

AngelaWEB2.0

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Autumn 2015

News



We hope you enjoy reading this edition of Everris News. For over 40 years our Australian and New Zealand team has been working with the nursery industry, assisting growers to improve efficiency and quality.

The more things change, the more they stay the same. Our company name has changed from being Sierra Chemical Company, Grace Sierra, and Scotts, to Everris and part of the ICL Group. One thing that has never changed is our desire to help nurseries to become more efficient and to grow better quality crops.

We have a few articles in the edition around our programme called AngelaWEB2.0. This programme enables our local managers to provide a customized, precise fertilizer programme. Our company has always believed in the nursery industry, and is the only global fertilizer company to invest so heavily in the range of products suited to our industry, and to provide in-field support. We love travelling and hearing from nurseries about how our team has made a difference, and are pleased to share some of those stories in this edition.

We hope you find the articles useful and that they remind you that the Everris team is always willing and able to support you to improve your nursery production.

Eric Lin, Business Director Asia Pacific John Walsh, Country Manager Australia & New Zealand

BLUE-MAX

Blue-Max is a coated aluminium sulphate specially formulated for use in the production of blue variety hydrangeas

Blue-Max features new polymer coated E-Max Release Technology that conveniently delivers controlled release aluminium sulphate to create and maintain the desired blue colour of hydrangea flowers.

AngelaWEB2.0

The ultimate tool for providing customized fertilizer recommendations

Everris has taken innovation to the next level and developed an important new web tool called AngelaWEB2.0. This is a powerful tool that contains recommendations for over 1,000 crops, providing specific Osmocote and Peters programmes to best fit your crop needs. For Everris, this is the continuation of over 40 years of commitment to the nursery industry – further enhancing our team of locally based, globally linked, well trained advisers in the field.

Winner of the Technical Excellence award at the Four Oaks Trade Show 2013, AngelaWEB2.0 is billed as the ultimate precision nutrition tool. Developed in-house, this sophisticated software programme is designed to help optimize plant quality and grower returns.

Simple and quick to use, this software tool contains over 900 individual recommendations tailored to specific ornamental and fruit crops at different growth stages. As well as all major bedding plant crops, the programme is geared towards more specialist lines including cyclamen. Pot plant growers are well served with tailored recommendations for crops from potmums to phalaenopsis orchids, while herbaceous and container nursery stock growers are also catered for.

Precision nutrition

At a time when nurseries are constantly looking at ways to minimize input costs while retaining quality, precision nutrition is an attractive proposition. While helping to ensure plants get what they need, AngelaWEB2.0 promises to save growers valuable time while helping to ensure mistakes are not made and valuable nutrients are not wasted.

Many factors impact on plant quality, and correct nutrition is among the most important. It not only has a significant role to play in preventing plant diseases, but is vital to healthy growth and financial performance.

"Performance will be compromised if a plant is lacking in a particular nutrient," says Andrew Wilson, Technical Manager at Everris UK. "Symptoms range from stunted growth to delayed and/or reduced flowering. However, apply too much of one or more nutrients and money is being thrown away with adverse consequences for both the bottom line and the environment."

Impact of pH and salt levels

"Each crop needs the correct nutrients to flourish," says Andrew Wilson. "Nursery managers have an array of controlled release and water soluble fertilizer products at their disposal to help them achieve this. However, other factors impact on a plant's nutritional requirements; namely its growth stage, the growing media and its pH and electrical conductivity (EC) salt levels. Water quality and application method is a key parameter when devising a nutrition programme. At many nurseries this changes through the season as they switch between different water sources."

If the pH falls outside the ideal range, disease outbreaks and severity are likely to increase while nutrient solubility, and therefore availability, is altered. Nutrient availability reduces when the pH moves outside the optimum of around 6.

EC is a measure of the concentration of dissolved salts and directly influences growth performance. Depending on the EC level, fertilizer applications may need to be increased or decreased.

AngelaWEB2.0 technology

Explaining how AngelaWEB2.0 works, Andrew Wilson says: "We start by entering the crop type and details including variety and growth stage. From this information the programme displays the crop's specific nutritional demands. Next we input data from a detailed analysis of the water source and how it is to be applied – i.e. overhead, ebb and flow or drip irrigation. AngelaWEB2.0 now calculates a recommended fertilizer regime using an extensive range of our controlled release and/or water soluble fertilizers. The programme produces a graph clearly showing the percentage of the plants' nutritional needs being fulfilled at each growth stage, as well as the EC level."

