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# I'm happy to bring you the first edition of our OMEX Agrifluids Newsletter

It's certainly a challenging time for everyone in the sector trying to keep updated on input costs, freight disruption, turbulent weather, supply shortages and volatile crop prices even before one considers remaining Covid restrictions! Hopefully these pages will provide some light relief with shared new experiences, exciting projects in progress and positive updates from around the world.

OMEX Agrifluid's priority has been to maintain supply and I'm proud to confirm that over the last 2 years none of our top 20 selling formulations have been unavailable at any point.

As costs rise farmers will have difficult choices to make when allocating their budgets. We are confident that applying foliar nutrition in the right place at the right time is the most efficient and effective return on investment.



**Nils Winkler**  
Managing Director

Thank you to all our commercial partners across 80 countries in all continents for their hard work, resourcefulness and commitment to maintaining the high levels of support for farmers during very challenging times. Your contribution will help growers to make the best decisions.

We are thankful to work in a critical industry for which there will always be demand and proud that through our work we are helping to supply good quality nutrition. Enjoy the newsletter and we look forward to seeing you soon as travel continues to become easier.

## Latest News

### OMEX Receives UK's largest ever shipment of UAN

This shipment is one of a number scheduled to arrive across OMEX's nationwide network of 10 distribution hubs in the coming months, ensuring a regular supply of Nitroflo liquid N+S throughout the UK and Ireland, with unsurpassed regional and local service delivered by a network of local delivery partners to OMEX customers.



### Listen to the OMEX podcast

Our new series of crop nutrition podcasts is now live on the OMEX website, head to <https://www.omex.com/blog/podcasts> to listen.

### We look forward to seeing you

We are pleased to announce that many shows and exhibitions will be going ahead this year. Please head to our socials to keep up to date and see where will be exhibiting this year. We look forward to welcoming you onto our stands.





# Feeding rice through the foliage:

**Rice yields from lowland farming environments are influenced by a number of factors. These include the variety of rice used, as well as the climatic and environmental conditions present during the growing season. Dr Terry Mabbett reports.**

Fertilizer input can help to boost yields however, timing and placement within the field is critical. During high energy expenditure and strenuous periods within the rice crop cycle, nutrient requirements reach peak levels. Therefore, it is important to ensure that any nutrients which are applied, are in a readily accessible form.

In fields where essential nutrients, such as zinc and calcium, are in inaccessible forms, foliar nutrition is a lifeline for crop growth. OMEX Agrifluids Ltd specializes in the production of foliar fertilizers and plant nutrition products. Rather than nutrients being absorbed from the soil through the plant roots, nutrients are applied in a liquid form as a spray, or as a seed treatment.

The OMEX product, Primer Zinc Bio is a suspension seed treatment, which combines high concentrations of zinc (700g/L), with a seaweed derived biostimulant. Although applied to rice seed before planting, Primer Zinc Bio has long lasting effects throughout the entire crop cycle, ensuring zinc nutritional content at harvest is met.

Kingfol Zn, also produced by OMEX, is another high concentration zinc product (700g/L). Unlike Primer Zinc Bio, Kingfol Zn is applied as a foliar treatment to rice plants during the tillering stage. Zinc oxide is the main ingredient, however, added enhancers to the formulation encourage optimal foliar uptake.



OMEX Bio 20 is applied in the rice nursery to boost root biomass and to secure seedling establishment

**Dr Terry Mabbett**



For strong tissue development, OMEX's CalmaxB; which contains a mixture of micronutrients, calcium and boron; can be applied at spike emergence.

## Bio 20 & Rice

For all-round plant growth promotion, Bio 20 is the OMEX product to use. Formed of 11 macro and micronutrients, as well as a natural kelp based biostimulant, Bio 20 encourages the growth of roots.

Bio 20 is particularly effective during periods where the crop is growing under stressful conditions. The increase in root biomass enables crops to maximize moisture uptake, which in turn, makes them more resilient to periods in the growing season where access to water is below optimal levels. With future climatic conditions set to be warmer, and increasingly more intense, the effect of Bio 20 on current and future crop production is only positive.

