



**TERRACOTTEM**<sup>®</sup> 25 *years*  
Leading soil conditioning technology

# CONTENTS

Introduction..... 4 - 7

Every Picture Tells A Story (Spain) ..... 8 - 9

A Truly Unique Stadium (Argentina)..... 10 - 11

Australian Wildlife Moves In (Australia) .....12 - 13

Worldwide Acclaim For Floral Displays (Belgium).....14 - 15

A Total Green Solution (Belgium) .....16 - 17

Plane Trees Sparkle (Belgium) .....18 - 19

Above Par Park (Brazil) .....20 - 21

Ground Breaking Garden Provides Oasis Of Calm (Australia) ..... 22 - 23

Golden Expertise (Colombia).....24 - 25

Guaranteed Success (Czech Republic) .....26 - 27

Big Bare Meadow No More (Czech Republic) .....28 - 29

Calais Achieves Accolade (France) ..... 30 - 31

The Road to Biodiversity (France).....32 - 33

Quiet Green Solution To Noise (Germany).....34 - 35

A Match Made In Heaven (Germany).....36 - 37

Unique Garden Blooms Again (Greece).....38 - 39

Winning Ways On The Pitch (Hungary) ..... 40 - 41

Prime Position In Platinum Park (Poland).....42 - 43

Everyone Is A Winner (Holland) ..... 44 - 45

Transplanted Trees Flourish (Republic Of Korea)..... 46 - 47

Reclaiming land with windscreens (Serbia).....48 - 49

Relaxing Calm In Busy City (Gibraltar) ..... 50 - 51

Olive Trees Survive Spanish Heat (Spain).....52 - 53

Charity Across The World (Belgium / South Africa).....54 - 55

Translations.....56 - 67

Thanks .....70 - 71



**TerraCottem founder, Bernard Devos has been the passionate force behind the company over the past 25 years. During that time he has seen many changes and in discussion with daughter Carol who has managed the company for 20 years, he looks at their achievements and what the future holds.**

**CD. When you first launched TerraCottem as a soil conditioner what did you want to achieve?**

**BD.** Originally I came from the textile industry and when I was approached to buy the TerraCottem licence in 1992, I was drawn by its immense possibilities both from a business and humanitarian point of view. Some 10 years earlier Prof Dr Willem Van Cotthem and a team from the Laboratory of Plant Morphology, Systematics and Ecology at the University of Ghent (Belgium) started a research program to grow plants in the Sahel region of Africa using only the available rainwater. They found that by mixing certain hydroabsorbent, nutritive and root growth stimulating components together, that a superior soil conditioning compound was attained, which produced dramatic and swift results. The result was TerraCottem, the soil conditioner that has been improving growing conditions and plant growth ever since.

In the beginning I tried TerraCottem in my vegetable garden in Spain and was amazed by the results: 'furious growth' as our Australian distributors like to say! I have always been a bit of a rebel and enjoy the challenge of going against the grain. TerraCottem was a perfect opportunity to do things differently and better. A good example is our first commercial project: the football pitch in my home town Waregem on a 95 per cent sand root zone layer which was totally unheard of at that time in Belgium! Again we achieved excellent root and grass growth in a very short time. I was immediately convinced. This product had huge potential and I thought it deserved a good marketing strategy and an international distribution network. I had the means to do it and started the business in January 1993.

**CD. When you look back at the past 25 years, what are you most proud of?**

**BD.** I think it's all the barriers we have broken. I knew very little about soils when I was introduced to TerraCottem, but I understood the possibilities it offered. It was the opportunity to grow plants in poor or degraded soils and that its use was not limited to only dry climates. In the early '90s soil conditioning was only known to an esoteric public and generally only in countries with an arid climate or for very specific applications such as sports pitches. Water availability and quality were only of concern in certain areas of the world. These days they are hot items. Even in areas



with typically frequent and abundant rainfall, precipitations have become more erratic and of concern when planting. We have raised awareness and in many areas educated people. Soil conditioning is a much better established concept nowadays in our professional industry and water savings is on everyone's agenda. TerraCottem has passed its growing pains. It has entered adulthood.

I am also very proud that the company remains a family business.

**CD. Are there some highlights?**

**BD.** On the humanitarian front we have sponsored numerous projects. One in the Gobi desert with ingenious greenhouses, hospital and school gardens in various African countries, erosion prevention near the San Pedro river in the Navajo Reserve in Tucson, to name a few. Commercially, we have enabled our clients to bring some of their mad planting dreams to fruition: from hanging grass sculptures and trees, to growing a lawn on a beach. There are plenty of examples of less mad projects but challenging ones in this book. We are present in more than 40 countries worldwide and have built a network of very loyal distributors and clients that share our values!

These days we are focussing more than ever on the synergetic effect of all the product's components, on root and plant growth and the holistic approach to achieve successful planting projects.





**CD. Why do you think TerraCottem is so successful and leads the field and has established itself in over 40 countries?**

**BD.** They – that’s Universal, Complement, Turf and Arbor – are still the best performing all-in-one soil conditioners. There are studies abound that prove their superiority compared to other soil conditioners or copies. But TerraCottem goes hand in hand with good horticultural practice, which is supported by our authorised distributors worldwide. Part of the success is also down to the work our distributors do. They are ‘real believers’; some are even obsessed by TerraCottem. It’s almost like a cult, a big family. We are very proud on the relationships we have with our distributors.

**CD. 25 years on the world has different challenges - lack of green spaces in heavy populated areas, climate change pressures, lack of water and the need for more sustainable solutions for plant growth. Surely all this means a bright future for soil conditioners?**

**BD.** Yes indeed! TerraCottem addresses some of the world’s biggest issues such as lack of water, hunger and deforestation. With just 20 grammes and a single application in the plant’s lifespan, TerraCottem helps a plant to settle in, grow faster and survive, often in very hard conditions, such as sandy soils, reclaimed land, soil with high salt content, areas with little rainfall or difficult access for watering. TerraCottem is a product for the present day and the future.

**CD. And what of that future?**

**BD.** The main challenge is to differentiate ourselves from bad products and copies that appear on the market and that disturb the confidence in soil conditioners. TerraCottem is a complex product and we need to simplify the message. With changing conditions and increased environmental pressures we have to continue to demonstrate its ability, benefits and longevity. It is the cost effective solution and so different from the copies. We want the industry to view TerraCottem as an indispensable tool, in a world where soil and water availability becomes more critical. Adding grams of TerraCottem to the soil when planting should become an automatic gesture.



**CD. The oak tree that is featured on this page above has been transplanted and flourished thanks to TerraCottem, what is the science behind that achievement?**

**BD.** This cork oak tree is 200 years old. It was a very important challenge for me to ensure its survival, as these trees generally don’t survive transplant. There was a lot of expectation surrounding the transplanting of this tree, as I convinced specialists TerraCottem would make a difference and the tree would not only survive but also thrive. I had a picture taken just a couple of months after the transplant and another almost 20 years later. This tree proved many people wrong. The secret of this little miracle is of course the right rate of TerraCottem but there are other very important actions: the swift execution of the transplant to prevent the fine roots from drying out, preferably removing and planting the tree in the same day. The tree’s roots have to be covered to protect them against sunlight. It also needs to be protected from bark damage. I also recommended mixing some soil from the tree’s previous site with the soil at the new destination. And finally irrigate thoroughly after planting. I have since planted over 20,000 trees and shrubs with very high tree survival rates.

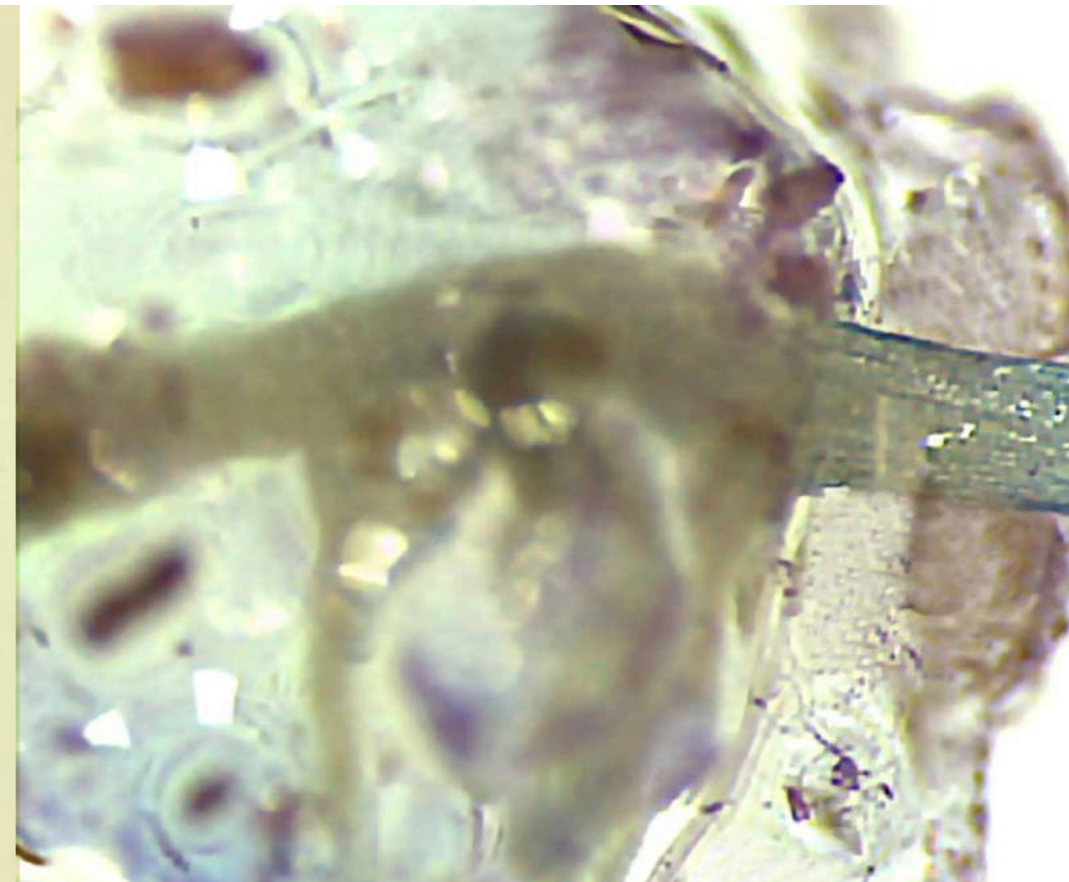
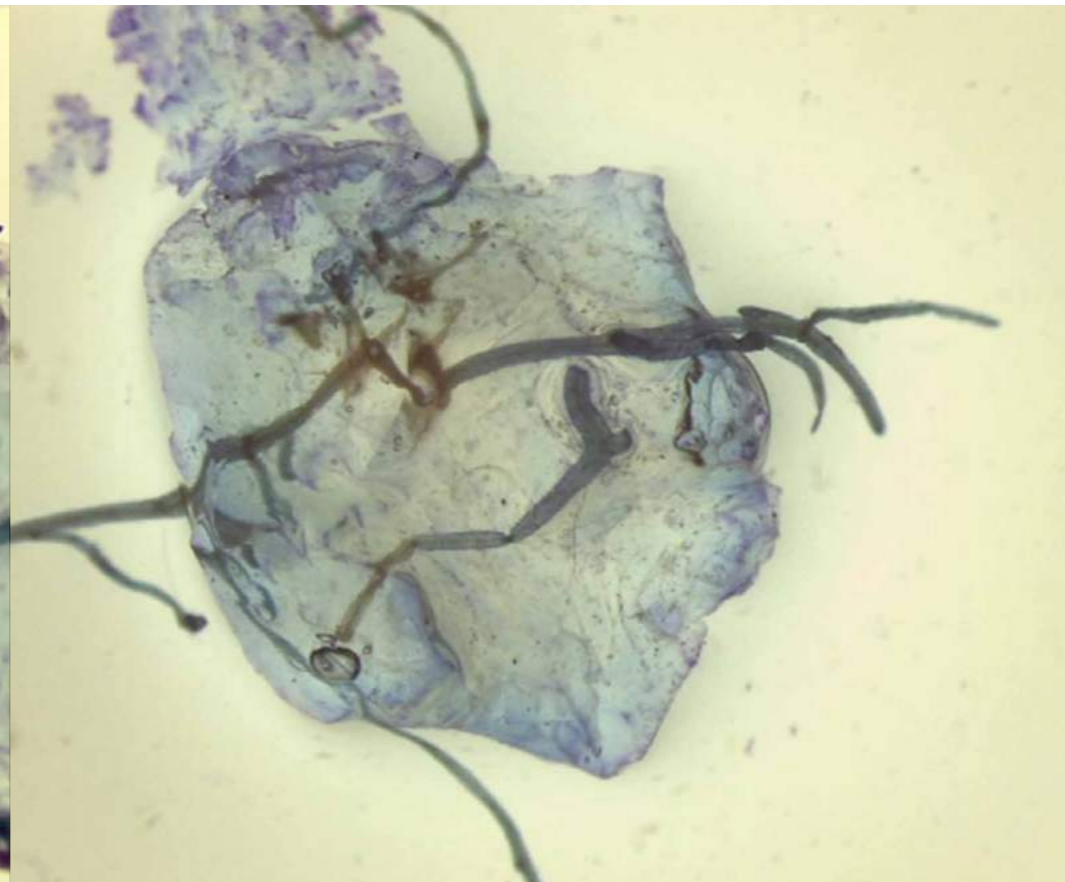
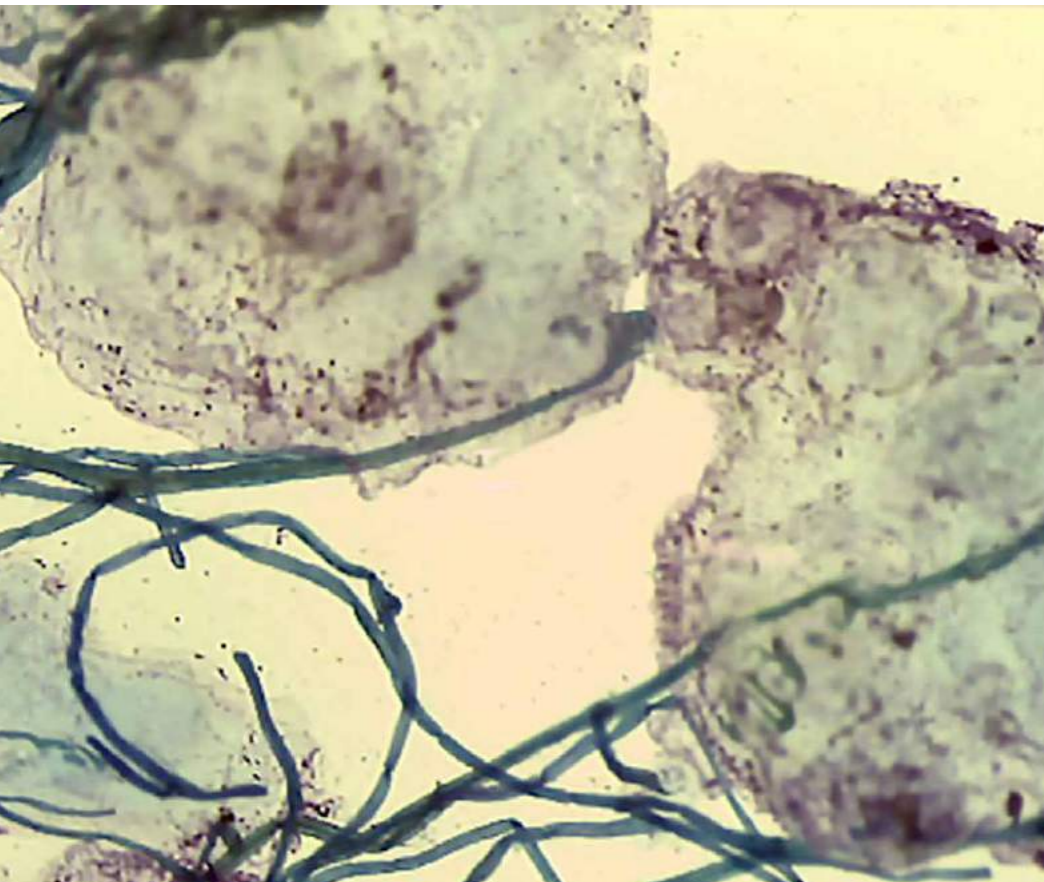


