





Beneficial Biology for Balanced Soil



Soil biology drives the nutrient cycles that create the healthy plants that feed and adorn our planet. OAS offer a range of products to support Turfgrass Managers to produce surfaces that look and perform to an exceptional standard. The Origin portfolio consists of plant nutrition, water management and biostimulants to promote a healthy plant and soil, less susceptible to abiotic stress and disease.

OAS specialises in selecting and applying the beneficial microorganisms found in a healthy soil food web to help our customers grow strong, healthy, nutritious plants, a process that complements an integrated turf management programme which is key to the longevity and success of turf. Soil microorganisms perform many beneficial functions:

- Produce enzymes to degrade and mineralise thatch
- Create humus to increase CEC and improve soil structure
- Bind soil particles together to create space for air and water
- Solubilise locked up nutrients and make them available to the plant
- Convert complex carbohydrates to plant food
- Drive the nitrogen cycle
- Make fertilisers available to the plant
- Stimulate plant hormone production
- Stimulate plant defence
- · Reduce dry patch
- Produce antibiotics to counter disease
- Competitively exclude turf pathogens

OAS Microbial Range can be used to bolster the microbial community in the soil.



Improve the playing surface



For use as part of an integrated turf management plan



Reduce management costs



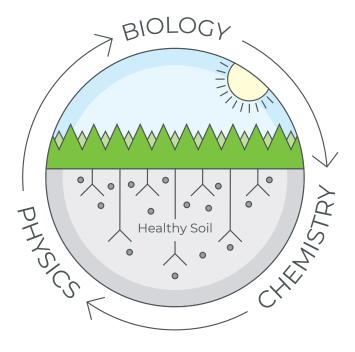
Improve water quality in water courses

Creating a healthy rootzone

A healthy rootzone for healthy grass must have a balance between biology, chemistry and physics. Biology impacts the chemistry and physics.

How can we help you promote healthy soil?

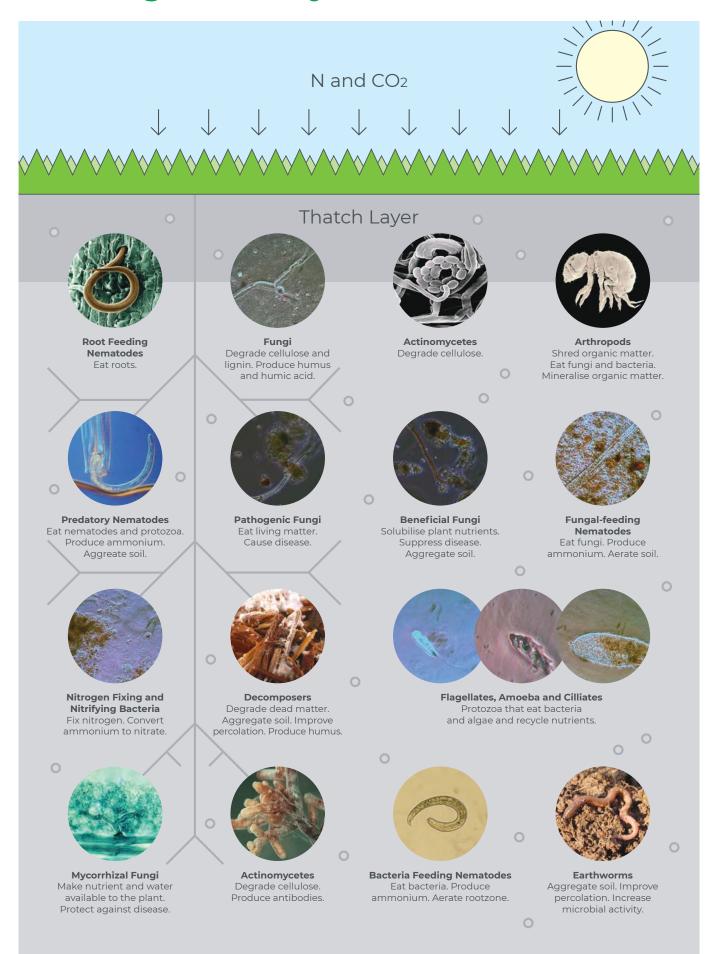
- Assess the grass species, rootzone profile and physical soil structure.
- Analyse the chemistry and available nutrients in the rootzone.
- Understand our customer's requirements based upon the data available and preferred management practices.
- Correct nutrient imbalances and adjust soil chemistry to increase Cation Exchange Capacity for optimal nutrient availability and uptake.
- Devise a programme to solve existing problems and create and maintain healthy grass and plants growing in healthy biologically active rootzones.



