

Inta-Ag Mag

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Start of 2021 brings higher grain prices

FARMERS WEEKLY UK | 12 FEB 21

Tight supply and rising maize prices are keeping wheat prices on their rising trend.

UK growers are generally well sold, and Defra's recent reduction to its estimate of the size of the 2020 wheat crop by almost half a million tonnes bolstered the firm sentiment over the holiday period.

The conclusion of a Brexit trade agreement has seen the pound rise by far less than many expected, keeping UK barley competitive on export markets to EU and other destinations.

A wheat crop of just under 9.7m tonnes adds to import requirements, while the new lower estimate for barley will ease the price pressure on that crop.

London's feed wheat futures contracts have seen daily increases for more than a week, with the January 2021 contract at £201.5/t on Wednesday 6 January – its highest price since April 2013.

May 2021 futures reached £205/t on the same day, while new-crop (November 2021) reached £167/t, despite a 28% rise in the UK wheat acreage for this year's harvest.

EX-FARM PRICES

Regional spot feed wheat prices gathered by Farmers Weekly on 6 January were up by 13/t compared with pre-Christmas levels, averaging just over £200/t ex-farm.

Milling wheat for January put on £6/t over the same period to average £217/t, while feed barley rose £6/t to average £146/t.

Chicago maize futures hit a six-year high this week, as a result of dry conditions for South American crops and the imposition of a two-month maize export ban by Argentina to maintain domestic supplies and prices in a challenging economic climate, which is being made worse by the pandemic.

The wheat and maize price increases are part of a tightening global commodity outlook, with soya production and stock estimates for the 2020 crop being reduced amid strong demand (see "Soya prices stay firm despite end to Argentina's dock strike" below left). This helped ex-farm oilseed rape values put on £16/t since 18 December to average £375.70/t midweek.

At 9.658m tonnes, Defra's final estimate for the 2020 UK wheat crop shows a fall of 475,000t from its October estimate and a 40.5% drop in production compared with 2019. This is the lowest UK production figure since 1981.

England accounted for an estimated 433,000t of the total 475,000t cut from the wheat crop size.

The drop in wheat production is primarily accounted for by a lower average yield estimate of 7t/ha, compared with a five-year average of 8.4t/ha.

The total UK barley crop is estimated at 8.117m tonnes (compared with 8.363m tonnes in Defra's October estimate). This is higher than the five-year average barley crop size of 7.2m tonnes, reflecting the big rise in spring barley production. The UK winter barley yield was cut from the 6.4t/ha October estimate to 6.2t/ha.

Wheat prices have also been boosted by confirmation of Russia's plans to tax grain exports from mid-February to the end of June.

The tax runs alongside the previously announced export quota of 15m tonnes and is set at about £22.70/t in a bid to reduce record-high domestic prices.

In preparation for a possible no-deal Brexit outcome, UK millers stocked up on imported supplies in the run-up to the end of 2020. "The market is reasonably firm on the back of weather and the Russian imposition of quotas and tariffs," said Frontier Agriculture grain director Simon Christensen.

"We continue to see demand for EU grain and still see strong demand from the UK wheat sectors from March on, but it is extremely difficult to judge."

BARLEY TARIFF BATTLE

Australia is asking the World Trade Organization (WTO) to sanction China for the imposition of an 80% tariff on Australian barley.

The tariff is said to relate to Chinese allegations that Australian growers were being subsidised in contravention of WTO rules. Australian barley, beef and wine exports were hit by Chinese import taxes after Australia called for an inquiry into the origins of the Covid-19 virus. ♦

Would More Sulphur Improve Vegetable Quality?

RB209 states field brassicas need 50-75 kg SO₃/ha/year, but trials with higher rates based on Dutch practices have led to better yields and crop quality asks Joe Johnson.

THE VEGETABLE FARMER UK | MAY 21

The role of sulphur in supporting crop quality is widely recognised, but the introduction of hybrid varieties with greater yield potential has led some to question whether established nutrient practices are appropriate in meeting crop needs.

The need for more applied sulphur is not new. The amount supplied by atmospheric deposition fell to less than 5kg S/ha/yr in the early 2000's and is now estimated at 1-3.5kg S/ha/year, equivalent to 2.5-8.75kg SO₃/ha/yr.

The amount available from atmospheric deposition is now so low it is barely worth factoring into calculations, says Ross Greenhill, Agrii agronomist.

"Levels of sulphur dioxide (SO₂) emissions have fallen by 96% since 1970 and will continue to fall: the UK is committed to cutting SO₂ emissions by 88% of 2005 levels by 2030," observes Mr Greenhill.