## EVERY PICTURE TELLS A STORY

The Institute for Mediterranean and Subtropical Horticulture 'La Mayora' in Malaga, Spain ran some trials on tomato seedbeds in vermiculite and perlite substrates, both ameliorated with TerraCottem. Dr María Remedios Romero Aranda, Plant Physiologist at the Plant Breeding and Biotechnology department explains: "The nutrition and development of plants can be perfectly controlled in these inert substrates, however over time they become compacted and loose aeration and water retention capacity. That's why we wanted to test the behaviour of TerraCottem on these substrates."

The addition of TerraCottem resulted in a rise of the water retention capacity in both the perlite and vermiculite substrate. There was also an increase in biomass production in both substrates and this was for both the under ground (roots) and the above ground growth (leaves and stem).

"Personally I was keen to see if the root hairs would penetrate inside the polymers contained in TerraCottem. The pictures I took with my microscope of the tomato root hairs speak volumes."







## A TRULY UNIQUE STADIUM

The multi-purpose stadium located in the city of La Plata, Argentina, also popularly known as the Estadio Único, was partially inaugurated in 2003. Soon afterwards the stadium underwent further work to convert it into an all-seater roofed stadium. At the time of its official inauguration in February 2011, the stadium was considered the most modern in Latin America.

The stadium's 7,350 m<sup>2</sup> pitch has another unique feature for Argentina, a pitch consisting of more than 6,600 plastic modules that can be entirely removed within 24 hours. The plastic modules are filled with a drainage layer and a growing medium of 95% 180/220 sand, 5% peat and 150 grams TerraCottem per sq m. to increase the poor water and nutrient holding capacity of this root zone layer. The growing medium is then covered with Tifton 419 - Tifway turf and overseeded with ryegrass.

As the stadium hosts many mass events it also has a reserve pitch. This pitch is built in the same way as the first but with a slightly different composition: 90 per cent 180/220 sand, 10 per cent peat and 120 grams of TerraCottem per sq m.

Alfredo Schappi, responsible for the stadium's pitch commented: "This tray system needs 18 months without play in order to establish itself properly. Based on my 15 years of experience with TerraCottem, I increased the TerraCottem rate of the main pitch slightly to get faster and deeper root development and used peat as a binder. We managed to get the pitch ready in record time! The first match was played just 40 days after the modules were turfed and shortly afterwards the stadium hosted six matches of the Copa America 2011."

With the industry's ever growing demands on a pitch's performance and endurance, as well as the stadium's profitability, the La Plata Stadium pitch is currently undergoing works to receive a PlayMaster field in a modular system. This pitch will have the same substrate composition and grass species as in the 2011 reconstruction works. Once completed, the Ciudad de la Plata stadium will again be unique and have a last generation world-class multi-use pitch - staying true to its nickname 'Unique Stadium'.





## AUSTRALIAN WILDLIFE MOVES IN

Nested in one of the Onkaparinga River's final bends before it empties out into Gulf St Vincent in Southern Australia, a decommissioned sewerage plant offered up a surprising amount of potential. The site, part of an existing coastal wetlands setting is close to the growing suburb of Noarlunga Downs. Any remedial works here would mean local residents would suddenly have three hectares of new public open space to walk through. The views would certainly improve, and the

amount of wildlife that was expected to move back in would be impressive.

Jamie Horne, the Environmental Services Manager of LCS Landscapes, the firm that planted the space, is genuinely amazed at how quickly the wildlife, as he puts it, 'set up camp'. It was a case of if you build it they will come.

In the last-century sewerage treatment usually ended in ponds where the remaining sludge was allowed to settle and dry out before recycling. In the case of the plant at

Christies Beach, the series of ponds sat together with a wide track around them. Turning this bleak vision into something vista-worthy was tricky, but a solution was reached with the clever use of earthworks and plants. The old tracks were retained for foot traffic, but the ponds were reworked to soften the old boundaries and to create promontories and islands. A gentle hill rises to one side with a new track to its summit from where there is now a view across the newly re-

worked ponds and the winding river towards the sea.

The plant species list and zoning plan was meticulously put together by SA Water and three local propagators and growers were commissioned to produce the 187,000 local provenance plants. It was then up to Jamie Horne and his team to get these into both the terrestrial and aquatic sections of the project. "We had 10 people on the team which started planting in August 2013, finishing in October. All of the plants that went

into soil were planted with TerraCottem, and I'd put the success rate conservatively at 95 per cent. The decision was made not to use mulch - the look we were aiming to achieve was to be as natural as possible - and this did contribute to the soil drying out very quickly.

"It is still early days, but the transformation is taking place. The gentle hill is covering itself in sections of shrubland and open woodland. And the same transformation is taking place around

the ponds - which are looking more like lakes - and are rimmed by the riparian plantings. But it's the aquatic species, plugged into the bottom of the ponds with Hamilton tree planters, which have probably made the biggest biodiversity impact. And the biggest change is the arrival of the birds from Fairy Wrens to Pelicans, they have all taken up residence."



## WORLDWIDE ACCLAIM FOR FLORAL DISPLAYS

Oudenaarde, a historic city of the arts in the beating heart of the Flemish Ardennes, is famous for its floral displays. The area of the Flemish Ardennes covers a hilly region in the south of the province of East Flanders in Belgium, with Oudenaarde being one of its major cities. The Oudenaarde floral displays have become a real delight for the eye of its residents and the many tourists. This long-standing tradition of flowers has resulted in an exceptional success for the city, both at regional, national and international level.

Stefaan De Smet, Horticultural Officer at the city of Oudenaarde remembers: “The renowned trade fair Flanders Technology International brought TerraCottem to our city, which was during the early stages of the company. We were keen to try this new technology to improve our work. Very early on we saw our maintenance costs drop and since then we have continuously used TerraCottem in our annual planting.”

“In 2017 we have planted 9,000 annuals including Pelargonium, Helichrysum, Bidens, Glechoma, Surfinia and Sunpatiens in various flower bowls, planters and towers, in a potting soil comprising of 50 per cent black peat, 40 per cent turf moss of white peat and 10 per cent clay. The soil was improved with 1.25 kilos Pg Mix 14-16-18, 1.5 kilos basacote 5-6 months (15-10-12) with Mg and Fe and 5 kilos TerraCottem Universal per

cubic metre of soil. We do not add any fertiliser during the entire season. All the flower displays were watered once a week, whereas previously when we didn't use TerraCottem, we watered up to three times a week.”

A further 11,000 Begonia ‘Dragon Wing Red’ were planted in flower beds, enriched, as customary, with recycled potting soil from the flower towers of the previous season and TerraCottem Complement.

“Good planning, the investment in the right materials and the dedication of our staff lead to very high standards of planting throughout the city centre and all the parks, as well as substantial savings in maintenance and plant replacement. Our efforts pay off and we draw a great deal of satisfaction from the gratitude we receive from residents and visitors and the invaluable recognition beyond national borders.”





## A TOTAL GREEN SOLUTION

Imog, an inter-municipal public company in Belgium provides integrated waste treatment for over 230,000 inhabitants from 11 municipalities. Their site in Moen covers more than 27 hectares and undertakes numerous operations. One of them is green composting, producing an annual 10 million kilos of compost for the landscaping industry.

The landfill with natural water purification is the foundation of this waste treatment plant. To complete the landfill site, Imog worked with Kristof Vromant, a certified 'native plants' landscape contractor to establish an indigenous green belt on the disposal area's slopes. More than 3,000 plants from a selection of 12 species, including: *Ligustrum vulgare*, *Prunus Padus*, *Viburnum opulus* and *Sorbus aucuparia* were planted over a period of two years.

"The site faced some serious challenges," explained Steven Deryckere, responsible for green planting and water treatment at Imog. "First it is the height of the site, second the soil which is a poor loam on top of the landfill's cover sheet and finally wind erosion.