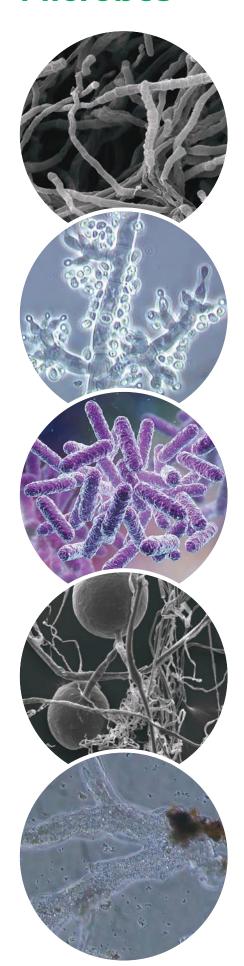
For more information or to request a quote, contact the team today on **0800 138 7222** or email sales@originamenity.com

Contents	
Creating a healthy rootzone	3
Creating a healthy soil food web for all grasses and plants	4
Microbes	5
Biofixation Technology	6
Products that contain Biofixation	6
ThatchEater	6
GreenCircle	7
Mycorrhizal Inoculant	7
Mycorrhizae	8
Mycorrhizae for Turf	9
Mycorrhizal Grass Seed Coat	9
Liquid Endo Mycorrhizae	9
Compost Teas and Additives	10
Compost Tea Brewers	10
Compost Tea Packs	10
Fungal Additive	11
Bacterial Additive	11
Introducing Soil Biology	12
VermiExtract	12
BioTabs	12
DegrAID	13
MycoGro Fertilisers	13
Aquacept	14
CoolTabs	14
Oil Spill First Aid Kit	15
Oil Degrader	15
Oil Remover	15
Water Treatment	16
Recycle	16
BlueWater	16
Mycorrhizae for Trees and Shrubs	17
Transplanter	17
WhipDip	17
Biological Applications	18

Creating a healthy soil food web



Microbes



Phanerochaete

- A powerful fungal decomposer able to break down organic matter
- Accelerates composting time of most organic waste materials
- Eliminates malodours during the composting process
- Break down thatch

Trichoderma

- Hyphal growth creates pores and tunnels, improving soil structure
- Stimulates plant defence mechanisms
- Organic acids produced by fungi lower pH and efficiently solubilise plant nutrients
- Promote plant growth
- · Good competitors able to exclude other microbes
- Capable of breaking down complex carbohydrates such as chitin

Bacillus

- Food for others
- Produce by-products that promote plant growth (hormones, enzymes, vitamins)
- Create a protective layer close to the root
- Excess N that released is plant available

Mycorrhizal Fungi

- Form mutually beneficial symbiotic relationships with plants
- Fungi obtain food from plants via root exudates, in exchange fungi bring water and nutrients back to the plant
- Mycorrhizae grows through soil increasing plants ability to access soil nutrients
- Produce Glomalin improves soil texture by binding particles
- Create a natural barrier around the roots
- Beneficial association with perennial grass species
- Mycorrhizae grows through soil increasing root surface area

Protozoa

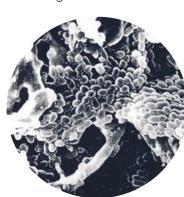
- Single-celled animals that feed primarily on bacteria, fungi, other protozoa and soluble organic matter
- Three different types: Flagellates, Amoebae, Ciliates
- · Play an important role in nutrient cycling
- · Release excess N
- An important food source for other soil organisms (earthworms, nematodes)

Biofixation Technology

The process of Biofixation, involves the fixing of bacteria and fungi to mineral supports and is at the centre of our biotechnical developments. It represents a considerable advancement in the application of biotechnology. Selected strains of natural microorganisms are fixed to carefully chosen mineral supports. This unique combination of microbes and mineral support provides the beneficial bacteria and fungi with enhanced metabolic activity, improved toxin resistance and increased reproductive capacity which exceeds that which is found in free living and bioaugmented microorganisms.