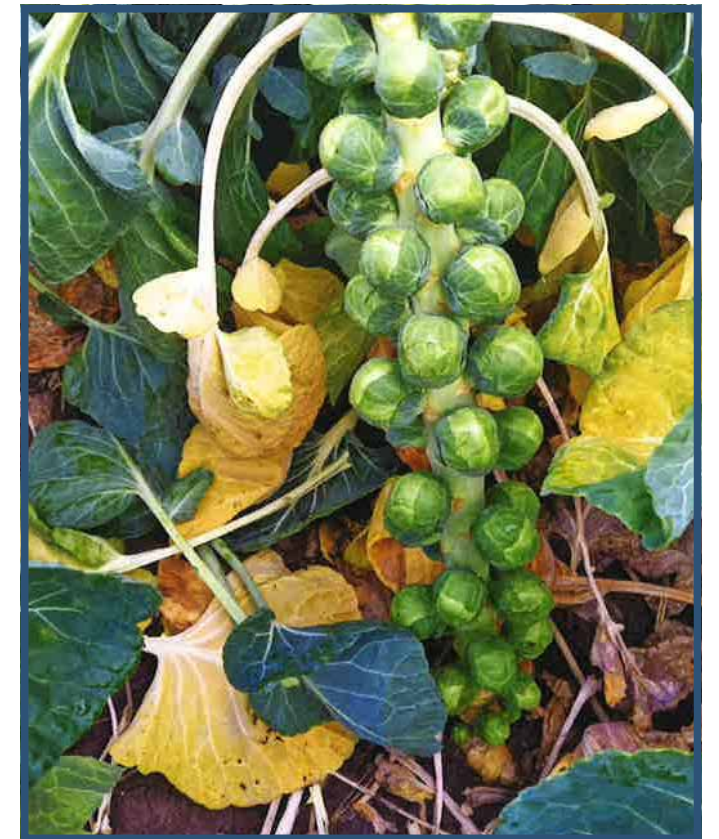
The need to review nutrient practices was impressed upon on Mr Greenhill during visits to the Netherlands where it was made clear that UK practices were insufficient to meet estimated crop needs.

"I've been privileged to have the opportunity to attend open days in the Netherlands during my career and the time spent with breeders is always worthwhile. On more than one occasion, breeders from the two seed houses that supply most of the Brussels sprouts varieties grown in the UK told me that we under-applied sulphate. The newer hybrid varieties, especially the earlier types, I was told, require considerably more sulphate than is the UK practice to apply. The suggested rate was 250-275kg SO₃/ha/year."

This contrasts with the 50-75 kg SO₃ /ha/yr stated by the Nutrient Management Guide (RB209), so a revised fertiliser protocol was developed by Agrii and adopted by an interested grower.

"Where sulphur is in short supply it leads to a noticeable impact on yield and quality, so there is great interest among growers as to how this may be averted. The intention of this trial was simply to see if sulphur applications in line with Dutch practices resulted in improved yields and quality," says Mr Greenhill. Application timing and product type were the next considerations with experience suggesting early applications are more worthwhile.

"I've found that applying most of the sulphur pre-planting, especially for early crops, is often more effective. Liquid products containing nitrogen and a high amount of sulphur, such as 9.8% N + 27.5% SO₃ at 1000 litres/ha delivers 98kg N/ha and 275 kg SO₃/ha. Applying roughly 100kg N/ha as the base application with the full amount of SO₃ is perfect.



"With later harvested crops a combined N+S granular product applied at the third split will help to ensure continued sulphur availability. In Scotland it is not unusual for Brussels sprouts to be in the ground for more than 12 months to extend the period of supply, so it is important to ensure nutrients are in a freely available form," he says.

A top-up of sulphur at the third pass will likely take the total applied amount to more than 300 kg SO₃/ha but growers should not be discouraged, says Mr Greenhill.

"It may seem like more than enough based on previous practices, but experience so far suggests it is well worthwhile with increases in marketable yield as a result. The best crops I have seen have been from this regime."

Determining the optimum rate to apply remains a work-in-progress with further trials planned, but to Mr Greenhill the need for higher nutrient rates is an obvious consequence of other agronomy changes.

"Varieties with greater yield potential are just one reason to review practices. The loss of Dursban (chlorpyrifos) led to growers switching to either Verimark (cyantraniliprole) and Tracer (spinosad) as a module drench.

"One positive I have observed is that these crops demonstrate more uniform growth, which suggests there was a level of phytotoxic damage to plants from Dursban. The impact of this is now coming to the fore as unchecked growth from more uniform plants is resulting in higher yields. It seems logical that these crops will have a greater nutrient demand," he says. ♦



Howl of a protest!