Before transplanting rice, Bio 20 can be applied as either a root soak or seed nursery treatment. Following transplanting, when rice is at the tillering stage, Bio 20 can be applied for a third time during the crop cycle, at a recommended rate of 2.0 L/ha (200ml/100L).

For the full article, as published in African Farming Magazine

Please visit:

[www.omex.com/blog/feeding-rice-through-the-foliage](http://www.omex.com/blog/feeding-rice-through-the-foliage)

Condensed version by:  
Hermione Wright, Trials officer,  
OMEX Agrifluids





# Growing with OMEX



"A program of CalMax & Zn 70 was recommended to correct calcium & zinc deficiency in avocado at the time of fruit setting. A program of 2 weekly applications was established, which prevented the aborting of the fruit."  
Ivan Haro Ruiz  
Mexico

"A single treatment of OMEX Primer Bio Zn at 2 l/ha on the soil straight after sowing, has improved growth and leaf system development in baby spinach compared to standard farm practice."  
Campania, Italy



"Applications of Bio 20 and pHortify were applied during the parsley transplant and growth phase. CalMax was used to correct calcium deficiency symptoms of marginal chlorosis earlier in the crop."  
Trinidad



"I used Zynergy on the wheat during a dry spell in all stages of the crop cycle. This led to a greening effect and reduced crop stress, comparing to the farmers who did not use the Zynergy sprays. My wheat crop has remained green during this season of low rains"  
Nakuru, Kenya



"OMEX nutrition helps us decrease the volume of fungicides by improving the health of the plant. Working with OMEX is great because we have a consultant who helps us, and the products work very well!  
I hope to continue this cooperation with OMEX!"  
Luciano Silva do Nascimento,  
Brasil

"This particular grower is using OMEX Calmax and OMEX DP98 combined in a foliar spray and applied to banana bunches to harvest heavier and larger bunches of fruit. We know this because boxes are being filled with just five hands of fruit whereas previously it required eight hands of fruit to fill a box"  
The Philippines



"The use of Bio 20 developed the wheat root system, leaves were wide and thick, there was improved stress resistance against dry hot wind, flag leaves remained green, stalks were mature, grains were full and heavy with good quality seeds and bright skin!"  
Henan, China



"It is highly recommended that OMEX products have excellent results and one should use these products by taking them from a dealer or concerned OMEX person" Sagar Patidaras  
India





# Field Trials Site



**At the beginning of the 2019-2020 UK cropping season, OMEX began work at our new dedicated field trials centre near Heckington, in South Lincolnshire. Although we have conducted both randomized plot trials and larger field scale strip or block comparisons on UK farms for many years and will continue to do so, the new facility gives us the opportunity to host many trials in one place, so making better use of our time spent gathering scientific data.**

This also provides a meeting point where our staff and customers can conveniently see our research in action. This is a perfect fit with our existing Biolab and greenhouse complex at King's Lynn where we conduct smaller scale screening and validation trials with new products and formulations before moving on to field scale experiments.

Hosted and managed by Mr. and Mrs. Barker, who trade as independent research contractors under the name of Barworth Research Limited, the Fenside Farm site includes a 5 hectare block of arable land as well as glasshouses, poly tunnels for soft fruit and horticultural experiments, scientific laboratories and a meeting room; all sited conveniently midway between our Bardney and King's Lynn factory sites.

Andy Barker gave us some background on the location, now in its third season of hosting OMEX trials.

"We originally ran our own trials and laboratory work at a number of different locations but decided to we needed to bring it all together as this makes far better use of time and resources. When we purchased the site four years ago, it had been used as an equestrian centre with stabling and paddocks, all under grass. We ploughed these up to bring the land in to arable production, took out the fences and consolidated the fields into a single main block where the

plot trials are now carried out".