"It was actually our second attempt at establishing greenery on the landfill's slope. This time round we followed Kristof's advice and combined TerraCottem with our Vlaco compost to increase the substrate's water holding capacity and ease early plant acclimatisation to the planting area. The result is beautiful."





## PLANE TREES SPARKLE

The 'Europalaan' is one of the busiest entry roads into the Belgian city of Genk and was infamous for being a 'place of misery'. That was until 2000, when the city council together with the regional government came up with a new mobility and structure plan that would decongest the entire area. The plan would also connect the neighbourhoods north and south of the avenue and re-instate the road with eye catching materials both in hard and soft landscaping.

Additionally, the new avenue had to reflect Genk's label of being one of Belgium's greenest cities. Three hundred trees were planted in two by two metre plant squares and integrated both in the hard and soft surface areas. The choice fell on high-stemmed plane trees to give extra volume to the avenue and these were planted at a 90 degree angle to the road forming clusters of trees instead of planting them along the entire distance.

The trees were planted in a peat-based potting soil with bentonite and enriched with fertilisers and plenty of TerraCottem. The plant holes were covered with a 10cm lava mulch layer to prevent weed growth.

Peter Fabry, Public Green Spaces maintenance manager, said: "The urban environment offers limited free space for the trees to grow. To improve the growing conditions, TerraCottem was added to the soil mixture to increase its water and nutrient holding capacity. Despite being planted late in the season (spring) all the trees established well in their new environment with less than one per cent of the trees dying. During the Christmas season the intended effect of creating volume reaches its climax when all the trees are lit up."



# ABOVE PAR PARK

Inaugurated in 2010 and conceived by the internationally acclaimed architect Oscar Niemeyer, the official seat of the Government of the State of Minas Gerais, Brazil consists of six large buildings, set in the second biggest park of the City of Belo Horizonte.

The administrative city is the only one in Brazil that is highly committed to sustainability, with buildings that have many systems to conserve natural resources.

Award winning landscape architects Flavia Renault and Thiers Matos, in charge of the park's landscape design, have been recommending the use of TerraCottem for years.

To give this prestigious project the best possible odds to achieve above par plant survival rates despite the sandy soil on site, TerraCottem was incorporated into the plant pits of the palms, trees and shrubs. They commented: "TerraCottem acts as a life insurance policy for the plants. It not only saves replacement work and money that can be caused by plant mortality but helps us achieve a mature garden faster."





## GROUND BREAKING GARDEN PROVIDES OASIS OF CALM

It is no accident that Darling Park was so named, given that at the centre of this Sydney waterfront development lies a jewel of a garden. Created by Eric Kuhne & Associates, Site Image Landscape Architects, the Royal Botanic Gardens Sydney and The Lend Lease Design Group – from concept through to creation these gardens were ambitious.

Designed some 20 years ago the gardens remain a wonderful example of what can be achieved with the right expertise and a willingness to push the boundaries. In fact, many of the boundaries pushed have become today's benchmarks.

The brief was to develop a multi-dimensioned corporate garden with views for the tenants, areas for lunchtime seating and spaces for functions.

It was achieved by creating a parterre which, when viewed from above, reveals itself as an astonishing flower. Each section within the flower provides seclusion, while a stroll around the perimeter is a journey through a series of rooms, each distinguished by flora from the continents of South America, Europe, Africa, Oceania, Asia and North America. Winding its way through the whole garden flows a creek, broken here and there by falls, which muffle noise from outside the park and help build a sense of distance from the city beyond and the traffic below.

Probably the most challenging aspect of the project was the slab over which the garden was constructed. The beams within the slab created planting pockets, with soil depths varying from 600 to 1200mm. The task was to design a landscape without apparent interruption from the beams. This was a project where the landscape was not a minor afterthought. It was the key element.

Ian Innes from Sydney's Royal Botanic Gardens

remembers: "The garden is essentially a large planter box, sitting over a car park and Sydney's Western Distributor elevated freeway. Our first task was to ensure good drainage, not only to reduce the potential load on the slab but also to avoid anaerobic soil conditions. We then spent some time getting a specialised planting mixture concocted – light-weight, free draining, without too much organic matter that may produce subsidence later.

"The final recipe included a high inert quotient (volcanic ash), pine bark nuggets for their ability to break down slowly, ground dolerite for good cation exchange – and TerraCottem. "Not knowing what the future maintenance would be, we specified TerraCottem, not only because of the hydrogel content and additional boost to cation exchange, but because of the slow-release fertilisers."

The mix proved to be a great success from the outset. A success that came from paying attention on two fronts – appropriate plant species and a good soil mixture. TerraCottem reduced requirements for fertilisers and watering – it was an integral part of the solution to on-slab planting.

TerraCottem was chosen to be part of the mix at the start of this project and when it came to renovation works, the soil conditioner was chosen again. It helps this ambitious garden to continue to provide an oasis of calm in Sydney's bustling city centre.





## GOLDEN EXPERTISE

Cuturú is a small mining village on the banks of the river Nechí in the north of Antioquia, Colombia. According to the local inhabitants it is the place where 'gold never runs out'. Yet, the village's main economic activity comes at a high environmental price. The alluvial gold mining has devastated the soil right up to the bedrock. The final result is a highly sandy, almost granular, washed, bare soil with no organic matter content, no microbial activity; in short where nothing grows.

The company Reforestadora Industrial de Antioquia was in charge of regenerating this land. It called upon the services of Luis Gonzalo Moscoso Higueta, director of the restoration company Forestpa S.A.S, to undertake the major task of re-instating 550 hectares with 600,000 trees.

With over 30 years of experience and his hands-on expertise in reforestation, restoration, plantation forestry, urban gardening and watershed protection Luis has designed, directed and executed more than 300 projects in Colombia. He was the architect behind the first ever project in South America to trade carbon credits generated by native tree species on the voluntary market. He has also carried out pioneering work in the Colombian lowlands leading the way to successful and affordable tree-based restoration of gold mine spoils in the tropics.

Luis commented on the project:

"The initial planting was done with *Acacia Mangium*, a pioneering species, in order to release biomass. Once the soil is improved, we intersect the acacias and plant native species such as carob tree, saman, elephant-ear tree and ash.

"To guarantee the success of our planting projects we have created a cocktail based on organic compost, Agrimins, fertiliser, mycorrhiza, calcium and phosphorus amendment and TerraCottem. The composition of this mixture varies from project to project as we base it on the results of the soil analysis. TerraCottem plays an important role in this composition as it helps to keep moisture, crucial in a sandy soil such as in Cuturú. It also acts as a nutritional guarantee due to its macro and micronutrients and, above all, it activates root growth, essential for plant establishment and survival."

Five months after planting, the acacias reached a height of one and a half metres and, two years later, the survival rate of this assisted regeneration exceeded 90 per cent – a very high figure especially as it includes the trees that were planted during the summer months.





## GUARANTEED SUCCESS

The landmark development Florentinum, located in the bustling heart of Prague, is the largest office building under one roof in the Czech Republic. The project design called for a vast amount of greenery and to achieve an immediate impact large trees were planted. However, some of the evergreen trees died. The death of the trees happened twice and the surviving ones were in a dire state. At this time in the development Zahradní Architektura Kurz s.r.o. was invited to take over the planting work.

“The investor asked us, if we are able to plant 10 metre high mature *Pinus Sylvestris* with a guarantee,” says Aleš Kurz, the company owner. “We worked closely together with a supplier of top quality trees

according to the client’s specification and we proposed TerraCottem to improve the performance of the soil that was lacking in structure and water holding capacity. The lack of soil structure caused us some concern during the winter months as the irrigation system is switched off. But most importantly we wanted to ensure the survival rate of those trees.”

Zahradní Architektura Kurz fulfilled the client’s expectations and as a result was awarded the maintenance contract of the gardens. “There is no mystery: skilled work, good technology, no cutting corners, healthy plants and sound investment have given this luxury centrum the garden it deserves and made our client happy,” concluded Kurz.



## BIG BARE MEADOW NO MORE

Outside the old city walls of the royal town of Kadaň in the Czech Republic, just off the banks of the river Ohře lies a big bare meadow. To liven up this empty open space, the council created a large flowerbed in the shape of Kadan's town hall with its dominating Gothic tower.

Ing. Miroslav Jancák, officer of the Department of the Environment explained: "The new bed was treated with TerraCottem just before we seeded a combination of 13 species of fast growing annuals and 12 species of half-height fast-blooming annuals that last until the first frost. Increasing the water retention capacity of the soil was paramount as the meadow has underlying potato and wine cellars. The cellars mean the soil is shallow and coupled with an exposed position makes it even more vulnerable to drought stress."

To start with the project wasn't a bed of roses. Miroslav said: "We had a bit of a challenge to get the bed in a good condition. First the pigeons pecked the red weed, which was going to form a heart in the middle of the bed. Then came the dog walkers. It wasn't until we fenced the area and hung a picture of the bed taken by a drone, that people understood what we wanted to achieve. Now they love it."

Miroslav Jancák is convinced that TerraCottem will become increasingly important to help save irrigation water, as the region is facing longer dry spells and less precipitation, but above all to establish thriving planting schemes in cities despite these conditions.





## CALAIS ACHIEVES ACCOLADE

The town of Calais, facing the south-east of England, is mainly known for its port and the Channel Tunnel. Over the past few years Calais has set up ambitious projects to enhance the city and improve its living conditions.

In September 2014, Eric Bouton arrived in Calais to head the city's Green Spaces department. Linked to his arrival, a bet to obtain the '4th Flower' for Calais. A challenge he has already met in Loon-Plage and Gravelines.

The French competition *Villes et Villages Fleuris* was launched in 1959 to promote flower displays and urban green spaces. Since 2005, it has attracted more than 12,000 participants. In 2017 Calais was one of 249 elected representatives whose exemplary approach to flower displays was rewarded with a '4th Flower', the highest award.

Eric Bouton has used TerraCottem since it was commercialised in France more than 20 years ago. "We work with very short lead times to achieve good plant development and high quality flowering. This soil amendment gives us a near total survival guarantee. We obtained the 4th Flower this year partly thanks to the Ephemeral Garden boosted with TerraCottem. For gardens exposed to wind and sandy soil TerraCottem is a real asset for success."