The products that contain Biofixation technology are:

- ThatchEater
- GreenCircle
- Mycorrhizal Inoculant



Contact the OAS team today for a full soil analysis. Call 0800 138 7222 or email sales@originamenity.com

ThatchEater

Degrades thatch with minimal disruption

ThatchEater is applied in spring, converting thatch to plant food. The humus, humic and fulvic acids that are produced create a free draining rootzone and promote sustainable plant growth.

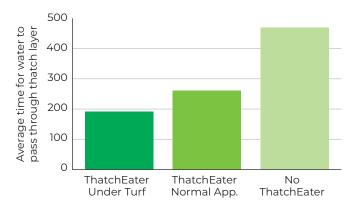


Before ThatchEater

After applications of ThatchEater

Benefits

- Reduces the need for invasive practices
- Bacteria and fungi produce enzymes to degrade thatch for a whole season with just one application
- Degrades thatch and mineralises organic matter
- · Releases nutrients for sward development
- Releases food for fungi to help promote fine grasses
- Improves surface drainage and reduces black layer



Effects of Thatch Eater on Rye sp Thatch Layers
Trials performed by Dan Hall, University of Surrey

Pack Size: 25kg Order Code: OAI004332

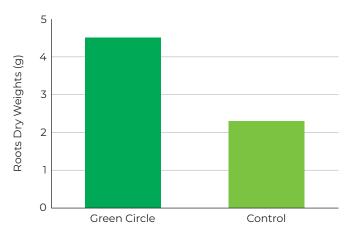
Application Rate						Gı	ranu	le Si	ze		
	50g/m²						0	.5 – 1	.5mr	n	
J	F	М	Α	М	J	J	Α	S	0	N	D

GreenCircle

Provides the foundation for a biological approach to sports turf management

GreenCircle contains a blend of beneficial soil bacteria and fungi, which replace the essential microbes lost from intensively managed turf. It uses biofixation technology to enhance the metabolism of beneficial microorganisms and to protect them from chemicals and UV light.

GreenCircle also contains biostimulants, trace elements, carbon and carbohydrates.



Green Circle Increases Root Dry Weights
Trial Performed by Jo Shannon-Lowe, University of Surrey

The addition of GreenCircle increased the root dry weights by 57%. Better rooting systems lead to increased uptake of water and nutrients leading to a healthier and stronger sward.

Benefits

- Degrades thatch as it forms and improves plant nutrient uptake
- Promotes greater root development and sward density
- Increases turf vigour, wear and stress resistance
- Helps promote perennial grasses

Mycorrhizal Inoculant

Creating a symbiotic relationship with turfgrass

Mycorrhizal Inoculant is an easy to apply product that improves root growth, nutrient uptake and resistance to stress.

Mycorrhizal Inoculant contains live spores of beneficial mycorrhizal fungi, growth-promoting soil fungi and bacteria, carbon, and organic soil nutrients to kick-start the soil's natural food web. This supports rapid establishment of newly seeded or turfed areas and to improve grass root growth and stress recovery.

Mycorrhizal fungi can increase the root surface area, significantly improving plant nutrient and water uptake. Mycorrhizae also produce powerful enzymes to solubilise locked up nutrients especially Phosphorus and Trace Elements.



One month after overseeding using Mycorrhizae

Benefits

- Faster grow-in and establishment of new greens and pitches
- Promotes establishment and longevity of fine grasses
- Improves root mass and increases nutrient uptake
- Increases plant tolerance to drought and stress conditions

Pack Size: 25kg Order Code: OAI004326

Application Rate						Gı	ranu	le Si	ze		
	25g/m²						0	.5 – 1	.5mr	n	
J	F	М	Α	М	J	J	Α	S	0	N	D

Pack Size: 25kg Order Code: OAI004334

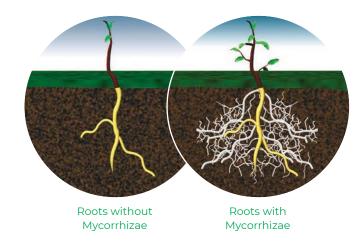
Application Rate							Gı	ranu	le Si	ze	
25g/m²						0.5 – 1.5mm					
J	F	М	Α	М	J	J	Α	S	0	N	D