"We can simply input the new data and the software makes the necessary tweaks"



Product Advantages

- 100% coated to limit exposure to overdoses, minimising root burn
- Consistent release eliminates repeated applications; saves time, labour and money
- Risk of phytotoxicity is significantly reduced compared to drenches.
- Lasting colour inspires retailer/consumer satisfaction

Essential nutrients

A confusingly large number of elements are found in plant tissue, sixteen of which are indispensable. Without these, plants show deficiency symptoms and eventually die. Alongside carbon, hydrogen and oxygen, all readily available from the atmosphere or soil water, plants require an additional thirteen nutrients. Nitrogen, phosphorus and potassium are termed macronutrients and are used in the largest quantities.

Calcium, magnesium and sulphur are termed secondary nutrients, while the remainder are categorised as micronutrients, or trace elements, and include iron, zinc and copper. An inadequacy in any one of the above nutrients, and plant growth is quite simply inhibited. In addition, plants can benefit from supplies of cobalt, sodium and silicon, but these are non-essential.



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Osmocote Topdress FT (Fusion Technology) 4-5 month is our coated fertilizer using Osmocote technology that has been specifically designed for topdress applications in container nursery stock.

It contains fast and slow release nitrogen, phosphorus and potassium, as well as magnesium and all the essential trace elements. Osmocote Topdress FT is an immediate and long term fertilizer where nutrients are released over a period of 4-5 months whilst still providing upfront nutrition for fast green up. It can be topdressed on containers for quick greening-up or for corrections of deficiency symptoms.

Knowing that container nursery stock plants tend to fall over in windy conditions, Osmocote Topdress FT also contains a component which makes the product stick to the growing media, so if the plant falls over you know you haven't wasted your time and money applying a topdress.

Product Advantages

- Contains fast, slow and controlled release nutrients
- Fine granule size for an even distribution
- Sticks onto the growing medium no loss of any granules if the pots are blown over
- Dust free
- Contains extra trace elements for greening effect

Australia's oldest registered nursery looks to the future

Dibble-applying Osmocote Exact improves efficiency at Heynes Wholesale Nursery



Heynes Wholesale Nursery was first established in 1869, and is said to be the oldest registered nursery in Australia. Five generations of Heynes have contributed to make it one of the best production nurseries in Australia and a nursery that is always looking to the future.

In the early 1980s, the company moved to its current Burton site in the north of Adelaide. It enabled Garry Heyne to plan a site designed specifically as a production nursery and to this day it shows how much efficiency can be gained by a good layout. Around 10 years ago they took a further step towards improved efficiency and installed the latest Demtec potting system.

"Dibbling has also enabled us to fine-tune the Osmocote Exact product we use."

Whilst Garry is still involved every day it's the younger generation and Garry's children Carl, Adam and Sarah who now run the day-to-day operation of the business. Carl Heyne talks about the advantages gained from the automated potting system.

Garry Heyne and Carl Heyne with Everris representative David Frank

"We have found that we have reduced the labour and time it takes to get stock on the ground. The time we save can be better utilized by our staff in different ways around the nursery. Dibbling has also enabled us to fine-tune the Osmocote Exact product we use. We vary the longevity and analysis by crop, ensuring that we optimize the growing time and maximise the saleability of every batch. Over the years we have made lots of modifications to the dibbling equipment, we are now even looking at applying pre-emergent inline, saving us even more time"

Heynes Wholesale Nursery is a perfect example of a pioneering nursery family. Innovation coupled with a desire to grow stock more efficiently is the mainstay of the business and sure to keep Heynes at the forefront of the Australian Nursery Industry

Editor's note: Research shows that not only does dibble-applying Osmocote Exact improve efficiency of the fertilizer, it can prevent 95% of weed growth and improve efficiency of pre-emergent herbicides such as Rout.



Aylett's premium poinsettias

AngelaWEB2.0 has greatly simplified and improved the nutrition programme for Aylett's poinsettia crop.

Aylett Nurseries, founded in 1955 by the late Roger Aylett, remains a family run business based in St Albans, in Hertfordshire, UK. Alongside the thriving ndependent garden centre, the site has a busy production nursery with two acres of greenhouses. Unusually, all the plants grown on site are retailed through its garden centre – voted the third best Independent Garden Centre in the UK by Which? Gardening in 2010.

In spring the Robinson Agri greenhouses, fitted with Priva climate control, produce an array of bedding and bespoke hanging baskets. Production then swiftly changes to dahlias – a crop Avlett's is famed for with 36 consecutive RHS gold medals to prove it. As the season progresses, the production schedule moves to primroses, poinsettias and cyclamens.

