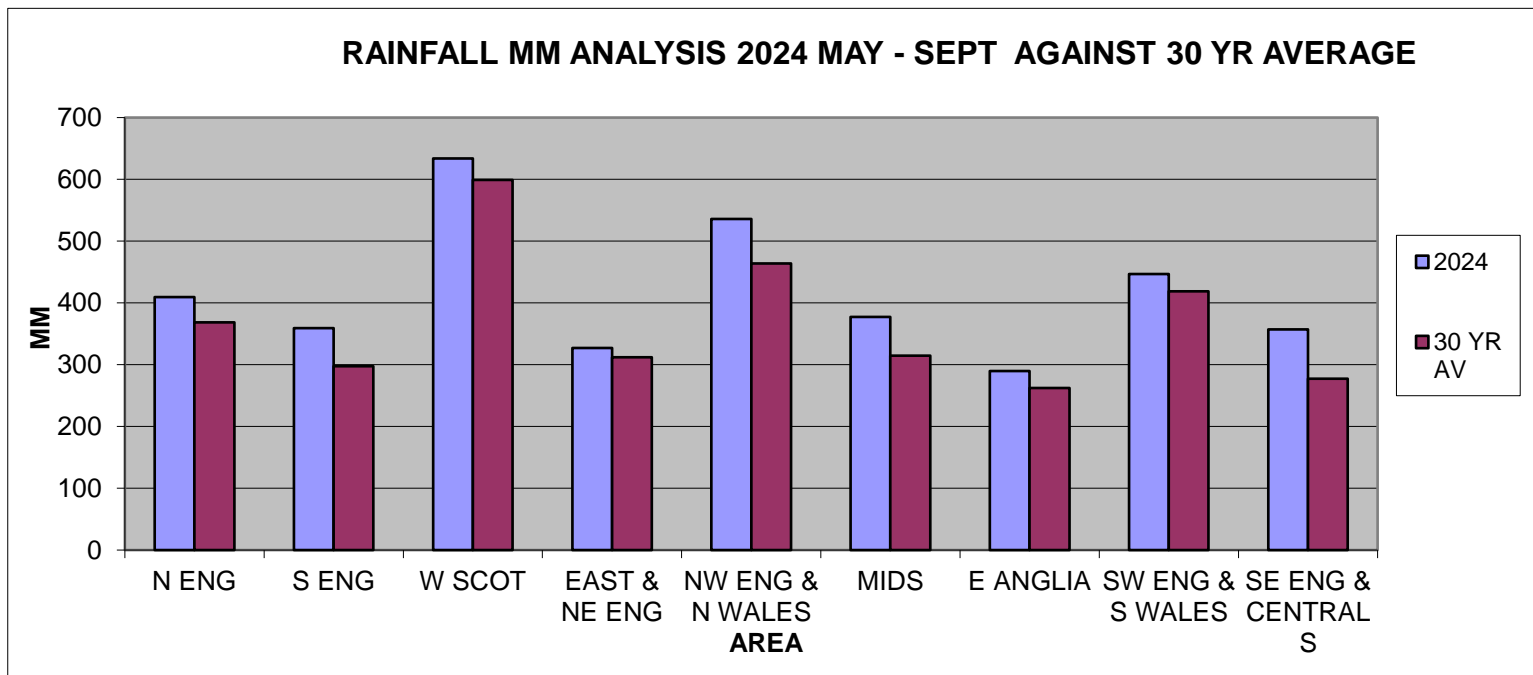


### Rainfall/Distribution May-Sep 2024



Overall, 2024 has been a wet and soggy year, the total rainfall from May – Sep being 12.7% higher than the 30 year average, with September being the wettest month of them all with 39.5% more rainfall than the 30 year average. The average for all the maize growing regions for 2024 was 415.11mm compared to 2023 with 402.34mm. The wet weather hasn't gone without causing issues for maize crops this year, the exceptionally wet April and May created difficulties with drilling, we saw drilling into mid-June in some areas of the country. Not only have we seen delayed drilling, the crop also hasn't had to search for water, meaning the root structure is small for many crops, cobs are high, and the plant is tall, leading to lodging in some cases.

UK Maize growing areas, all received rainfall levels above the 30 year average, including East Anglia where last year East Anglia saw 3.1% less rainfall than the 30 year avg.



### Monthly silage analysis required

Once the crop is fully fermented after 4-6 weeks then it is important that the silage is sampled every month and the ration adjusted to account for starch and digestibility changes over winter. The early silage samples analysed by Trouw show that the crop is good with dry matters at 30.7% and a starch content of 28.4% and higher sugars than the previous two years.

	Units	Maize 2022	Maize 2023	Maize 2024
Dry Matter	%	33.9	33.6	30.7
Crude Protein	% DM	7.9	7.9	7.9
D Value	%	72.4	69.9	70.9
ME	Mj/kg DM	11.4	11.0	11.1
Starch	% DM	35.0	27.8	28.4