## THE ROAD TO BIODIVERSITY

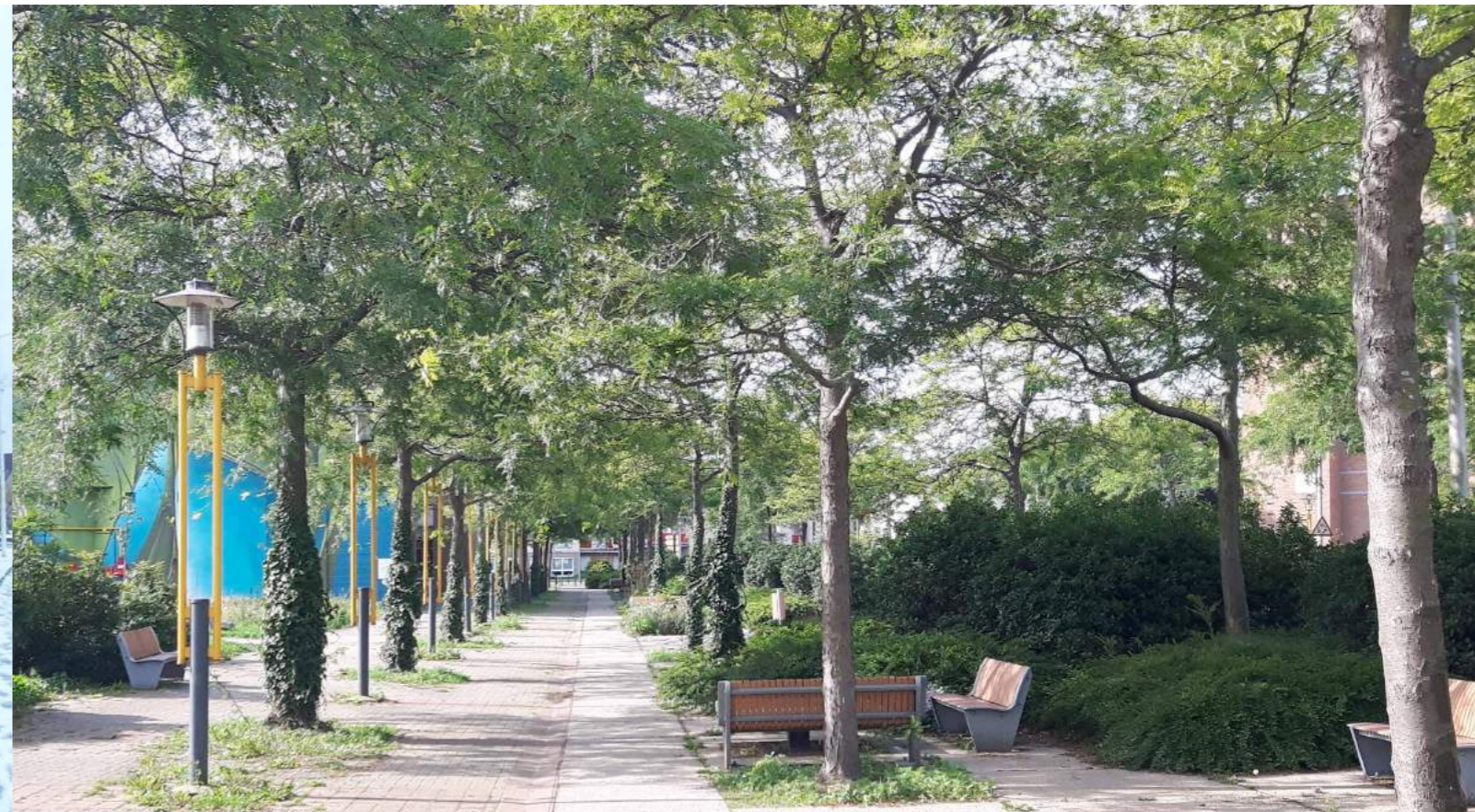
For 40 years, the French city of Grande-Synthe, on the edge of the harbour area of Dunkirk, has endeavoured to pay equal attention to all its districts, without prioritizing them. Its achievements are considerable with 95 per cent of its residents living within 300 metres of a green space and everyone benefits from 127 square metres of greenery per inhabitant.

Parks and gardens are therefore a strong feature of the city. Since 1972, Grande-Synthe has established a fundamental political axis that has never been questioned since: to create an exceptionally green and flowery living environment for its inhabitants.

Yves Caestecker, Head of the Public Spaces and Nature Department commented: "From 1990 to 2005 we committed ourselves to differentiated management. We were looking for alternative forms of management to, among other things, abolish pesticides. Since 2005 our focus has switched to safeguarding biodiversity."

The city is also surrounded by a green belt, considered of vital importance for the residents' quality of life due to its location near the port of Dunkirk with its heavy industry (especially metallurgy). In a relatively short time Grande-Synthe developed from a hamlet to a city with more than 22,000 inhabitants. In order to be able to plant as efficiently as possible often on marginal soils, the use of TerraCottem was decisive. Other tree species and shrubs, transforming the belt into a road of biodiversity, have systematically replaced poplars, which were originally planted to quickly form a green screen.

These efforts did not go unnoticed and were rewarded in 2010 with the status of first capital of biodiversity and a new 'Golden Flower' in 2015, the highest accolade of the *Villes et Villages Fleuris* competition in France.





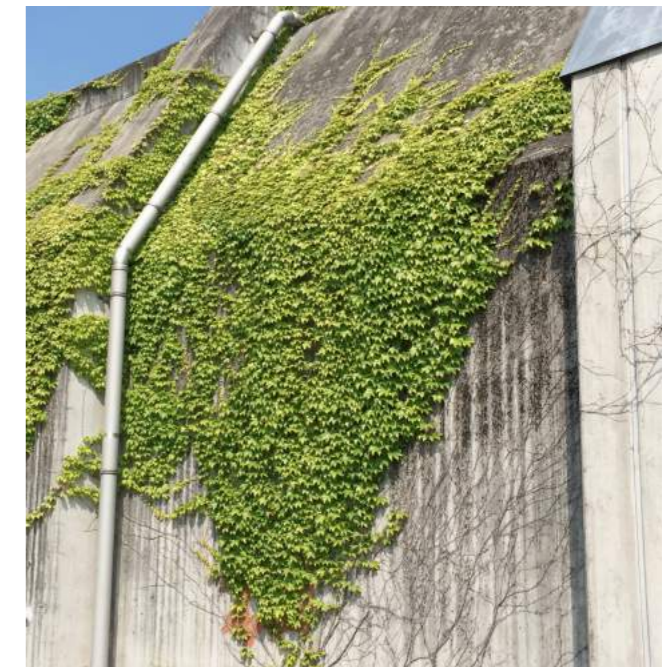
## QUIET GREEN SOLUTION TO NOISE

Road traffic noise is far and away the most frequently quoted cause of noise complaints in Germany. Despite enormous progress in noise reduction, particularly in heavy traffic, the increasing amount of traffic in particular has partly offset the success in noise abatement.

In 2000 the North Bavarian Motorway Directorate raised sound barriers along the stretch of the BAB A3 motorway between Goldbach and Hösbach in order to reduce noise nuisance for the surrounding villages. Included in this prestigious road project was the plan to cover the motorway and conceal it with climbers and trees.

The site presented a series of challenges that had to be overcome in order to achieve this green roof. The south-facing wall had thick underlying concrete foundations meaning there was little soil for the climbers. Additionally the soil was lacking in nutrients and because of the wall's orientation the evaporation rate of the soil was high. The choice of TerraCottem Universal as a soil conditioner was made to address these issues not only for the climbers but also for the tree and shrub planting in the vicinity of the concrete walls. The construction work had heavily compacted the soil and despite loosening the soil mechanically just before planting it still wasn't optimal for the transplanted trees to quickly form new roots and establish themselves properly.

Ten years have passed since this stretch of the BAB A3 motorway received its green roof and rows of trees. The Directorate is very happy with the result and so are the local residents, who in spite of the six lane motorway enjoy their quiet and green surroundings.







## A MATCH MADE IN HEAVEN

The Carl Benz and Ferdinand Porsche streets, part of the new extension of the Bremen industrial park near the port of Bremen in Germany offered less than ideal growing conditions for the oaks and lime trees the design agency HBI Hiller Begemann Ingenieure GmbH included in its landscaping plan. Yet, the site's sandy soil was a match made in heaven for TerraCottem. The site also suffered from soil compaction caused by the civil works, wind erosion and low rainfall.

Plant holes of 2 x 2 x 1.5 meters were mechanically dug and part of the excavated soil was mixed with substrate. The plant holes were filled with this mixture in two different layers. The bottom 75cm consists in a mixture of 50 per cent quartz sandstone 8/32 and 50 per cent of the excavated soil enriched with 3kg/m<sup>3</sup> tree alginate, 100 litres/m<sup>3</sup> Agriperl and 2kg/m<sup>3</sup> TerraCottem Universal. The top layer has 50 per cent quartz sandstone 8/32, 50 per cent DIN 18915 tree sand topped

up with 100 litres/m<sup>3</sup> Agriperl 3-6mm, 1kg/m<sup>3</sup> Oscorna Universal fertiliser, 1.5 kg/m<sup>3</sup> Luzian stone flour, 3kg/m<sup>3</sup> Bentonite clay and 1kg/m<sup>3</sup> TerraCottem Universal.

Mr Hiller, the design company's site manager commented: "We increased the TerraCottem rate to 2kg/m<sup>3</sup> in the lower layer in order to further stimulate root growth and increase the soil's water retention capacity and aeration and thus prevent roots from growing upwards.

"Two years after the planting was completed, we did our first evaluation and of the 218 planted trees, only five had died which gave us a survival rate of almost 98 per cent. We continued to monitor the trees for several years and each time appreciated the benefits of TerraCottem. This was especially noticeable during the dry spells when the entire environment was bone dry and brown while the oaks and lime trees were lush and green."



## UNIQUE GARDEN BLOOMS AGAIN

The gardens of the Ionian Village originally built in the early '60s are located on a scenic stretch of ocean front property outside of Bartholomeio in Greece. The property is about 32 acres, and lays along the western coast of the Pelopponese, directly across from the island of Zakynthos.

The campus run, by the Greek Orthodox church, organises activities throughout the year for up to 200 young people to learn more about their orthodox faith, Hellenic culture and strengthen their education in environmental protection

In September 2016 the entire garden was destroyed by a tornado and the Greek Orthodox Church of North America charged landscape consultant Nikos Thymakis with the garden's redesign, screening of plant material and the supervision of the construction.

The new gardens were completed a year later and feature 11,000 plants and

over 900 large specimen trees. Out of the 200 different plant species 180 are Hellenic native. The remainder is Mediterranean and tropical plants including both *Chamaerops humilis* and *Phoenix theophrastii*. "The Ionian Village is the only place in Greece to have both these palm species," commented Nikos Thymakis. Another distinctive feature of this garden are three vulnerable species listed in the The Red Data Book of Rare and Threatened Plants of Greece: *Phoenix theophrastii*, *Pancratium maritimum* and *Juniperus oxycedra*.

Two more imposing garden features are the 70 monumental olive trees and a Bible garden. "We used TerraCottem to guarantee the survival rate of all these unique specimens planted in sandy soil and dry lands. We achieved a 100 per cent success rate, observed very good and fast plant growth and an increased drought resistance. It is becoming increasingly important to have a water-wise approach in planting schemes to withstand erratic climate conditions," concluded Nikos.





## WINNING WAYS ON THE PITCH

Hidegkuti Nándor Stadion, home stadium of MTK Budapest, is named after one of Hungary's best football players.

The 5,322-seater stadium located in Budapest's Józsefváros district was entirely renovated in 2016 by Garden Group Kft with a top of the range football pitch including the Desso GrassMaster and TerraCottem technology.

"The pitch was built according to a sand dominated root zone over gravel carpet specification. Fifty grammes of TerraCottem went into the lower root zone layer (-20 to -10cm) and 60g/m<sup>2</sup> into the top root zone layer (-10cm to 0cm) in order to increase the water retention capacity of the sand-based root zone.

Gábor Kárpáti, director of Garden Group commented: "Due to the extreme weather conditions and the microclimate caused by the stadium's high concrete walls we were facing some challenges to create and maintain good grass growth. So we were keen to try out TerraCottem as it would aid the sward composed of 100 per cent English ryegrass (*Lolium perenne*), resist drought stress and increase the root zone's cation exchange capacity. Very early on we observed a more consistent, stronger and deeper root development. Since then we have used TerraCottem in all our sports pitch constructions."



## PRIME POSITION IN PLATINIUM PARK

Planting 25-year old trees in the gardens of the prestigious Platinum Business Park in Warsaw called for great care and attention.

Wojciech Musielak, Technical Director of P.W. Ogród, the company in charge of building the gardens was responsible for planting 25 of these mature trees for the state-of-the-art business park, which includes five Class A buildings. Wojciech Musielak has been a keen TerraCottem user for over a decade. He commented: "This project is in the prime business district of Mokotow near the intersection of Domaniewska and Woloska streets so the spotlight would be on it and I needed optimal results. Top quality products were used throughout the surrounding landscaping. We incorporated TerraCottem in the plant hole of these 25-year old *Aesculus hippocastanums* (a large deciduous, synoecious tree, commonly known as horse-chestnut or conker tree) as we know it gives us 100 per cent guarantee for rapid growth and excellent rooting of plants with minimal irrigation."

Photographer: Piotr Krajewski



## EVERYONE IS A WINNER

More than 15 years ago, Pokon Naturado, market leader in consumer potting soil in the Netherlands, started incorporating TerraCottem in some of its high-end potting soils. In particular it included TerraCottem in soils for outdoor use and balconies. The reason was obvious – to increase the potting soil’s water retention capacity for applications in drier environments and subject to higher temperatures. Over the years the range of potting soils enriched with TerraCottem has expanded and includes: indoor plants, Mediterranean plants, and as an additive for tree and shrub planting.