Poinsettia crops have high production costs, and are a long crop requiring high heat input. "We grow 5,000 a year and sell them ourselves giving us genuine ownership over these plants," says Aylett's director Adam Wigglesworth, chairman of the HTA Retail Management Committee. "This is a point of difference we actively promote to our garden centre customers. These plants are labelled as 'fresh off our nursery' and it is of paramount importance that we get it absolutely right."

Giving customers a good choice, Aylett's grows a range of varieties including Bella Italia, Champion Red, Premium Picasso, Christmas Bells and White Christmas.

Generally UK-grown, poinsettias are fed a programme of water soluble fertilizers. However, keen to extend the crop's shelf life and ultimately maximize customer satisfaction, Aylett's management team made the decision to change tack and employ a controlled release fertilizer. After consultation with the Everris technical team, Osmocote Exact HiEnd (5-6 months) was selected and is incorporated at 3.5kg/m³ into the Levington growing media mix (70:30 peat/pine bark). The mix also contains Intercept 5GR, dolomitic lime, wetting agent H2Gro and base fertilizer (not all elements are available in products sold in Australia and New Zealand).

"A sophisticated product, Osmocote Exact HiEnd starts releasing nutrients at a slower rate to optimize root growth and plant establishment," explains Andrew Wilson. "As the demand of the crop increases later in the production cycle, the Osmocote Exact HiEnd releases a higher level of nutrients. This release pattern is unaffected by high temperatures making it ideal for this crop."

After inputting various data, including a detailed analysis of the nursery's hard water supply, AngelaWEB2.0 calculates the exact nutritional demands of Aylett's poinsettia crop. Highly flexible, having selected Osmocote Exact HiEnd 5-6M, it calculates the Peters Excel Grower water soluble programme for hard water required to run alongside it.

As with most nurseries, the water composition at Aylett's changes over the season. To ensure the feeding programme stays on track, samples of water and growing media samples are regularly analyzed by an independent laboratory, Natural Resources Management (NRM), to determine nutrient, pH and EC levels.

"With all Aylett's poinsettia crop information stored in AngelaWEB2.0, we can simply input the new water and growing media data and the software makes the necessary tweaks and adjustments to the recommended water solubles programme, producing new print-outs and reports," explains Andrew Wilson.

With experience of the AngelaWEB2.0 prototype for several seasons, Adam Wigglesworth is impressed. "Our poinsettia crop is a big draw for our customers," he says. "We have huge interest in providing the very best quality product. Generally, UK poinsettia production is of a very high standard and these plants are widely available from multiple retailers in the lead up to Christmas. To compete we have to produce plants of the very highest specification – a truly premium product.

"We've also utilized this tool to develop a precision nutrition programme tailored to our 10,000 cyclamen crop. AngelaWEB2.0 has greatly simplified and improved the nutrition of both crops. Our production team has clear recommendations to follow and the results speak for themselves. Plants are of premium quality. Grade out has been vastly reduced as our plants are of a premium size and significantly more uniform."

Aside from this, Adam says it has freed up more time to concentrate on other aspects of production, including working with BCP Certis to implement IPM programmes aimed at reducing chemical usage.

"Manually calculating nutrition programmes can be time consuming, complicated and there is plenty of scope for errors to creep in," explains Andrew Wilson. "This is particularly true for nurseries growing a wide variety of crops. With the rising price of mineral raw materials and transport costs, fertilizer is a significant input cost. Apply too much and growers are simply wasting money; apply too little and crop quality suffers."



AngelaWEB2.0 analysis showing the percentage of plant needs fulfilled from Osmocote Exact HiEnd at 3.5kg rate and from the hard water supply

AngelaWEB2.0 helps to grow better crops in Queensland

Ben McClernon uses AngelaWEB2.0 to save Ibrox Park Nursery money and time



For over 40 years, the team from Everris (and formerly Sierra/Grace Sierra/Scotts) have been working with growers to improve crops for the local nursery industry. A large part of this is in the experience of our staff and in the training and tools at their disposal. In Australia and New Zealand the team is led by Dr Sam Stacey, the Technical Manager for the Asia Pacific Region.

Ben McClernon is responsible for advice in the Queensland and Northern Territory region and has found AngelaWEB2.0 beneficial in helping to make better recommendations. As Ben puts it: "Many growers are working on outdated recommendations, and on rates that may or may not be soundly based. The advantage AngelaWEB2.0 gives me is the surety of the outcome, and the growers that I have used it with have seen better crops and often reduced fertilizer usage."

