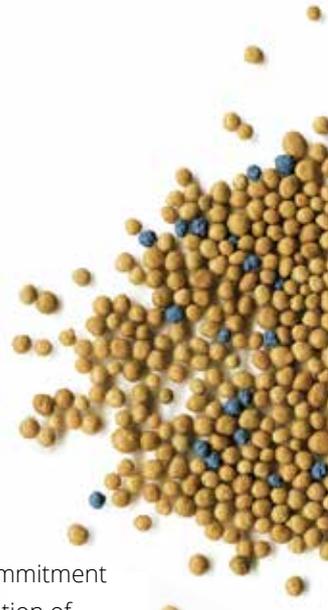


Osmocote®

Celebrating a fifty-year history 1966 to 2016



Few people in the industry today would remember the introduction of the first Osmocote in 1966. It was a time when interest in container nursery stock production was developing rapidly, and growers were facing the challenges of



the new soil-less growing media. Fifty years ago, Osmocote represented the start of a whole new principle of fertiliser application.

Now, with four generations of coated fertilisers, Osmocote still leads the industry with the broadest and most effective range of solutions. From the original NPK to the addition of trace elements, patterned release and the more recent science of programmed release, Osmocote can provide the right solution for every situation.

The company behind Osmocote has changed a number of times over the

past 50 years, leading to the current change to ICL. This change from Everris to ICL represents the true strength of our global organisation and the people, processes and structure that will drive future research, development and

support for Osmocote in Australia and New Zealand, and around the world.

Strong technical support has been a

focus for Osmocote since the 1970s when Bob Severns, President of the Sierra Chemical Company, made "going to the growers" a fundamental key to the Osmocote business. This led to the establishment of major R&D facilities in the Netherlands and a global network of Technical Advisors.

Today our local Technical team, led by Dr Samuel Stacey, continues to provide support for growers throughout Australia and New Zealand, with Joska Stroobach in WA, Nicola Rochester in NZ, Ben McClernon in QLD and NT, Robert Megier in NSW & ACT and David Franklin in Vic, SA & Tas.

The passion and commitment that led to the invention of Osmocote has continued through to today, driven by the belief that a nutrition program should not only increase yield with healthier, more saleable plants, it should also assist in saving management time and reducing costs where excess or inappropriate fertilisers are being used.

'Going to the growers' a fundamental key to the Osmocote business

Bob Severn, President of the Sierra Chemical Company

As a team, we are proud to support the industry and we value the trust placed in us by the many growers we have worked with.

We would love to hear your Osmocote stories and hope you will join with us to celebrate the fifty-year history of Osmocote throughout 2016.

ICL
Where needs take us



Celebrating a fifty-year history of Osmocote 1966 to 2016



1965-66

Development of coated-fertiliser process

The coated-fertiliser method was invented by a large grain firm, Archer Daniels Midland Corporation.

Initially intended for cereal crops, the product (which they called Osmocote) proved too expensive for widespread agricultural application.

Osmocote better suited a specialty market and a decision was made to sell the product and the technology.

1966

Sierra Chemical Company established

Two complimentary technologies formed the basis for the company, Osmocote coated fertiliser and Agriform fertiliser tablets.



1966

Osmocote 1st generation coated fertiliser developed

The Sierra Chemical Company introduced the 1st generation coated fertilisers in 1966: an NPK granule with an organic resin coating around it, ensuring that only one application of nutrients would be enough for a long period of time. This was the start of a whole new principle of fertiliser application.

1970

New 8-9 month formulation

The development and introduction of a new Osmocote 8-9 month formulation reduced the need to topdress crops every three months.

1968

First trials with new soil-less growing media

With interest in container nursery stock production developing rapidly, Osmocote provided a solution to the challenges of new soil-less growing media, and the first trials were commenced.



Key people at the Sierra Chemical Company in the 1980s, Bob Severns (President) with Jay Rosse and Bill Floyd (both Grower Services) inspecting Osmocote production facilities.