Ben Scheer, Innovation & Business Development Manager at Pokon Naturado commented: “Our marketing strategy to the garden centres has consistently been to upsell from regular to high-end potting mixes through advertising in trade magazines, offers to the retailers, and promotions to the consumers both instore and on national TV. Thanks to our consistent marketing approach we have highlighted the benefits and return on investment offered by TerraCottem to the end user. Our potting soils give them better growth results and healthier and more drought resistant plants. So happy customers become TerraCottem ambassadors. A win-win situation.”







## TRANSPLANTED TREES FLOURISH

More than 15,000 of 10 different species of pine trees were planted over a period of 12 months at the Hyundai Sollago Country Club in Taeon-gun, Chungcheongnam-do, South Korea.

Iljin Leisure Co. Ltd, responsible for the country club's landscaping was facing less than ideal growing conditions for transplanting trees. The golf course is built on a seashore landfill with very high salt content, a low water retention capacity and strong winds.

"TerraCottem helped the trees settle into their new environment,"

said Yang Sanmo, the project leader at Iljin Leisure. "We achieved an overall survival rate of 97 per cent, where on a site like this we would normally face losses of 30 per cent. We now have a beautiful golf course surrounded by trees where before it was just a barren piece of land."



## RECLAIMING LAND WITH WINDSCREENS

About 70 per cent of electricity generated in Serbia comes from coal. Thermal power plants and Mines Kostolac near Klenovnik are largely powered by the coal extracted from the nearby surface/open pit mines.

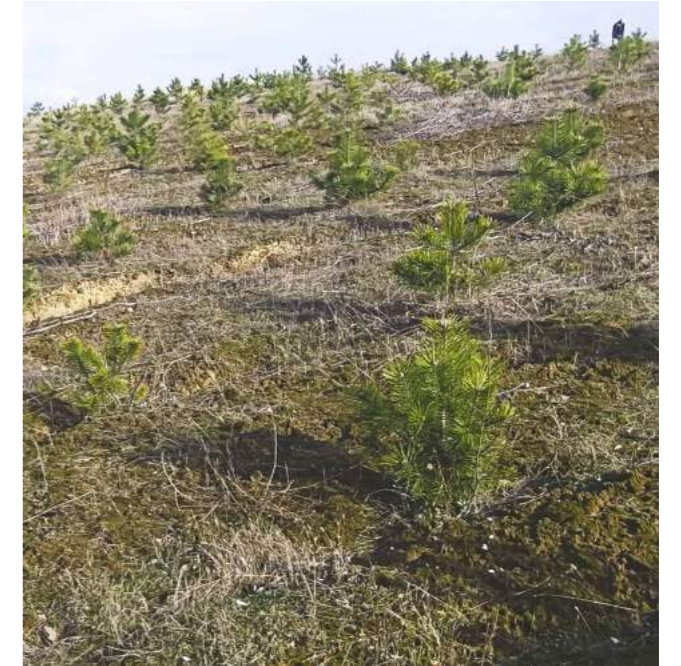
Open pit mining is the most common form of strategic materials mining in Serbia, visually and environmentally affecting surroundings with long-lasting depressing effects, such as water and air pollution, loss of forest and soil fertility.

The public company 'Electric Power of Serbia' was offered an innovative solution to establish plant growth in this harsh environment by increasing the soil's fertility and water retention capacity and improving plant survival rates. A series of technologies had been tried in the past with poor results, until Natasa Trifunovic, forestry engineer at GreenSoil Inzenjering presented a holistic approach based on the TerraCottem methodology.

Natasa Trifunovic commented: "First, we created planting fields with powerful earth moving machines. Then we drilled and prepared the plant holes and incorporated TerraCottem and planted them up with both bare root and containerised *Pinus Nigra* and with bare root *Robinia Pseudoacacia*."

Despite extremely elevated temperatures shortly after planting, the three-year-old bare root *Pinus Nigra* reached a survival rate of 60 per cent while the two-year-old ones rose to 95 per cent. The containerised three-year-old plants did better and had a survival rate of 85 per cent. The best performing ones were the bare root one-year-old *Robinia Pseudoacacia* with a survival rate of 90 per cent.

Electric Power Industry of Serbia is happy with the results and so is Natasa: "The overall survival rate of the entire project is above 70 per cent, in a very inhospitable environment for plant growth topped up with extremely high summer temperatures."





## RELAXING CALM IN BUSY CITY

The Commonwealth Park on the island of Gibraltar includes a publicly accessible grassed area of 4,000 square metres – a landscape first for the country – on which local people can relax, just as they do in parks and public gardens throughout the world. Flanked by the city walls with a range of water features it offers an oasis of calm from a hectic and busy city.

The soil for the project was produced from spoil from various sites within Gibraltar with material screened and the earth from the process being mixed with nutrients to create a soil which would support the trees and shrubs – as well as form a substrate for the turf.

Everything was done to the specification devised by Tim O'Hare Associates – who are pre-eminent in the field – to ensure that planting could cope with the local conditions.

Once the ground was prepared, UK-based turf producer Inturf delivered and installed turf to a specification, which would both withstand the anticipated pounding the sward would receive, while delivering the aesthetic appeal sought in the design concept. “As well as producing the turf at our Yorkshire turf farm the challenge was to deliver it field fresh to Gibraltar – four days drive away,” says Alex Edwards, Inturf Joint Managing Director. “To help the turf establish in such challenging conditions we incorporated TerraCottem into the substrate to improve water retention and the accessibility of nutrients in the soil.”

Once the turf had established a trained team of groundsmen were employed to maintain the park and the general public started to enjoy the significant benefits of using the only ‘green open space’ on The Rock. Outdoor events, government receptions, picnics and even cinema screenings have been a huge success, which has brought the people of Gibraltar even closer together. Following the positive feedback the next park is already at the planning stage.





## OLIVE TREES SURVIVE SPANISH HEAT

In 2016 the owner of El Cadoso, an estate 16 kilometres from Seville, the capital of Andalusia, in Spain decided to capitalise on his land with a super intensive olive plantation. He opted for the Arbequina variety to obtain a higher yield and production of extra virgin olive oil.

The first five hectares were planted in July 2016 with a planting frame of 1.8m x 4m resulting in a total of 1,388 plants per hectare. A year later, another five hectares were planted with 1,333 plants per hectare, using a planting frame of 1.5m x 5m.

The company Todolivo carried out both plantations with the assistance of state-of-the-art technology in the form of a GPS alignment system, with simultaneous placement of plant and support (cane) and an application of 20g of TerraCottem per plant.

The property decided to use TerraCottem to make the most of the available irrigation water, promote growth and reduce plant losses. Planting was carried out in the middle of summer with a greater mortality rate expected due to the high temperatures suffered during this period. At 85 days after planting, a first evaluation was made in four rows with a total of 781 plants. The 1.92 per cent mortality rate was far lower than anticipated, with 4-5 per cent expected in these conditions, so the survival rate was above 98 per cent.

A spokesperson for the estate commented: "During August when temperatures were above 40°C, we couldn't irrigate for five days because of a breakdown in the irrigation system. Thanks to the application of TerraCottem, the plants did not suffer excessively and perfectly withstood the water stress, avoiding a great loss of plant material and investment."





## CHARITY ACROSS THE WORLD

Christmas 2017 saw two very different charitable projects, both with the aim of improving the lives of adults and children, receive help from TerraCottem.

The projects were a children's park in Westlake, Cape Town, South Africa and the 'Bi- Ventiel' forest in Kruishoutem in Belgium. The Ventiel charity was set up to enrich the life of people with young-onset dementia, including their families and friends.

Local companies for both projects were supplied with all the necessary materials to plant trees and shrubs. One was under a scorching sun in a bone dry soil, suffering one of the most severe droughts in 100 years. The other location couldn't have been more different as it was under heavy clouds in a moist soil, with the least number of hours of sunshine in December for nearly a decade.


Both charities wanted to secure a beautiful green space for people with challenging life conditions, an environment in which to relax and enjoy their free time. The faster they achieved this result the better for all.

In Cape Town a number of SALI (South African Landscapers Institute) members donated plants, ground cover, trees, wood chip bark and soil conditioner to create some shade for the Westlake kids. These children come from the nearby day care centre and crèche and play in this run down community park. TerraCottem's role was to give the 100 shrubs and 15 trees, planted under the leadership of Norah de Wet, the SALI National Chairperson, a fighting chance to survive!

At the same time, in rainy Belgium, Ventiel launched the planting of hundreds of trees and shrubs, the Bi-Ventiel forest, during the 'Warmest Week', a nation-wide event organised by radio channel Studio Brussel. The event is where thousands of organisations and groups of people across the country organise activities to collect money for their charity.

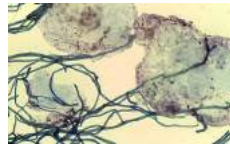
The results to date have been encouraging and TerraCottem was delighted to play its small part in supporting these two worthy charities.





Fr	Traductions
Ep	Traducciones
Pt	Traduções
Nl	Vertalingen
De	Übersetzungen
Pl	Tłumaczenia
Gr	Μεταφράσεις
Se	Превод
Hu	Fordítások
Ko	번역





## CADA IMAGEN CUENTA UNA HISTORIA

### Ep / CADA IMAGEN CUENTA UNA HISTORIA

El Instituto de Hortofruticultura Subtropical y Mediterránea "La Mayora" en Málaga, España, realizó algunos ensayos en semilleros de tomate en sustratos de vermiculada y perlita, ambos mejorados con TerraCottem. La Doctora María Remedios Romero Aranda, fitofisióloga del Departamento de Fitomejoramiento y Biotecnología, explica que "la nutrición y el desarrollo de las plantas se pueden controlar perfectamente en estos sustratos inertes, pero, con el tiempo, se compactan y pierden capacidad de aireación y retención de agua. Por eso queríamos probar el comportamiento de TerraCottem en estos sustratos".

La adición de TerraCottem dio lugar a un aumento de la capacidad de retención de agua y de la producción de biomasa, tanto en el sustrato de perlita como en el de vermiculita, así como tanto para el crecimiento subterráneo (raíces), como para el crecimiento sobre el suelo (hojas y tallo).

"Personalmente, estaba deseando ver si los pelos de la raíz penetrarían dentro de los polímeros contenidos en TerraCottem. Las fotos que tomé con mi microscopio de los pelos de raíz de tomate hablan por sí solas".



## UN ESTADIO REALMENTE ÚNICO

### Ep / UN ESTADIO REALMENTE ÚNICO

El estadio polivalente ubicado en la ciudad de La Plata, Argentina, también conocido popularmente como el 'Estadio Único', fue parcialmente inaugurado en 2003. Poco tiempo después, fue objeto de nuevas obras para convertirlo en un estadio con todos sus asientos bajo techo. En el momento de su inauguración oficial en febrero de 2011 el estadio fue considerado el más moderno de América Latina.

La cancha de 7.350 m<sup>2</sup> del estadio cuenta con otra característica única en Argentina, está compuesta por unos 6.600 módulos de plástico que pueden ser completamente retirados en 24 horas. Los módulos de plástico se rellenan con una capa de drenaje y un medio de cultivo de un 95% de arena 180/220, un 5% de turba y 150 gramos de TerraCottem por metro cuadrado para aumentar la deficiente capacidad de retención de agua y nutrientes de este sustrato. El medio de cultivo se cubre a continuación con Tifton 419 - césped Tifway y se siembra con ryegrass.

Como el estadio alberga muchos eventos de masas, también tiene un campo de reserva. Este campo está construido de la misma manera que el primero, pero con una composición ligeramente diferente: 90% de arena 180/220, 10% de turba y 120 gramos de TerraCottem por metro cuadrado.

Alfredo Schappi, responsable del mantenimiento de la cancha del estadio comentó: "Este sistema necesita estar 18 meses sin usar para ponerlo en marcha. Basándome en mis 15 años de experiencia con TerraCottem, incrementé ligeramente la dosis de TerraCottem en la cancha principal para conseguir un desarrollo radicular más rápido y más profundo usando turba como aglutinante. ¡Conseguimos dejar la cancha lista en tiempo récord! El primer partido se jugó solamente 40 días después de que se instalara el césped en los módulos de plástico y poco tiempo después el estadio albergó seis partidos de la Copa América 2011".