A case in point was at Ibrox Park Nursery in Burbank Queensland. Ibrox Park Nursery grows a range of advanced trees in 45 litre bags, and had been using 6kg/m³ of a 12-14 month product. Ben put in their local temperature information (sourced from Bureau of Meteorology, Redlands Research Station Data), into the AngelaWEB2.0 Controlled Release Fertilizer Simulation and came up with a recommendation which saw a product change to Osmocote Exact Lo Start 16-18 month at 7kg/m³, which has eliminated the need for costly topdress applications later on in the production.

"We are using less fertilizer overall, growing crops better than ever and we have eliminated the need to top-dress which saves us a lot of money"

Angela Fowell with Ben McClernon of Everris

Ben has now set up a temperature data recorder in the nursery to accurately log the media temperatures hourly over a 12 month period so as to further fine tune these recommendations in the second half of 2015.

Angela Fowell, Ibrox Park Nursery production manager, explains: "We are using less fertilizer overall, growing crops better than ever and best of all, we have eliminated the need to topdress which is saving Ibrox Park Nursery a lot of money in both labour and fertilizer."

Ben remarks, "I enjoy the fact that because of our R&D and extension in the field we are able to provide growers with objective information. AngelaWEB2.0 takes this one step forward and I love improving the outcomes for nurseries in my region."



AngelaWEB2.0 analysis showing the percentage of plant needs fulfilled from Osmocote Exact HiEnd alone.





Graph showing how closely the nutrition programme matches the poinsettia's demands.

Effective weed strategies

Dr Sam Stacey presents research showing dibbling leads to increased effectiveness of pre-emergent herbicides



Dr Sam Stacey, Technical Manager of Everris Asia Pacific has a broad range of responsibilities, leading the Regulatory, Research and Development and Agronomy departments over the entire region. Sam's favourite part of his job is visiting growers with our local managers and helping to interpret our products to increase the efficiency of production.

Sam also spends a lot of his time presenting at grower meetings and conferences mainly on plant nutrition. Recently he has presented on research conducted over many years on effective weed control in nurseries. The topics discussed were the effective use of Rout and Sierraron including the importance of correct application, rates and timing.

Of great interest to the audience was the research showing that the dibble technique of applying controlled release fertilizer (Osmocote) led to significant increased effectiveness of pre-emergent herbicides. The study was conducted by Altland, Fain and Arx, at Oregon State University and was first published in 2004. The research is available online, or you can contact your local Everris representative for a copy.

The Everris team are focused on finding ways to improve the efficiency of nurseries, and with weeds being such a high cost to control, we are very pleased to present ideas that lead to potentially better nutrition, reduced cost of labour and improvements on other inputs.

Sam travels the region presenting seminars on this and other topics and we hope to see you in the audience when he next presents in your area. The Everris team is available to discuss how this research could assist your production.

Creeping woodsorrel (Oxalis Corniculata)

Crops: Lavender and Euonymus

Fertilizer rate: 3.2 g/L





Data from: Altland et al. (2004) J. Environ. Hort. 22(2):93-99.

Everris at IPM Essen

David Franklin reports back on his recent trip to the world's leading horticulture trade fair



Everris factory tour group L-R: Scott Bromwich (Daltons NZ), Greg Carrick (Garden City Plastics Vic), Gerard (Everris), Robert Ross (Daltons), Matthew Mills (Garden City Plastics VIC), Craig Williams (Garden City Plastics NSW), Michael Watts (Taupo Native Plants NZ), Angela Knight (Garden City Plastics), Rob Grey (Garden City Plastics WA) Philip Smith (Taupo Native Plants NZ), Geoff Allison (Garden City Plastics VIC)

IPM 2015 was again held in the picturesque town of Essen, Germany. It's an interesting time of the year for a horticultural show in Europe; with the weather typically grey and cold it seems surreal to be heading to the biggest and best horticultural trade fair in the world. I had never been before but I have heard so much about the show and I wasn't disappointed.

As a nurseryman I was blown away by the diverse range of exhibits and in particular the variety of green life on show. I implore all growers who haven't been to make the time and see the show. The sheer size is daunting but so too is the inspiration you will leave with. It's only my second time in Europe but I am constantly impressed by the way they grow, market and ultimately use plants in everyday life. As an industry I believe we can learn much from the EU model and hopefully encourage the buyers of our products to use more plants more often. Everris has a long and prominent history in the horticultural market globally. It's fair to say we have had a few changes of name but it's the products and field support that remain the same and are still considered the benchmark for growers around the world. We have been present at the fair since its inception and use the opportunity to showcase our broad range of products and services designed to help growers achieve the best crop with the best returns.