Mycorrhizae

- 'Myco' (fungus) 'rhiza' (root) mutually beneficial, symbiotic relationship between plant roots and fungi
- Specialised fungi which colonise roots and extend hyphae far into the soil
- Mycorrhizal hyphae are extensions of the root system and are more effective in nutrient and water absorption than roots themselves
- Approximately 95% of plants form symbiotic relationships with mycorrhizal fungi including all fine grass species
- Symbiotic relationship centred on a plant's ability to produce carbohydrates – the excess of which is released through roots and feeds soil biology

Mycorrhizal fungi offer a host of benefits beyond improved survival and accelerated growth. The development of a robust root system through mycorrhizal association enables plants to withstand common environmental stressors, such as drought or poor soil conditions. This natural resilience leads to a healthier and more biodiverse ecosystem.



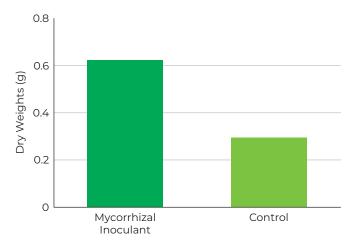


Mycorrhizal fungi form symbiotic relationships with plant roots. Bent, Fescue and Rye grasses rely heavily on mycorrhizae and other soil fungi for survival in nature.

In sports turf, levels of mycorrhizae are often low due to inert soils. This results in a weakened sward, which suffers more from drought, stress, nutrient leaching, and disease. Plants with mycorrhizal associations need less water and benefit from accelerated growth, and improved tolerance to environmental and disease pressures.

University and user trials have shown dramatic improvements in speed of establishment, root mass and sward quality while reducing water inputs.

The addition of Symbio Mycorrhizae increased the root dry weights by 48%. Better rooting systems lead to increased uptake of water and nutrients leading to a healthier and stronger sward.



Mycorrhizal Inoculant Increases Root Dry Weights Trial Performed by Jo Shannon-Lowe, University of Surrey

Mycorrhizal Grass Seed Coat

For rapid establishment of fine grasses when overseeding

Mycorrhizal Grass Seed Coat is an easy to apply product that improves root growth, nutrient uptake and resistance to stress.

Mycorrhizal Grass Seed Coat contains live spores of beneficial mycorrhizal fungi, growth-promoting soil fungi and bacteria, carbon, and organic soil nutrients to kick-start the soil's natural food web.



Roots treated with Mycorrhizal seed coat on the left, untreated on the right.

Benefits

- Improves establishment of fine grass seed in new and old greens
- Greatly improves root mass and increases nutrient uptake
- Increases plant tolerance to drought and stress conditions
- Increases the percentage of fine grasses in the sward

Liquid Endo Mycorrhizae

Promotes root and shoot growth and improves seed survival

Liquid Endo Mycorrhizae contains four species of endo mycorrhizae. It may be applied as a seed coat, root drench, mixed with compost teas or injected into the rootzone by ground probe aeration.

When a healthy mycorrhizal root touches a non-mycorrhizal root, in most cases, the mycorrhizae will transfer to the weaker root. Spreading the beneficial effects, improving sward growth and establishment.

Research shows that mycorrhizal grass establishes and grows rapidly and reduces water requirements.



Overseeding with Grass Seed Coat Pictures taken 9 days after over seeding

Benefits

- Improves seed survival rates
- Increases shoot and root growth in sandy rootzones
- Reduces water requirements
- Accelerates growth rates reducing establishment time of newly sown playing surfaces
- Promotes fine grasses

Pack Size: 500g

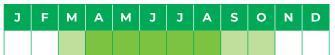
Order Code: OAI001572

Pack Size: 1.5kg

Order Code: OAI006622

Application Rate

3kg/ha



Pack Size: 200ml

Order Code: OAI001538

Pack Size: 1L

Order Code: OAI001540

| J | F | M | A | M | J | J | A | S | O | N | D |

Application Rate

Compost Tea Brewers

Improve the life in your soil

Bio Brewers suit every situation from entire golf courses and playing fields to bowling greens. Creating healthy biologically active soil with compost tea.