Debido a las crecientes exigencias de la industria en cuanto a rendimiento y resistencia del campo, así como a la rentabilidad del estadio, el campo de La Plata se encuentra actualmente en fase de obras para recibir un campo PlayMaster en forma de sistema modular. Este terreno tendrá la misma composición del sustrato y especies de césped que en las obras de reconstrucción de 2011. Una vez finalizado, el estadio Ciudad de la Plata volverá a ser único y contará con una cancha multiusos de última generación de categoría internacional, manteniéndose fiel a su sobrenombre de 'Estadio Único'.



## WERELDWIJDE FAAM VOOR BLOEMDISPLAYS

### NI / WERELDWIJDE FAAM VOOR BLOEMDISPLAYS

Oudenaarde, historische kunststad in het kloppend hart van de Vlaamse Ardennen, toot zich reeds jarenlang uitbundig met groenaanplantingen en bloemen. Een ware lust voor het oog van haar bewoners en de vele toeristen. Deze jarenlange bebloemingstraditie resulteerde voor de stad dan ook in een uitzonderlijk palmares, zowel op regionaal, nationaal als internationaal vlak.

Stefaan De Smet, groenambtenaar van stad Oudenaarde, herinnert zich: "De vermaarde vakbeurs Flanders Technology International bracht TerraCottem naar onze stad. Deze periode was pas de beginfase van TerraCottem zelf. We wilden deze nieuwe technologie graag gebruiken om ons werk te optimaliseren. Al vlug werd een kostenbesparend resultaat voorgelegd inzake tijdsbesteding aan onderhoud, dat tot op vandaag behouden wordt. Sindsdien gebruiken we TerraCottem jaarlijks in de aanplant van éénjarigen."

"In 2017 hebben we negenduizend éénjarigen geplant waaronder Pelargonium, Helichrysum, Bidens, Glechoma, Surfinia en Sunpatiens in plantenbakken, bloemschalen en -torens, in een potgrond bestaande uit vijftig procent zwarte turf, veertig procent mos van wit veen en tien procent klei. Deze grond werd verbeterd met 1,25 kilo Pg Mix 14-16-16-18,1,5 kilo basacote 5-6 maanden (15-10-12) met Mg en Fe en 5 kilo TerraCottem Universal per kubieke meter grond. Gedurende het gehele seizoen werd niet bij bemest. We voorzien één gietbeurt per week, wat voorheen, zonder gebruik van TerraCottem, tot 3 maal diende te gebeuren."

Verder werden er elf duizend Begonia 'Dragon Wing Red' in volle grond aangeplant en zoals gebruikelijk, jaarlijks verrijkt met recuperatiepotgrond van de bloemschalen en -torens en TerraCottem Complement.

"Een goede planning, investering in de juiste materialen en de toewijding van onze medewerkers resulteren in hoge kwaliteitsnormen in onze aanplantingen in het stadscentrum en alle parken. Daarbij realiseren we aanzienlijke besparingen op onderhoud en vervanging van plantmateriaal. Onze inspanningen werpen hun vruchten af en wij putten heel wat voldoening uit de blijvende erkentelijkheid van bewoners en bezoekers alsook de onschatbare erkenning over de landsgrenzen heen."



## DE TOTALE GROENE OPLOSSING

### NI / DE TOTALE GROENE OPLOSSING

IMOG, een Intergemeentelijke Maatschappij in België, verzorgt de geïntegreerde afvalverwerking van ruim 230.000 inwoners uit 11 gemeentes. De site in Moen omvat 27 hectare en biedt plaats aan tal van exploitaties. Eén van deze is de groencompostering die jaarlijks zo'n 10 miljoen kg compost produceert voor de landschapssector.

De deponie met natuurlijke waterzuivering staat aan de basis van dit afvalverwerkend bedrijf. Voor de begroening van deze stortplaats en het realiseren van een groene gordel met inheemse beplanting op de talluds werkte IMOG samen met Kristof Vromant, een geregistreerde tuinaannemer die hierbij gecertificeerde planten van autochtone herkomst gebruikte. Meer dan 3000 planten uit een selectie van 12 soorten waaronder onder andere Ligustrum vulgare, *Prunus Padus*, *Viburnum opulus* en *Sorbus aucuparia* werden aangeplant over een periode van 2 jaar.

"De site kampte met enkele serieuze uitdagingen" verklaarde Steven Deryckere, Verantwoordelijke voor Groenaanplanting en Waterzuivering bij IMOG. "Vooreerst de hoogte van de site, daarnaast de grond die aangebracht is als afdekking van de stortplaats die samengesteld is uit een arme leemgrond gewonnen uit klei ontginning en tenslotte de winderosie."

"Het was in feite de tweede poging om een begroening op de talluds van de stortplaats te realiseren. Deze keer volgden we het advies van Kristof op en combineerden TerraCottem met onze VLACO compost om zo de waterretentiecapaciteit van de bodem te verhogen en de acclimatisatie van de planten op het beplantingsterrein te verbeteren. Het resultaat is prachtig."





## FONKELENDE PLATANEN

### NI / FONKELENDE PLATANEN

De 'Europalaan' is één van de drukste invalswegen naar de Belgische stad Genk en was berucht als 'plaats van onheil'. Dit tot 2000, toen het stadsbestuur samen met de regionale regering met een nieuw mobiliteits- en structuurplan kwam die de volledige omgeving zou herinrichten. Het plan zou ook de verbinding maken tussen de noordelijke en zuidelijke buurten van de Europalaan en de laan voorzien met in het oog springende materialen in zowel harde als zachte landschapsarchitectuur.

Daarenboven moest de nieuwe laan het kenmerk van Genk als één van de groenste steden van België uitstralen. Driehonderd bomen werden aangeplant in plantvakken van twee bij twee meter en geïntegreerd in zowel de verharde als zachte omgevingszones. De keuze viel op hoogstammen om de laan extra volume te geven. De platanen werden dwars op de Europalaan geplant om groene kamers te vormen in plaats van een laanaanplanting.

De bomen werden aangeplant in een mengsel van lava-granulaten, verrijkt met teelaarde, bentoniet, meststoffen en TerraCottem. De plantgaten werden afgedekt met een mulchlaag van 10 cm lava om onkruidgroei tegen te gaan.

Peter Fabry, hoofd van de Dienst Groenbeheer betoogt: "de stedelijke omgeving biedt een beperkte vrije ruimte aan bomen om zich te ontwikkelen. Om de groeicondities te verbeteren, werd TerraCottem aan het boomsubstraat toegevoegd om de water- en voedingsretentie te verbeteren. Ondanks dat de bomen laat in het seizoen aangeplant werden (lente), ontwikkelden ze zich goed in hun nieuwe omgeving en minder dan 1% stierf af. Tijdens de kerstperiode bereikt het beoogde volume-effect van de bomen zijn hoogtepunt wanneer ze allemaal opgelicht zijn."



## A CIDADE ADMINSTRATIVA

### Pt / A CIDADE ADMINSTRATIVA

Inaugurada em 2010 e concebido pelo internacionalmente aclamado arquiteto Oscar Niemeyer, o local oficial do Governo do Estado de Minas Gerais é composto por seis grandes edifícios localizados no segundo maior parque da cidade de Belo Horizonte.

A cidade administrativa é a única no Brasil que está altamente comprometida com a sustentabilidade, com edifícios que possuem vários sistemas para conservação dos recursos naturais.

Os arquitetos paisagistas premiados Flavia Renault e Thiers Matos, responsáveis pelo design do paisagismo do parque, vêm recomendando o uso do TerraCottem por anos.

Apesar do solo arenoso no local e para propiciar as melhores probabilidades de sobrevivência das plantas, o TerraCottem foi incorporado nas covas das palmeiras, árvores e arbustos. Eles comentaram: "TerraCottem atua como uma apólice de seguro para as plantas. Não só economiza trabalho de substituição das plantas como minimiza os prejuízos que podem ser causados pela mortalidade das plantas, e ainda nos ajuda a alcançar um jardim maduro mais rápido".



## EXPERIENCIA DE ORO

### Ep / EXPERIENCIA DE ORO

Cuturú es una pequeña población minera en las orillas del río Nechí en el Norte de Antioquia, Colombia, donde "el oro nunca se acaba", como aseguran sus habitantes. Sin embargo, la principal actividad económica del pueblo tiene un alto coste medioambiental. La minería aurífera de aluvión ha devastado el suelo, en algunos casos hasta la roca madre. El resultado final es un suelo altamente arenoso, lavado, des poblado de coberturas vegetales, sin ningún contenido de materia orgánica, ni actividad microbiana y en donde, por lo general no crece nada.

La empresa pública y privada Reforestadora Industrial de Antioquia, encargada de regenerar esta tierra, ha solicitado los servicios de Luis Gonzalo Moscoso Higueta, director de la empresa de Forestación, Restauración Ecológica, Paisajismo y Acción Ambiental, FORESTPA S.A.S, para que emprendiera la ingente tarea de rehabilitar 550 hectáreas con el establecimiento de 600.000 árboles.

Con más de 30 años de sólida experiencia práctica en reforestación, restauración, plantaciones forestales, jardinería urbana y protección de cuencas hidrográficas, Luis ha diseñado, dirigido y ejecutado más de 300 proyectos en Colombia. Fue el artífice del primer proyecto en América del Sur en comerciar bonos de carbono generados por el establecimiento de plantaciones forestales con especies nativas en el mercado voluntario. También ha realizado un trabajo pionero en las tierras bajas de Colombia, liderando un proceso de restauración forestal exitoso y económico en escombros de minas de oro de los trópicos.

Comentando acerca del proyecto, Luis dijo que: "La plantación inicial se hizo con *Acacia mangium*, una especie pionera, para que vaya soltando biomasa y contribuya a la colonización de otras de la región. Una vez mejorado el suelo, se intercalan las acacias con especies nativas entre ellas algarrobo, samán, piñón de oreja y fresno. Para garantizar el éxito de nuestros proyectos de plantación, hemos creado un cóctel a base de compost orgánico, micro y macro elementos, micorriza, enmienda con calcio y fósforo y TerraCottem. La composición de esta mezcla varía de un proyecto a otro, ya que nos basamos en los resultados del análisis del suelo. TerraCottem juega un papel fundamental en esta composición pues nos ayuda a que el agua se mantenga disponible, lo que supone un hecho crucial en un suelo tan arenoso como el de Cuturú. Asimismo, actúa como garantía nutricional por los macro y micronutrientes que lleva y, sobre todo, activa el crecimiento radicular que es tan importante para el asentamiento de las plantas y su supervivencia".

Cinco meses después de la plantación las acacias alcanzaron una altura de un metro y medio y, dos años más tarde, la tasa de supervivencia de esta plantación forestal supera el noventa por ciento y el crecimiento los cinco metros, incluso en las plantaciones hechas en verano.



## CALAIS REMPORTE LA RECONNAISSANCE

### Fr / CALAIS REMPORTE LA RECONNAISSANCE

La ville de Calais située face au sud-est de l'Angleterre est principalement connue pour son port et le tunnel sous la Manche. Depuis quelques années Calais a mis en place des projets ambitieux pour mettre la ville en valeur et améliorer son cadre de vie.

En septembre 2014, Eric Bouton est arrivé à Calais pour prendre la direction du service des espaces verts. En filigrane de son arrivée, le pari d'obtenir pour Calais la quatrième fleur. Un challenge qu'il a déjà relevé à Loon-Plage, puis à Gravelines.

Le concours *Villes et Villages Fleuris* est un concours français créé en 1959 pour promouvoir le fleurissement et les espaces verts urbains. Depuis 2005, il compte plus de 12 000 participants. En 2017 Calais a fait partie des 249 élus dont la démarche exemplaire en fleurissement a été récompensée par une 4ème fleur, le prix supérieur.