The Golden Goose, by Graeme Williams

Dear Aunty Jacinda, A moment if I may, A response I think is needed, To the protest the other day.	Irrespective of the daily grind, All the people they must eat. As we saw in Covid, Panic buying to the fore, Wonder what you'll eat next time, When farmers can't be farmers anymore.	The productive and the hearty. Sending the country down the gurgler, Thanks to Jacinda's "Labourless" party.
Farmers are generally too busy, To rally and cause a stink, But their overwhelming response, Must have made you stop and think.	They all have had enough. Supermarkets full of humble pie, Hmmm ... the menu could be rough.	The protest by diligent farmers, For the country shouldn't shock, They nurture and protect the land, Infinitely better than Labour does with DoC.
You see, thinking has been lacking, in your policies I suggest. Possibly economic incompetence, and bureaucratic bullshit at its best.	A majority of farmers, Are a cut above the rest. They understand the logic, Of not shitting in one's nest.	Instead of crippling progressive farmers, and dictating them with force, I suggest leading the charge by example, And controlling DoC's broom and gorse.
Your policies are from fairyland, Hindering what the farmers they produce. I struggle with the economic logic, Of screwing the Golden Goose.	The bar is constantly rising, f By peering over the fence. Labour, I suggest, should peer as well, And view some common sense.	So cheers to Laurie Paterson, And Bryce McKenzie in the South. You did what needed doing, Giving the cause the focus and the mouth.
You see New Zealand has been founded, On the farmers and the land. Farming and economic strength, Symbiotically go hand in hand.	Labour in a literal sense, Used to mean grafting in a role. Labour in a current sense, Means top pay on the dole.	The Golden Goose is farming, And common sense there needs to be, Otherwise the goose and country's completely plucked,
The reason isn't rocket science. Be it vege, milk or meat.	Screwing the diligent workforce,	But spelled with an "F" and not a "P".



Dean McMiken made it on stuff showing his support





Soil fungi can help improve the health of crops

WHAT ARE MYCORRHIZAL FUNGI?

- Described as “obligate biotrophes”, mycorrhizal fungi have to form a symbiotic association with the host plant in order to complete their life cycle. Their name is derived from the Greek words mycos (meaning fungus), and rhiza (meaning root).
- There are two main types: endomycorrhizal, which has part of its hyphae inside the plant cell, and ectomycorrhizal, which remains on the outside of plant cells.
- Arbuscular mycorrhizal fungi – which penetrate the root and form highly branched structures for nutrient exchange – are most commonly found, and are associated with most plant species.

FARMERS WEEKLY UK | 07 MAY 21

Mycorrhizal fungi are beneficial organisms that have a symbiotic relationship with plants, growing in association with their roots and helping them to thrive.

A key component of any balanced farming system, these naturally occurring underground fungi undergo a complex biological interaction with the roots of most plants, allowing them to cycle organic matter and release nutrients.

In what sounds like the perfect arrangement, special two-way feeding arrangements are created within the plant roots by the fungi. Through this, the plant receives moisture and vital nutrients and, in return, the fungi gets the sugar and carbon it needs.

Where these fungi are present and there are good levels of root colonisation, plants become healthier and less susceptible to stress, with yields responding accordingly, enthusiasts claim.

As a result, farmers following a regenerative agriculture approach and those looking to reduce their reliance on artificial inputs are increasingly tapping into the benefits that soil fungi can provide, with efforts being made to encourage their abundance and understand more about what they have to offer.

HOW DO MYCORRHIZAL FUNGI WORK?

Originally attracted by “signals” produced by the plant’s hormones, the fungi penetrate a plant’s roots and make themselves at home. Once there, they get to work – setting in motion a mutually beneficial trading of resources which continues throughout the crop’s life, explains agronomist Alice Montrose at crop consultant Ceres Rural.

As well as colonising the host plant’s root tissues internally, the fungi develop hyphae or root-like structures that grow outside the root, forming a network of fine filaments in the soil.

“This hyphal network acts like a secondary root system, allowing it to explore a far greater soil area than the plant roots alone can,” she says.

Given that nutrients, such as phosphorous, are relatively immobile in the soil, it helps with their uptake, as well as ensuring access to water.

Mycorrhizal fungi are also instrumental in building soil structure, through their excretion of glomalin. A glue-like compound, glomalin helps to aggregate soil particles and, along with the hyphae, hold these aggregates together.

ADDITIONAL BENEFITS

As well as being able to mine the soil effectively, their other beneficial effect is to make plants more stress tolerant.

“The greater scavenging ability of a bigger root network means that crops become more drought tolerant and more resilient, which helps when environmental conditions are against them,” says Miss Montrose.

“They can also cope with any soil compaction issues – the very fine hyphae produced by the fungi can penetrate soils which aren’t in the best condition.”