Benefits

- Degrade thatch, stubble and organic matter in soils and growing media
- Improve soil friability for better drainage and root development
- Introduce the soil food web and create healthy plants and soils

200L Brewer Order code: OAI002481

Makes between 100 – 200 litres of compost tea to cover from 1 – 5 hectares. Designed for sports pitches and golf clubs.



25L Brewer Order code: OAI002483

Ideal for the smaller nursery and turf manager 25 litres treats up to 3000m². Ideal for bowling greens, cricket squares, soil based winter sports pitches, allotments and lawns.



IBC Aerator Order code: OAI002485

Designed to fit in a 1000L IBC. Makes between 800 – 1000 litres of compost tea to treat a growing area of up to 25 hectares.



Compost Tea Packs

Complete compost tea package for use with all compost tea brewers

Compost tea is a highly concentrated microbial solution containing a diverse range of the bacteria, fungi, protozoa and beneficial nematodes that create healthy biologically active soil in which to grow healthy plants.

Compost tea converts compacted, inert soil into healthy humus rich rootzones, with improved percolation rates and friability, nutrient recycling, disease tolerance and water retention in summer.



Before compost tea

After applications of compost tea

Benefits

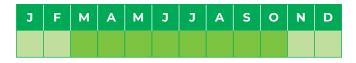
- Improves soil structure, oxygen diffusion, water infiltration and depth of active rootzone
- Retains and recycles nitrogen and other nutrients
- Rapidly decomposes thatch and turns organic matter into humus
- Produces hormones that encourage plant growth
- Provides the biology to promote rye, fescue and bent grass
- Reduces the need for invasive practices
- Reduces opportunities for pathogens to grow

Pack size: 50L

Order code: OAI002494

Pack size: 100L

Order code: OAI002497

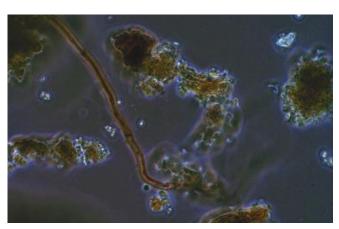


Fungal Additive

Fungal Additive for compost tea is a highly concentrated and diverse blend of fungi and bacteria designed to boost lignin degrading fungi

This highly concentrated mix of seven species of soil fungi is selected for its ability to degrade thatch and organic matter converting it to humus and essential organic acids.

The fungi also maintain the fungal dominance needed for perennial grass growth and help to out-compete the fungi that cause fairy rings and fungal dry patch.



Fungi in compost tea

Benefits

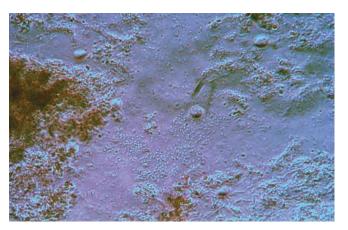
- Introduces diverse fungi and bacteria into compost tea brews
- · Replenishes beneficial soil fungi
- Creates fungal rich soils needed for perennial grass growth
- · Degrades thatch
- Recycles organic nutrients and increases nutrient availability for the plant

Bacterial Additive

A highly concentrated and diverse blend of bacteria, designed to boost populations of bacteria and produce a bacterial dominant compost tea

Bacterial Additive helps to mobilise organic matter in the soil and makes nutrients more plant-available whilst reducing the leaching of soluble nutrients.

The bacteria are used to boost the compost tea and to stimulate growth in early spring and late autumn.



Bacteria in compost tea

Benefits

- Introduces a diverse population of bacteria into compost tea brews
- · Improves growing media for annual plants
- Recycles organic nutrients
- Increases nutrient availability for the plant
- · Reduces nutrient leaching from the growing media

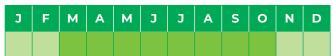
Pack size: 1kg

Order code: OAI002501

Pack size: 5kg

Order code: OAI002503

Application Rate
250 – 500g/ha



Pack size: 250g

Order code: OAI002500

Pack size: 2.5kg

Order code: OAI002498

J F M A M J J A S O N D

VermiExtract

Replace essential micro-organisms and repair disease scars

VermiExtract is a probiotic liquid extraction derived from organic Vermi compost. It contains a broad spectrum of beneficial micro-organisms which improve nutrient availability and create friable rootzones, resulting in healthy plants grown in healthy soil. VermiExtract is rich in humic, fulvic and amino acid substances, which condition the soil and improve water retention. VermiExtract contains natural N.P.K and trace elements vital for healthy turf.