Eric Bouton utilise le TerraCottem dès le début de sa commercialisation en France il y a plus de vingt ans. « Nous travaillons avec un délai très court pour obtenir un bon développement et un fleurissement de haute qualité. Cet amendement du sol nous donne une garantie de reprise quasi-totale. Nous avons obtenu la 4ème fleur cette année en partie grâce au Jardin Ephémère boosté au TerraCottem. Pour des jardins exposés au vent et aux sols sableux TerraCottem est vraiment un atout de réussite. »





## LE CHEMIN DE LA BIODIVERSITÉ

### Fr / LE CHEMIN DE LA BIODIVERSITÉ

Depuis 40 ans, Grande-Synthe, ville française en bordure de la zone portuaire de Dunkerque, s'est attachée à porter la même attention à tous les quartiers, sans faire de priorité, au point qu'aujourd'hui 95% des Grand-Synthois habitent à moins de 300m d'un espace vert et que chacun bénéficie de 127m<sup>2</sup> d'espace vert par habitant.

Les espaces verts sont une caractéristique forte de la ville. Dès 1972, la ville de Grande-Synthe a déterminé un axe politique fondamental et jamais remis en question depuis : proposer un cadre de vie exceptionnellement vert et fleuri aux Grand-Synthois.

Yves Caestecker chef du Service Espaces Publics et Nature : « Dans la période 1990 - 2005 nous nous sommes engagés dans une gestion différenciée. Nous investissons beaucoup dans des formes alternatives de gestion afin, d'entre autres, rendre l'utilisation des pesticides superflue. Depuis 2005 notre attention est dirigée sur la sauvegarde de la biodiversité. »

L'implantation de la Ceinture Boisée est d'une importance vitale pour la qualité de vie de la ville, dû à son emplacement près du port de Dunkerque avec son industrie lourde (notamment la métallurgie) et que dans un temps relativement court Grande-Synthe se soit développée d'un hameau à une ville avec plus de 22 000 habitants. Afin de pouvoir planter le plus efficacement possible sur des sols souvent marginaux, l'utilisation de TerraCottem s'est avérée concluante. Les peupliers, qui à l'origine ont été plantés pour rapidement former un paravent vert, ont été systématiquement remplacés par d'autres espèces d'arbres et arbustes transformant la ceinture en un chemin de la biodiversité.

Efforts qui ne sont pas passés inaperçus et qui ont été récompensés par le statut de première capitale de la biodiversité en 2010 et une nouvelle fleur d'Or en 2015, la plus haute distinction du concours *Villes et Villages Fleuris*.



## RUHIGE GRÜNE LÖSUNG GEGEN LÄRMBELÄSTIGUNG

### De / RUHIGE GRÜNE LÖSUNG GEGEN LÄRMBELÄSTIGUNG

Straßenverkehrslärm ist in Deutschland einer der häufigsten Gründe für Beschwerden über Lärmbelästigung. Obwohl enorme Anstrengungen in der Reduzierung von Lärm unternommen werden, besonders bei Schwerlastverkehr, hat der immer stärker zunehmende Verkehr fast alle Anstrengungen der Lärmreduzierung außer Kraft gesetzt.

Im Jahre 2000 baute die Autobahndirektion Nordbayern eine einmalige Lärmschutz-Einhausung, eine begrünte Überdeckung, über die A 3 von der AS Aschaffenburg-Ost bis AS Hösbach. Insgesamt wurden 6 Spuren zwischen den Orten Goldbach und Hösbach über eine Länge von 2200 m überdacht. Inclusive der Lärmschutzwälle beträgt die begrünte Gesamtlänge 6,4 km. Ziel war es die Lärmbelästigung für die angrenzenden Städte auszuschalten. Eingebunden in dieses Prestige Straßenbau Projekt war der Plan die komplette Autobahn zu überdachen und die Beton-Einhausung mit Kletterpflanzen und Bäumen zu begrünen.

Der Standort bot eine Serie von Herausforderungen, die zu lösen waren um eine gelungene Begrünung zu erzielen. Die Südexponierte Betonwand hatte dicke unterirdische Fundamente, was sehr wenig Boden für die Kletterpflanzen bedeutete. Zusätzlich war der Boden nährstoffarm und auf Grund der Ausrichtung der Wand gab es eine hohe Verdunstungsmenge. Die Entscheidung TerraCottem Universal hier als Bodenverbesserer einzuarbeiten wurde getroffen, um diesen Herausforderungen nicht nur für die Kletterpflanzen, sondern auch bei den Baum- und Strauchpflanzungen unmittelbar an der Nähe der Betonmauer entgegen zu treten. Die Bauarbeiten hatten den Boden stark verdichtet und obwohl der Boden direkt vor der Pflanzung mechanisch aufgelockert wurde, war er immer noch nicht optimal für die schnelle Durchwurzelung und den guten Anwuchs der angepflanzten Bäume.

Zehn Jahre sind vergangen seitdem diese Einhausung der A 3 sein grünes Dach und die Baum- und Strauchreihen erhalten hat. Die Autobahndirektion ist sehr zufrieden mit dem Resultat und ebenso sind es die Anwohner vor Ort, die eine ruhige grüne Umgebung vorfinden, obwohl sie in unmittelbarer Nähe einer sechsspürigen Autobahn leben.



## EIN GLÜCKSFALL

### De / EIN GLÜCKSFALL

Die Carl Benz und Ferdinand Porsche Straßen, welche Teil der neuen Erweiterungen des Bremer Industrieparks in Hafennähe in Deutschland sind, boten alles andere als ideale Wachstumsbedingungen für Eichen und Linden, welche vom Ingenieurbüro HBI Hiller & Begemann Ingenieure GmbH in ihren Plänen aufgenommen wurden.

Andererseits war der Sandboden ein Glücksfall für TerraCottem. Die Flächen litten ebenso unter Verdichtung durch Straßenbauarbeiten, Winderosion und immer längeren Trockenperioden bedingt durch den Klimawandel.

Pflanzlöcher von 2 x 2 x 1,5 Meter wurden maschinell ausgehoben und Teil des Bestandsbodens wurde mit Substrat gemischt. Die Pflanzlöcher wurden in zwei verschiedenen Schichten gefüllt. Die unteren 75 cm bestehen aus einer Mischung von 50 Prozent Quarzsand 8/32 und 50 Prozent anstehenden Boden angereichert mit 3 kg/m<sup>3</sup> Baumalginat, 100 Liter/m<sup>3</sup> Agriperl und 2 kg/m<sup>3</sup> TerraCottem Universal. Die obere Schicht hat 50 Prozent Quarzsand 8/32, 50 Prozent DIN 18915 Baumsand angereichert mit 100 Liter/m<sup>3</sup> Agriperl 3-6 mm, 1 kg/m<sup>3</sup> Oscorna Universal Dünger, 1,5 kg/m<sup>3</sup> Luzian Steinmehl, 3 kg/m<sup>3</sup> Bentonite und 1 kg/m<sup>3</sup> TerraCottem Universal.

Herr Hiller, der Bauleiter des Landschafts-Planungsbüros stellte fest: "Wir erhöhen die TerraCottem Dosierung auf 2 kg/m<sup>3</sup> in der unteren Schicht, um das Wurzelwachstum weiter zu stimulieren und die Wasserspeicherkapazität und Belüftung im Boden zu vergrößern. Dies verhindert, dass die Wurzeln nach oben wachsen."

"Zwei Jahre nachdem die Pflanzungen abgeschlossen waren, wurde die erste Auswertung der 218 gepflanzten Bäume durchgeführt. Nur fünf Bäume waren nicht angegangen, was eine Überlebensrate von fast 98 Prozent ausmacht. Wir haben die Bäume über mehrere Jahre beobachtet und freuen uns jedes Mal über die Vorteile von TerraCottem. Dies war besonders auch sichtbar während der langen Trockenperioden, als die Umgebung knochentrocken war während die Baumscheiben und die Eichen und Linden selber noch kraftvoll belaubt und grün waren."



## Ο ΜΟΝΑΔΙΚΟΣ ΚΗΠΟΣ ΑΝΑΓΙΕΝΝΙΕΤΑΙ

### Gr / Ο ΜΟΝΑΔΙΚΟΣ ΚΗΠΟΣ ΑΝΑΓΙΕΝΝΙΕΤΑΙ

Οι Κήποι του Ιονίου Χωριού που ξεκίνησαν να δημιουργούνται στις αρχές της δεκαετίας του '60 βρίσκονται σε μια γραφική θαλάσσια έκταση στο Βαρθολομαίο στην Ελλάδα. Η έκταση καλύπτει περίπου 32 στρέμματα και βρίσκεται κατά μήκος της δυτικής ακτής της Πελοποννήσου, απέναντι από το νησί της Ζακύνθου.

Οι εγκαταστάσεις του Ιονίου χωριού ανήκουν στην Ελληνική Ορθόδοξη Αρχιεπισκοπή της Αμερικής η οποία διοργανώνει δραστηριότητες όλο το χρόνο για περισσότερους από 200 νέους για να μάθουν περισσότερα για την Ορθόδοξη πίστη τους, τον Ελληνικό πολιτισμό και να εμπλουτίσουν την εκπαίδευσή τους στην προστασία του Περιβάλλοντος.

Τον Σεπτέμβριο του 2016 ολόκληρος ο κήπος καταστράφηκε από ανεμοστρόβιλο και η Ελληνική Ορθόδοξη Εκκλησία της Βόρειας Αμερικής ανέθεσε στον Κηποτέχνη και Σύμβουλο Πρασίνου, Νίκο Θυμάκη, (ο οποίος έχει δημιουργήσει και τους Θεματικούς Κήπους της Θεολογικής Σχολής Χάλκης του Ορθόδοξου Οικουμενικού Πατριαρχείου στην Κωνσταντινούπολη), τον επανασχεδιασμό του κήπου, την επιλογή και ποιοτικό έλεγχο των φυτών καθώς και την εποπτεία της κατασκευής.

Οι νέοι κήποι ολοκληρώθηκαν ένα χρόνο αργότερα και διαθέτουν 11.000 φυτά και πάνω από 900 μεγάλα δείγματα δένδρων. Από τα 200 διαφορετικά είδη φυτών τα 180 ανήκουν στο ελληνικό οικοσύστημα, είναι γηγενή. Τα υπόλοιπα είναι μεσογειακά και τροπικά φυτά, συμπεριλαμβανομένων των *Chaerops humilis* και *Phoenix theophrastii*. «Το Ιόνιο Χωριό είναι το μόνο μέρος στην Ελλάδα που έχει και τα δύο αυτά είδη φοινικιάς», σχολίασε ο Νίκος Θυμάκης. Ένα άλλο ξεχωριστό χαρακτηριστικό αυτού του κήπου είναι τα τρία ευπαθή είδη φυτών που αναφέρονται στο *The Red Data Book* των Σπένιων και Απειλούμενων Φυτών της Ελλάδας: ο *Phoenix theophrastii*, το *Pancratium maritimum* και *Juniperus oxycedra*.

Δύο επιπλέον μοναδικά χαρακτηριστικά αυτού του κήπου είναι τα 70 αιωνόβια ελαιόδεντρα και ένας κήπος με τα φυτά της Αγίας Γραφής. "Χρησιμοποίησα το TerraCottem για να επιτύχουμε με εγγύηση την επιβίωση όλων αυτών των μοναδικών δειγμάτων που φυτεύτηκαν σε αμμόδη και ξηρά εδάφη. Επιτύχαμε ποσοστό επιτυχίας 100%, παρατηρήσαμε πολύ καλή και γρήγορη ανάπτυξη των φυτών και αυξημένη αντίσταση στην ξηρασία. Στις μέρες μας είναι όλο και πιο σημαντικό να υπάρχει μια υδατοδιαμορφωμένη προσέγγιση στα συστήματα φύτευσης για να αντέξουν στις ακανόνιστες κλιματικές συνθήκες", κατέληξε ο Νίκος.





## PROFESSZIONÁLIS PÁLYAMINŐSÉG

### Hu / PROFESSZIONÁLIS PÁLYAMINŐSÉG

A Magyarország egyik leghíresebb futballistájáról elnevezett Hidegkuti Nándor Stadion az MTK futballklub otthona.

Az 5322 férőhelyes stadion Budapest Józsefváros kerületében helyezkedik el. A stadion 2016-ban teljesen egészében felújításra került, a világszinten is élvonalbeli sportpályát a Garden Group Kft. kivitelezte Desso GrassMaster és TerraCottem technológiákat használva.