Mycorrhizal fungi are also very competitive, which is why they are also understood to protect the host plants from other fungi and bacteria that may be detrimental.

“We hear a great deal about healthier plants coming from biological soils which are functioning well and this explains why.

“They have an effect on both biotic and abiotic stresses. Where soils are in the right condition and full of microbial life, they provide nutrition and other services to the plant at the time it is required,” she says.

HOW TO BUILD SOIL BIOLOGY

There are several things that growers can do to increase soil biology and get microbes working well . But don't expect to see changes occur overnight.

1. REDUCE TILLAGE

Soil disturbance should be reduced as much as possible. Cultivations destroy the hyphal networks that the fungi create in the soil. If growers want to benefit from them, they need to leave them as intact as possible.

2. TARGET FERTILISER

Don't over-apply nutrients, especially P and N, where you are trying to encourage soil life. High rates of fertiliser make roots lazy. This weakens the relationship between the fungi and plant, and means they can miss out on “free” micronutrients and water. Target the use of fertilisers to avoid this happening and keep the roots active.

3. FUNGICIDES

Be careful with seed treatments, early season sprays and any other disease control treatments that hit the soil.



Fungicides are effective against fung, but use them sparingly and only when required – especially when crops are small. Applications will always affect soil biology, so the key is to keep any detrimental effect to a minimum.

4. ORGANIC MATTER

Increasing soil organic matter through the use of farmyard manure and other soil amendments provides a better habitat for soil microbes, as well as giving them an alternative food source. Organic matter also holds nutrients and retains water, improving the soil's health and structure. Aim to build it back up and develop a productive system.

5. LIVING ROOTS

Keeping plants growing is important for mycorrhizal fungi levels, as the fungus can't complete its life cycle without a suitable host. Try to have a living root in the soil for as long as possible, so the soil retains its microbial life and continues to function.

6. DIVERSITY

A diverse crop rotation helps with soil biology, as different plant species promote different types of fungi. Mycorrhizal fungi form associations with most crops, but a notable exception is oilseed rape. Brassica crops don't form associations with mycorrhizal fungi, which is where techniques such as companion cropping can help. ♦

BUNKER HARVESTER GETS MAJOR UPGRADE

POTATO REVIEW MAY/JUNE 2021

ORIGINALLY presented in 2018, GRIMME's two-row EVO 280 bunker harvester is getting a major upgrade.

The completely redesigned version has increased bunker capacity allowing greater distances to be bridged between the harvester and transporting trailers and allowing even high transport vehicles to be loaded easily and conveniently.

The design of the machine allows the bunker floor to be reversed without additional damage to the crop, allowing the bunker capacity to be completely utilised at any time. The removed crop serves as a soft cushion for the subsequent harvested crop flow.

Further advantages include an unloading time of approximately 45 seconds and extremely gentle crop protection, as there is no additional transfer-step in the bunker floor. Growers have confirmed an increase in performance of up to 30 % compared to harvesters with a standard bunker.

For more traction, increased ground protection and reduced energy consumption, a hydrostatic wheel drive can be fitted. For the first time on the market, both wheels can be permanently

driven hydraulically with a total thrust of over 2.3 t (23,000 N) respecting a road transport width of less than 3.0 m and complete EU type approval.

The feature called “Turbo Clean” facilitates the cleaning operation of certain webs and separators.

With the new comfort packages, height-adjustable steps are available on the picking table, which provide the picking personnel with a comfortable working height. Also available are a waterproof storage box, paddings on the picking table, drink holders and a

15-litre hand wash tank.

For use on heavy soils, highly wear-resistant plastic share blades can be used, which helps reduce soil adhesion and keeps wear to a minimum. Clod breakers are also available on the first main web to prevent clod build-up in sticky soils without stones.

The hedgehog web of the third separator can be equipped with plates of long, soft hedgehogs. Stones and clods can sink deeper and thus be separated more efficiently from the crop flow. ♦



We've made some changes

You may have noticed Warren's friendly face is no longer at reception when you arrive anymore. Warren has taken on a new role within the company focusing on procurement and stock management.

You will still see him out serving in the store and delivering when times are busy but ultimately, he's handed over the day to day running of the Store to Mark Wrightson who's now taken on the Store Manager's role.

Mark will be your first point of call for orders and deliveries. He can be reached on 021 211 4441



Bridget's wee champions!

Inta-Ag have been proud sponsors of the Pukekohe Indian Sports Club (PISC) for a number of years, as hockey is a popular sport amongst the vegetable growing community!

Bridget Johnson from Inta-Ag and Anesha Parsot have been coaching the U9's Hockey team and couldn't be more proud of how well our team is doing!

Its amazing to see the support that is out there for Junior and Senior level hockey and it is a lot of fun to be involved in!