VermiExtract promotes biological activity in the soil which increases air space and percolation rates.



Before treatment

After treatment

Benefits

- Contains soil bacteria, fungi and protozoa
- Rapidly repairs disease, nematode and dry patch damage
- Converts root exudates and fertilisers into plant available nutrition
- Microbial activity improves soil friability and percolation rates
- Increases humus production for improved water and nutrient retention
- Promotes greater root development and sward density

BioTabs

Replace essential microorganisms and repair disease scars

Repair your soil by replacing some of the natural soil biology that is lost to drought, and frost. The beneficial bacteria and fungi in BioTabs will help you grow a healthy sward.

An all-natural soil probiotic, containing the beneficial bacteria and fungi found in healthy, productive soil and rootzones.



Benefits

- · Assists repair of disease scars and dry patch
- Increases root mass, making nutrients more soluble and available to the plant
- Converts thatch to humus improving water and nutrient retention
- Replaces beneficial organisms killed by drought, compaction and frost

Pack size: 10L Order code: OAI001647

Application Rate

10L/ha

J F M A M J J A S O N D

Pack size: 20 tablets Order code: OAI001716



DegrAID

Adds thatch degrading biology to your rootzone

DegrAID is a bio-based product in a soluble sachet. Designed with ease of application in mind to specifically promote biological activity in soil. It contains beneficial bacteria and fungi with thatch degrading properties, to help convert thatch to humus and improve plant nutrient up-take. Cellulose and lignin found in thatch are difficult to degrade. Soil microorganisms, especially beneficial fungi and bacteria produce enzymes to breakdown these compounds.

DegrAID adds high numbers of fungi that are efficient in breaking down lignin and cellulose in thatch.

Beneficial bacteria in DegrAID breakdown cellulose and mobilise nutrients such as phosphorus and potassium making them available for plant uptake.

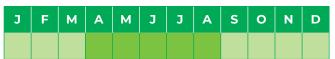
Benefits

- Easy to apply soluble sachet
- · Contains thatch degrading fungi and bacteria
- Fungi convert thatch to humus
- · Bacteria solubilise and retain nutrients
- Promotes establishment of fescue, bent and rye grasses
- Increases plant tolerance to drought and stress conditions

Pack size: 2 x 50g Order code: OAI007121

Pack size: 8 x 50g Order code: OAI007123

Application Rate
100g/ha



MycoGro Fertilisers

MycoGro fertilisers contain Mycorrhizae Rhizobacteria and fungi

Balanced granular fertilisers designed specifically to develop the biological and mycorrhizal activity of the soil.

These unique blends include beneficial mycorrhizal fungi, rhizobacteria and carbon, with biostimulants rich in sugars to improve grass root growth, and stress recovery.

Benefits

- Promotes the establishment of fescue, bent and rye grasses
- Mycorrhizae improve root mass and increase nutrient and water uptake
- Increases plant tolerance to drought and stress conditions
- Supports grow-in and establishment of new grass seeds and turf
- Healthy grass growing in a microbially active root zone is more stress tolerant and recovers faster from disease

The MycoGro range:

12-0-9+1Fe+0.5Mg + Thatch Eating Microbes (without Mycorrhizae)

Pack size: 25kg Order code: OAI001737

10.0.20 + 1.7% Fe + 2.2% Mg

Pack size: 20kg Order code: OAI001744

11.2.14 + 3% Mg + slow release

Pack size: 20kg Order code: OAI001750

5.0.28 + 2.5% Fe + 1.5% Mg

Pack size: 20kg Order code: OAI001736

10.3.14 + 2% Mg 2% Fe (without mycorrhizae)
Pack size: 20kg Order code: OAI001748