A pálya homokalapra épült, mely alatt kavicsrétegek találhatóak. A vízmegtartó képesség növelésének érdekében 50 gramm TerraCottem került az alsó györrészórába (-20cm és -10cm mélységben), valamint 60g/m<sup>2</sup> a felsőbe (-10cm és 0cm).

Kárpáti Gábor, a Garden Group ügyvezetője elmondta, hogy kihívásokkal szembesültek a fű növekedésekor az építés és fenntartás során a magas betonfalak által okozott szélsőséges időjárási viszonyok és a kialakult mikroklíma miatt. "Örömmel szolgál, hogy kipróbálhattuk a TerraCottem technológiát, mivel ez segíthet a 100%-os angolperje (Lolium perenne) szárazságtűrésének és a felvehető tápanyagmennyiség növelésében. Már nagyon korán megfigyeltük az erősebb és mélyebb gyökérfejlődést. Azóta is minden pályaépítésünk során használjuk a TerraCottem technológiát."



## EKSPOZYCJA DRZEW W PLATINIUM PARK

### PI / EKSPOZYCJA DRZEW W PLATINIUM PARK

Ten projekt znajduje się w części biznesowej Mokotowa na skrzyżowaniu ulicy Domaniewskiej i Wołoskiej. Dyrektor techniczny P.W. Ogród stwierdził: "Rozumiałem, że wyniki naszej pracy będą bardzo widoczne, więc potrzebowaliśmy optymalnych rezultatów. W związku z powyższym przy nasadzeniach 25-letnich kasztanowców (Aesculus hippocastanum) skorzystaliśmy z produktu o najwyższej jakości. Zdecydowaliśmy się na TerraCottem, ponieważ wiedziałem, że daje nam 100 procent gwarancji szybkiego wzrostu i doskonałego zakorzenienia rośliny przy jednoczesnym zaoszczędzeniu znacznej ilości wody."



## IEDEREEN EEN WINNAAR

### NI / IEDEREEN EEN WINNAAR

Meer dan 15 jaar geleden begon Pokon Naturado, marktleider in de consumentenpotgrond in Nederland, met het inwerken van TerraCottem in sommige van zijn hoogwaardige potgronden. Meer specifiek introduceerde het TerraCottem in de potgronden voor terras- en balkonplanten.

De reden was duidelijk: de waterretentiecapaciteit van potgrond verhogen voor toepassingen in drogere omgevingen en onderhevig aan hogere temperaturen.

Sedertdien werd het gamma van potgronden met TerraCottem uitgebreid en omvat nu ook deze voor kamerplanten, mediterrane planten en wordt het ook gebruikt als additief voor aanplantgrond van bomen en hagen.

Ben Scheer, Innovation & Business Development Manager bij Pokon Naturado merkte op: "Onze marketing strategie naar de tuincentra toe is steeds geweest om meer hoogwaardige potgronden te verkopen dan reguliere door te adverteren in vakbladen, aanbiedingen te doen naar de kleinhandel en promoties uit te voeren naar de consument zowel in de winkel als op de nationale TV. Dankzij onze consistente marketing benadering konden we de voordelen en return on investment die TerraCottem bezorgt in de kijker plaatsen bij de eindgebruiker. Onze potgronden bezorgen hen betere groeieresultaten en gezondere, meer droogteresistente planten. Zo worden tevreden klanten echte TerraCottem-ambassadeurs. Een win-win situatie."



## 수목이식, 식재

### Ko / 수목이식, 식재

한국 충남 태안군 태안 기업도시내 현대 솔라고 컨트리클럽에서 10여 종류의 수목 15,000그루 이상을 12 개월 동안 식재하였습니다.

컨트리 클럽의 조경을 책임지고 있는 일진레저(주)는 나무를 이식 하는데 임해매립지라 수목 성장 조건에 미치지 못했고, 골프 코스는 염분함량이 매우 높고, 낮은 수분 보유력과 강한 바람이 부는 해변 매립지 위에 지어졌습니다.

일진레저(주)의 양상모팀장은 "테라코렘은 수목이 극척박한 매립지 환경에서 활착하는 것을 도왔습니다 라고 하면서" 여기는 나무의 생존율이 97%에 달했으며, 보통 이 같은 지역에서 우리는 30% 이상의 손실율을 보았습니다. 우리는 이전에는 단지 불모의 땅이었던 이곳을 나무들로 둘러싸인 아름다운 골프 코스를 가지게 되었습니다."





## ZAŠTITA ZEMLJIŠTA VETROZAŠTITNIM POJASEVIMA

### Se / ZAŠTITA ZEMLJIŠTA VETROZAŠTITNIM POJASEVIMA

Oko 70% električne energije proizvedene u Srbiji dolazi od uglja. Termoelektrane i kopovi Kostolac su u najvećoj meri pokrenuti od strane uglja ekstrahovanog iz okolnih površina, otvorenih jama.

Površinski kop je najčešća forma strateškog kopanja materijala u Srbiji, koji vizuelno i ekološki utiče na okolinu sa dugotrajnim štetnim efektima, kao što su zagađenje vode i vazduha, gubitak šuma i plodnosti zemljišta.

JP „Elektroprivreda Srbije“ je ponudjeno inovativno rešenje za ozelenjavanje degradiranih površina, koji doprinosi poboljšanju mikrobiološke aktivnosti zemljišta, poboljšava rast biljaka uz povećanje kapaciteta zadržavanja vode i povećanja procenat primanja biljaka. Niz tehnologija je pokušano u prethodnim projektima, koji su davali slabe rezultate, dok GreenSoil Inženjering na čelu sa MSc Natašom Trifunović, nije predstavio holistički pristup baziran na metodologiji TerraCottem-a.

„Nakon izvršene tehničke rekultivacije, formirana su polja za sadnju biljaka. Sadnja je obavljena kombinovanom tehnikom mašinski-motorno svrdlo i ručno pripremanjem sadnih jama. Primenjena je tehnologija sadnje sadnica crnog bora sa golim korenima i kontejnerskih sadnica crnog bora, kao i bagrema sa golim korenima uz dodavanje TerraCottem-a.“

Uprkos izuzetno povišenim temperaturama i bez uslova nege i održavanja biljaka nakon sadnje, dve godine stare sadnice crnog bora sa golim korenima imale su procenat primanja oko 95%, dok je kod sadnica crnog bora starih tri godine procenat primanja 60%. Kontejnerske trogodišnje biljke crnog bora su pokazale procenat primanja 85%. Sadnice sa golim korenima bagrema starosti godinu dana imale su procenat primanja preko 90%.

Elektroprivreda Srbije je zadovoljna rezultatima, kao i vodja projekta Nataša Trifunović: „Celokupan projekat je izveden vrlo uspešno sa procentom primanja sadnica preko 70%, uz vrlo zadovoljavajući porast biljaka, uz napomenu da su uslovi održavanja ozelenjene površine izostali, na šta se mogu dodati i ekstremno visoke letnje temperature.“



## ALTA TECNOLOGÍA EN PLANTACIÓN SUPERINTENSIVA DE OLIVO

### Ep / ALTA TECNOLOGÍA EN PLANTACIÓN SUPERINTENSIVA DE OLIVO

A 16 kilómetros de Sevilla en España se encuentra la Finca El Cadoso cuyo propietario tomó la decisión de rentabilizar el terreno con una plantación en superintensivo de olivos. Optó por la variedad arbequina para obtener un mayor rendimiento y producción de aceite de oliva de calidad virgen extra.

Las primeras 5 hectáreas fueron plantadas en julio 2016 con un marco de plantación de 1,8 m x 4 m resultando un total de 1388 plantas por hectáreas. Un año más tarde, se plantaron otras cinco hectáreas más con 1333 plantas por hectárea, utilizando un marco de plantación de 1,5 m x 5 m.

Ambas plantaciones fueron realizadas por la empresa Todolivo con tecnología de última generación: sistema de alineación por GPS, colocación simultánea de planta y tutor y aplicación de 20 g de TerraCottem por planta.

La propiedad se decidió por la utilización de TerraCottem para aprovechar al máximo el agua de riego disponible, favorecer el crecimiento y reducir pérdida de plantas. La plantación se realizó en pleno verano y se esperaba una tasa de mortandad más alta como consecuencia de las altas temperaturas que se sufren en esta época. A los 85 días de la plantación se hizo un primer muestreo en 4 hileras con un total de 781 plantas, contabilizando la muerte de tan solo 15 árboles, un 1,92 % en vez del 4-5 % que suele ser lo normal en estas condiciones, por lo que el éxito de supervivencia fue superior al 98 %.

El propietario comentó: “Durante el mes de agosto, a temperaturas superiores a 40 °, estuvo averiado el sistema de riego durante 5 días y no pudimos regar. Gracias a que aplicamos TerraCottem las plantas no sufrieron en exceso y soportaron perfectamente el estrés hídrico, evitando una gran pérdida de plantas y de inversión.”



## LIEFDADIGHEID TOT VER BUITEN DE LANDSGRENZEN

### NI / LIEFDADIGHEID TOT VER BUITEN DE LANDSGRENZEN

Tijdens de kerstperiode van 2017 heeft TerraCottem twee totaal verschillende liefdadigheidsprojecten ondersteund, beide met als oogmerk het leven van kinderen en volwassenen te verbeteren.

Eenzijds was er de speeltuin in Westlake, Kaapstad, Zuid-Afrika en anderzijds het 'Bi- Ventiel' bos in Kruishoutem, België. VZW Het Ventiel heeft als doel de verrijking van het leven van personen met jongdementie, alsook voor hun omgeving en voor hun "buddy".

Beide projecten kregen de benodigde materialen voor de aanplanting van bomen en struiken van lokale bedrijven maar hadden met compleet verschillende groeiomstandigheden te kampen. In Zuid-Afrika was er de blakerende zon en de steenharde, uitgeputte bodem door de grootste droogte van de afgelopen 100 jaar. In België gebeurde de aanplanting dan weer in zwaarbewolkt weer en in een zware, natte kleigrond met ook hier een weerrecord; het minste aantal uren zonneschijn in de maand december van het afgelopen decennium.

Maar de doelstelling van beide liefdadigheden was eender: een mooie, groene zone creëren voor mensen met moeilijke levensomstandigheden. Een omgeving waar ze kunnen ontspannen en genieten van hun vrije tijd. En hoe sneller zij dit resultaat bereikten, hoe beter voor iedereen.

In Kaapstad doneerden een aantal leden van het SALI (South African Landscapers Institute) planten, bodembedekkers, bomen, boomschors en bodemverbeteraar om een schaduwrijke zone te creëren voor de kinderen van Westlake. Het objectief was om dit vervallen gemeenschapspark te heropwaarderen voor de kinderen uit een nabijgelegen opvangcentrum en kinderdagverblijf. Het was de rol van TerraCottem om de 100 struiken en 15 bomen, geplant onder leiding van Norah de Wet, de SALI Nationale Voorzitter, de hoogst mogelijke overlevingskans te geven!

Tegelijkertijd werden er in het druilige België honderden boompjes en struiken aangeplant in het 'Bi- Ventiel' bos tijdens de "Warmste Week" van Studio Brussel. Een themabos over én voor mensen met jongdementie. Dit bos geeft nieuw leven, nieuwe zuurstof ... net zoals VZW Het Ventiel nieuwe zuurstof geeft aan mensen met jongdementie.

TerraCottem had de eer om een kleine bijdrage te mogen leveren in deze twee lovenswaardige goede doelen.





## THANKS

This book celebrates 25 years of TerraCottem throughout the world and would not have been possible without the help and support of a great many people. Our thanks must go to our distributors, customers and employees who have all played an important role in bringing this project to fruition. They have provided some wonderful examples of how our soil conditioner is helping such a diverse range of projects on a worldwide basis.

Twenty-five years and still going strong as the plants, shrubs, trees and turf, treated with TerraCottem illustrate in this publication.

We also remember with fondness two of our distributors who have died: Johan Janssens distributor for Czech Republic and Slovakia and one of our first distributors; and Apostolis Venetis distributor for Greece.