The first advertisement for Osmocote in New Zealand appeared in Commercial Horticulture in 1969.

1978

European manufacturing

In 1977 the construction of a plant in the Netherlands commenced, and in 1978 Sierra opened its new European manufacturing site in Heerlen.

1978

Trace element formulation

Following extensive trials, Sierra introduced Micromax, a formulation made from soluble salts of trace elements.

In addition to obvious advantages, it contained several sulphates that boosted available sulphur levels when incorporated into soil-less media.

1981

Introduction of dibbling

Sierra introduces the dibbling process, with Osmocote being placed in a hole and the plant placed over the Osmocote.

This reduced the need to add Osmocote to bulk media enabling growing media to be stored indefinitely.

1980

Optimising global and regional operations

A decision was made by Sierra to source all Osmocote products for Australia and New Zealand from the Netherlands. The Australian operations now came under the Dutch branch of the company. Regional Managers were appointed in Queensland, NSW, WA, Victoria, SA and New Zealand.

1983

Osmocote Mini introduced

Sierra introduced Mini Osmocote, one fifth the size of a standard granule, and providing 10 times the number of granules per unit weight.

The granules are so small that good distribution can be achieved in volumes as low as 20mL.

This made Osmocote Mini ideal for plug production.

1983 and 1989

Osmocote 2nd generation coated fertiliser developed over two phases

With trace elements incorporated in the NPK prills, these 2nd generation products provided new advantages to growers

- one-shot application, especially in relation to dibbling
- the spread of micronutrient supply over the whole release period instead of relying on the medium to hold separate nutrients during the plant's growth cycle.

1989

Grace-Sierra formed

Sierra's two major shareholders retire and sell their shareholding to WR Grace & Co.

A new organisation, Grace-Sierra, is formed.

1994

Scotts acquires Grace-Sierra

By acquiring Grace-Sierra The Scotts Company adds Osmocote controlled-release fertiliser technologies along with other leading products including Banrot and Peters.

Towards the end of the year, Scotts Australia was born.



2002

Osmocote 3rd generation coated fertiliser developed

The result of 3rd generation innovation and development, Osmocote Exact provides maximum guarantee of good growth and perfect quality.

This 3rd generation is ideal for cultivation in greenhouses, fertilising with plant hole dibbling equipment, growing sensitive species and high value crops, or if applying 75% or more of nutrients by coated fertiliser. Longevity and release pattern are guaranteed.

2011

ICL acquires Scotts Professional

ICL acquires Scotts Professional products including Osmocote R&D and production sites. The new fertiliser company is branded as Everris.



2015

Everris becomes ICL

Our change from Everris to ICL represents the true strength of our global organisation and the people, processes and structure that will drive future research, development and support of Osmocote in Australia and New Zealand, and around the world.



Denis Hughes of Blue Mountains Nurseries speaking at one of the many Grace-Sierra potting-mix seminars in the early 1990s.



Greg Neighbour, Grace Sierra's grower services manager inspecting orchid trials with a New Zealand grower in 1990.

2008

Osmocote 4th generation coated fertiliser developed

Featuring the unique breakthrough technology of programmed release, Osmocote Exact DCT (Dual Coating Technology) is the latest generation in the Osmocote family.

Programmed release is the science of pre-defining nutrient release to improve crop yields and quality even further while saving time and money. This is achieved by applying a second coating to a proportion of the prills, thus delaying part of the nutrient release to a later time. Varying the percentage of dual coated granules determines the release pattern.

2016

Osmocote grows 50 years

With four generations of coated fertilisers Osmocote still leads the industry with the broadest and most effective range of solutions.