5.3.8 100% Organic

Pack size: 20kg Order code: OAI007250

10.2.10 + 1.5% Mg + 0.9% Fe 50% Organic Pack size: 20kg Order code: OAI007275

5.2.10 + 1.3% Mg 50% Organic

Pack size: 20kg Order code: OAI007274

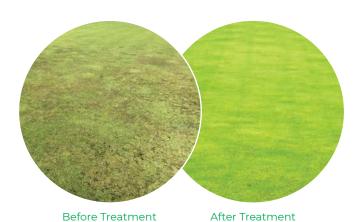
Application Rate	Granule Size
25 – 35g/m²	0.5 – 1.5mm

Aquacept

Provides a biological solution to the hydrophobic layer caused by fairy rings and fungal dry patch

Many turf managers experience a hydrophobic layer 4 – 6cm thick just below the thatch layer. It often occurs in conjunction with or near fairy rings. The hydrophobic layer is caused by organic wax and protein based hydrophobins excreted by fungi that coat the soil particles making the soil hydrophobic.

The bacteria in AquaCept are chosen for their ability to digest the protein and waxes and outcompete the fungi for nutrient, removing the cause of the problem.



Benefits

- Cleans up soil profiles after heavy winter IPM applications ready for the growing season
- A long-term solution giving gains in summer sward quality
- Alleviates the causes of dry patch

CoolTabs

Boost growth and replenish the soil food web

Repair your soil by replacing some of the natural soil biology that is lost to compaction, drought and frost.

The beneficial bacteria in CoolTabs will help you create a healthy sward in times of cool season stress.

CoolTabs are an all-natural soil probiotic containing five species of beneficial Bacillus bacteria found naturally in healthy soils and root zones.



Benefits

- Help prevent fertiliser leaching in heavy rain
- Degrade cellulose to reduce thatch
- Solubilise phosphate to make it available to the plant
- Maintain biological activity in the soil for strong healthy grass
- Assist in repair of disease scars and dry patch

Pack Size: 5kg Order Code: OAI001715

Application Rate

5kg/ha

J F M A M J J A S O N D

Pack size: 12 tablets Order code: OAI001724

Application Rate

12 tablets/ha

J F M A M J J A S O N D

Oil Degrader

A powerful blend of microbes and nutrients capable of degrading the full complement of polluting hydrocarbons – can be used to treat contaminated surfaces, soils and water

Origin

A blend of efficient hydrocarbon degrading microbes combined with soluble nitrogen and phosphorus containing nutrients. The product can be mixed dry into soils or dissolved in water and sprayed onto the contaminated area.

All the bacteria in the product are facultative anaerobes and have the ability to adapt to most soil conditions.

However, the best degradation results are obtained under aerobic conditions.

Oil Degrader can be used in soils containing up to 20% total hydrocarbon.

Benefits

- · Rapidly degrades mineral oils and diesel
- · Degrades phenols
- Degrades volatile aliphatic, aromatic, heavy aliphatic, chlorinated and bromated hydrocarbons
- Water soluble for use as a spray or solid application
- Supplied with own water-soluble nutrients for one stop application

Oil Remover

The enzymes in oil remover rapidly biodegrade mineral oils into harmless constituent parts

Origin

Oil spills are a fact of life. Oil Remover makes you prepared for immediate action. Enzymatic action breaks down oil pollution on soil, grass and concrete. It converts hydrocarbons to basic water-soluble elements and nutrients, allowing rapid reseeding and recovery of oil spills on grass.

Oil Remover contains nutrients necessary for healthy plant regeneration.

Do not use on oil-based tarmacadam type surfaces.

Benefits

- To remove fuel, hydraulic and lubricating oils from Sports turf
- Also effective on many artificial surfaces

Pack size: 1kg Order code: OAI004317

Symbio Oil Degrader

America statemental mendant distribution of the statement of the state

Oil Spill
First Aid Kit

Oil Degrader **plus** Oil Remover

Pack size: 1kg Order code: OAI004316

Application Rate

50g/m³

Recycle

To break down grass, organic material, hydrocarbons, pesticides and waste found in wash down and waste treatment systems

These microbes are specially selected for their ability to rapidly degrade a wide range of organic wastes.

Recycle is also designed to aerobically degrade the pollution parameters that can result in discharge effluents failing consent limits.

Recycle breaks down organic material, hydrocarbons and waste found in wastewater treatment systems. The inclusion of fast acting enzymes, starter nutrients and high microbe counts means that Recycle starts reducing pollutants immediately.