"The soil is a light loamy sand which, while it is not the most productive land, is ideal for fertiliser and biostimulant trials due to its low background fertility and susceptibility to drought conditions, which means we can often see big differences with effective treatments. Conversely, we are still able to plant and travel through crops in wetter periods when stronger land is inaccessible. Although yields would be higher on more fertile land, it can be very difficult to tease out significant differences between treatments where the crop is already very well fed and watered".

The main field block is suitable for combinable crops such as cereals and legumes and will be planted with winter wheat and spring barley this year. A variety of plot trials

**"We have also set up a bespoke fertigation system in one of the polytunnels, where we are able to grow soft fruit in the same conditions as commercial farms."**





will be included looking at nitrogen products, rates and applications, inhibitors, foliar nutrients, biostimulants and crop health programmes amongst other work”.

“In addition to the larger scale field trials, we also conduct smaller microplot trials with a wider range of crop types such as carrots, onions, potatoes, peas, maize and brassicas in an area we can irrigate with our sprinkler



system. We do not have a sufficient reservoir of water to grow root crops on the main field, where production without irrigation would be impossible”.

“We have also set up a bespoke fertigation system in one of the polytunnels, where we are able to grow soft fruit in the same conditions as commercial farms. The difference is that we can apply and evaluate different treatments to small blocks through the fertigation, which is not possible for large scale growers. This facility was commissioned

and used to successfully carry out trials in a first crop of strawberries last season”.

Barworth continue to conduct independent contract trials for other third parties and are fully accredited for carrying out registration trials work to ORETO standard, which means that OMEX customers can be assured of trustworthy, valid and high-quality output.

With surging interest in nutrient use efficiency, biostimulants, crop health treatments, precision farming, coping with climate change and integrated pest management, there is no shortage of work that needs to be done in the coming years to ensure that our customers continue to have access to best products and advice to meet the challenges ahead.

The easy accessibility makes the site ideal for demonstration days hosting UK and international visitors and although this has been impossible for the last 2 years because of Covid precautions, plans are afoot to host a large number of different groups of farmers, distributors and agronomists in the spring & summer of 2022.

**David Booty**





# Cost Effective Nutrition

As nutrient use efficiency becomes ever more critical for growers due to the rising input costs and increasing sustainability pressures, we look at the advantages of using foliar nutrition.

A foliar fertilizer programme can boost nutrient efficiency without over applying nutrition whilst also controlling costs. Foliar fertilizers provide an instantly available form of nutrition, bypassing problems associated with solid base fertilizer, including insufficient nutrition to meet requirements. This may be due to a drain on a particular macronutrient later in crop development. More generally, it is also because a large proportion of a nutrient is locked up in the soil and therefore unavailable for uptake.

The prompt nutrient mobilization that foliar feeding offers means growers can react in a more immediate corrective manner and apply the precise quantities needed to fulfil the crop's nutrient requirements. Using a liquid foliar system can help reduce fertilizer input due to the improved accuracy and better take-up by the crops.

OMEX foliar products are formulated with EBA (Enhanced Bio-Availability) technology to maximize the benefits of every application. The range features growth stage-specific foliar fertilizers, giving growers the option to supplement nutrients to the plant at any point post-germination.



## Enhanced Bio Availability

The OMEX foliar product range incorporates eba™ technology – a revolutionary formulation system designed to optimise foliar uptake and assimilation of nutrients.

Formulation characteristics of the products include:

- Selection of specific raw materials to aid rapid assimilation and mobilisation in the crop.
- Synergistic, multi-form nutrient sources.
- Two separate organic fractions to improve nutrient transport and stimulate epiphylllic micro organisms on the leaf surface which aid nutrient uptake.
- An advanced adjuvant system to allow maximum leaf coverage.

Leaf coverage shown under UV light



## OMEX Environmental BENEFITS

EXTREMELY LOW heavy metal content

Highly effective & efficient products developed with advanced technology

LOW concentration applications per hectare

Sprayed to target parts of the plant that need it & are most suitable for uptake

Applying the correct amount at the correct time

Groundwater contamination IS STRONGLY REDUCED

ZERO RESIDUES requiring no harvest interval