Four generations of Osmocote still providing the right solution for every situation



1966
1st generation coated fertiliser
Original Osmocote with NPK



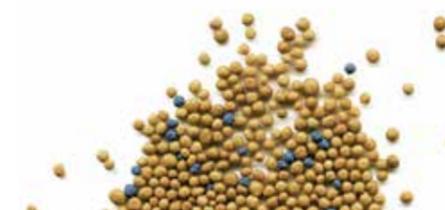
1983 and 1989
2nd generation coated fertiliser
Osmocote Pro with NPK and trace elements



2002
3rd generation coated fertiliser
Osmocote Exact with NPK and patterned release



2008
4th generation coated fertiliser
Osmocote Exact DCT programmed release





1969 A New Zealand Nurseryman's Association visit to California provided opportunities to meet the Sierra team and learn about Osmocote and nutritional programs for soil-less growing media.



1984

Quality assurance testing being completed by the Sierra Chemical Company's Corporate Research Director, Garry Hargrove with Catherine Alley.

WORLD'S SIMPLEST LIQUID FEED SYSTEM



Osmocote
CONTROLLED-RELEASE FERTILIZERS FOR HORTICULTURAL CROPS

Experts agree, the most effective way to grow top quality plants is to include small amounts of nutrients with each watering. Research has shown that the ideal system is one that provides plants with a "constant liquid feed". But the ideal is seldom achieved in practice. And that's where Osmocote—the world's simplest liquid feed system—comes in.

With Osmocote, there's no expensive injector to buy; no risk that human errors or mechanical failures will harm your plants. Once you apply Osmocote—by incorporating it in your soil mix or by top-dressing it after planting—all you do to achieve its patented, automatic feeding mechanism is add water.

As moisture penetrates Osmocote's resin coating and dissolves its nutrient core, each dry granule is transformed into a tiny reservoir of liquid plant food. Minute quantities of liquid nutrients are continuously metered into the soil—every minute of the day and night. And that is about as close as you can get to a "constant liquid feed" system!

Proven under greenhouse and field conditions, there is an Osmocote formulation for virtually every crop and growing condition.

Full particulars from any branch of
DALGETY-LOAN or FRANK M. WINSTONE (Merchants) LTD. 2731

CH 119 For further details use service card

OSMOCOTE IN ACTION

Once Osmocote is applied to a crop, soil moisture penetrates its resin coating and dissolves the high analysis nutrient core, transforming each dry granule into a tiny reservoir of liquid plant food. An increase in osmotic pressure within the granule meters the liquid nutrients through the resin coating and into the surrounding soil.

1970 This Osmocote advertisement introduced the then new 8-9 month formulation which reduced the need to topdress crops every three months.



Run your fertilising program like clockwork

Osmocote® Exact® DCT brings a timely new science to the Osmocote Family

Reducing your time spent fertilising is now as easy as DCT. Osmocote Exact DCT (Dual Coating Technology) is the latest generation in the Osmocote family. This new 4th generation features the unique breakthrough technology of programmed release.

Programmed release is the science of pre-defining nutrient release to improve crop yields and quality even further while saving you time and money.

This technique is achieved by applying a second coating to a proportion of the prills, thus delaying part of the nutrient release to a later time. Varying the percentage of dual coated granules determines the release pattern. Essentially you fertilise once and let Exact DCT do the rest for you.

standard
bi-coat
bi-coat
tri-coat

Osmocote Exact, now with a wider range of release patterns.

Which Osmocote is right for you?
Ask your distributor or Scotts representative for a Grower Recommendation analysis.
Australia: Freecall 1800 789 338 or visit www.scottsaustralia.com
New Zealand (09) 299 6558 or visit www.scottsnz.com

The world's famous family of controlled release fertilisers



Scotts created controlled release coated technology in 1967. In its 4th generation, the Osmocote family now gives growers even greater choice to match the fertiliser to their business and crop needs.


Scotts
Growing success

2010 This Osmocote advertisement featured unique fourth-generation technology which pre-defines nutrient release to improve crop yields and quality while saving time and money.

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