This year I was not only lucky enough to represent our ANZ business at the IPM show, but I also had the pleasure of hosting a group of distributors and growers to our production facility in Heerlen, Netherlands. Over the years we have hosted different groups through the plant and our Research & Development facilities to highlight and tell the story of Osmocote. Sometimes when you tell a story so many times it can lose its meaning, so it's great to be able to show people why we believe our quality assurance procedures provide growers with the safest products that ultimately provide the best value for money.

From Everris distributors

"Our team of five key people were very grateful to be invited to tour the Everris factory in Holland firsthand. The presentation we were given regarding the quality and consistency put into every batch of Osmocote by the Development and Production staff was amazingly informative. Our relationship with Everris as our chosen major supplier of controlled release fertilizer to Garden City Plastics has only strengthened due to the extra knowledge we've brought away and the certainty we feel when recommending this range."

— Geoff Allison, General Manager Garden City Plastics



"I am fortunate enough to have visited three different production facilities worldwide. What struck me most about the Everris facility was the patented coating technology which is obviously very sophisticated." — Scott Bromwich, Daltons



The impossible is now possible For the first time NPK, calcium, magnesium, trace elements, and sulphur are available in a single product. No precipitation problems. Specially developed for soft water.

Soft water often lacks calcium and/or magnesium, two elements that are important for the growth of crops. In addition, the absence of sulphur in soft water can result in symptoms of nutritional deficiencies in many crops such as poinsettias or pelargoniums. Finding a solution for this problem is difficult, since adding sulphur in the form of sulphates can result in the precipitation of products containing calcium.

The new formulae in Peters Excel CalMag with Organic-S have been specially developed for soft water. One single product supplies NPK, calcium, magnesium, trace elements, and sulphur of natural origin. This special formulation optimizes chelation of trace elements and in this way improves root growth without causing precipitation of nutritional elements. The combination of sulphur of natural origin with calcium is 100% soluble.

Peters Excel CalMag for soft water with calcium, magnesium, and sulphur

CalMag Grower 14-2.6-11.6+4.6Ca+1.5Mg

The N:K balance is designed to encourage growth. It can also be mixed with calcium nitrate. Contains all necessary nutritional elements and Organic-S, sulphur of natural origin, which promotes chelation and encourages root growth.

CalMag Finisher 12-2.6-16.6-4.6Ca+1.2Mg

Often used to support the application of CalMag Grower 14-2.6-11.6. High in potassium, it promotes more compact growth. Contains all necessary nutrients and Organic-S.

Choose Peters Excel CalMag because:

- It is specifically designed for use with soft water.
- It ensures healthy plant growth due to the constant supply of calcium and magnesium.
- It contains Organic-S, sulphur of natural origin for optimum absorption and high yields.
- It is extremely reliable because of the raw materials used.
- It provides perfect colour and stable growth due to high content of chelating trace elements.
- It offers maximum availability and absorption of nutrients with the innovative M-77 technology.
- It has all elements mixed in a single container.

Everris Australia Pty Ltd

Suite 211, 33 Lexington Drive Bella Vista NSW 2153, Australia

Everris Regional Sales Managers

NSW & ACT Robert Megier 0418 239 503 robert.megier@everris.com VIC, SA & TAS David Franklin 0418 350 984 david.franklin@everris.com QLD & NT Ben McClernon 0418 731 991 ben.mcclernon@everris.com WA Joska Stroobach

Australia Freecall 1800 789 338 or +61 (2) 8801 3300 F +61 (2) 8824 4833 New Zealand 0274 908 438 info.anz@everris.com www.everris.com.au





0416 041 759 joska.stroobach@everris.com

NZ

Nicola Rochester 0274 908 438 or +64 274 908 438 (outside NZ) nicola.rochester@everris.com

Everris Australia Pty Ltd, Suite 211, 33 Lexington Drive Bella Vista NSW 2153, Postal address: PO Box 6170, Baulkham Hills NSW 2153 New Zealand PO Box 125, Whitford, Auckland 2149, New Zealand. Everris Pty Ltd ABN 83 148 200 962, trading as Everris Australia. Items marked ™ and ® are trademarks of Everris, its subsidiaries, or partners. © Everris Australia Pty Ltd 2015 7577.0315