Recycle also competes with filamentous bacteria for available nutrients. This decreases the production of excess sludge, whilst producing sludge flocs with superior settling characteristics, and reducing the requirement for sludge treatment chemicals.

Benefits

- For wash down and treatment systems
- For the rapid improvement of overloaded or underperforming biological aerobic wastewater treatment plants
- Facilitates the aerobic degradation of a range of hydrocarbons, lignin, cellulose and general organic residues
- · Improves nitrification

Pack size: 1kg

Order code: OAI001431

Pack size: 5kg

Order code: OAI006718

Application Rate 50g/m³

BlueWater

A biological treatment for ponds, lakes, water hazards, drainage ditches and soakaways

Water on golf courses can become contaminated with algae, particularly during the summer months as stagnant water warms up.

BlueWater is a natural formulation of bacteria and buffers contained in a water-soluble sachet. The bacteria in BlueWater use nitrates and phosphates as their own food source, starving the algae and reducing algal growth.

In addition to this, the bacteria also break down the organic solids from fish and waterfowl excreta and decaying plant material that results in cloudy water, organic silt build-up and foul odours.

Benefits

- · Reduces blanket weed
- Helps to prevent green and cloudy water
- Reduces sludge build-up
- Eliminates odour problems
- · Non-chemical, safe for fish
- Visible results in just 4 weeks



Before treatment

After treatment

Pack size: 8 x 250g Order code: OAI004356

Pack size: 25 x 250g Order code: OAI004353

Pack size: 50 x 250g Order code: OAI004354

Application Rate											
250g/800m ³											
J F M A M J J A S O N [D			

Transplanter

For containerised and rootballed trees and shrubs

Transplanter provides all the biological support systems the plant needs to survive in its new environment, and to establish and grow from day one.

An endo and ecto mycorrhizal inoculant for almost all* containerised or root balled trees and shrubs prior to transplanting.

*All trees and shrubs except Laurels, Rhododendrons, Azaleas, all Ericaceous species, orchids and brassicas.



Benefits

- · Improves transplant survival rates
- Accelerates growth rates of nursery stock and transplanted plant
- · Increases plant growth in poor soils
- Increases the natural vigour and health of the plant
- · Reduces the need for water

WhipDip

For bare root and feathered trees and shrubs

An endo and ecto mycorrhizal inoculant for almost all* whips, bareroot trees, shrubs, seedlings, cuttings and small containerised plants. Easy to apply as a root dip just before planting.

*All trees and shrubs except Laurels, Rhododendrons, Azaleas, all Ericaceous species, orchids and brassicas.



Benefits

- Improves transplant survival rates
- Accelerates growth rates of nursery stock and transplanted plants
- Increases plant growth in poor soils
- Increases the natural vigour and health of the plant
- · Reduces the need for water

Pack size: 300g

Order code: OAI001584

Pack size: 1kg

Order code: OAI001580

Pack size: 5kg

Order code: OAI001585

Pack size: 10kg

Order code: OAI001577

Application Rate

1g/1 litre of rootball size

The object is to get an even coating of mycorrhizal spores over the young feeder root system on the outside of the rootball.

Pack size: 300g

Order code: OAI001598

Pack size: 1kg

Order code: OAI001597

Pack size: 5kg

Order code: OAI001599

Pack size: 10kg

Order code: OAI001596

300g will be enough for approx. 660 bare root trees or 2000 – 3000 seedlings depending on size of root. (Use less water for seedlings).

Biological Applications

Problem	Cause		Biological A	Applications	
Thatch	Thatch is degraded and converted to humus by fungi and bacteria in the presence of oxygen. If microbes or oxygen are lacking thatch builds up.	ThatchEater	DegrAID	Compost Teas Fungal Additive Bacterial Additive	BioTabs VermiExtract GreenCircle
Fairy rings	Over 50 types of basidiomycete fungi cause fairy rings. They come to the surface to reproduce when there is no other bacteria and fungi to prevent their growth.	Compost Teas Fungal Additive Bacterial Additive	BioTabs	AquaCept	GreenCircle
Fungal dry patch	A build up of protein and secretions delivered by fungi in the rootzone, which coat the soil particle with a hydrophobic layer.	AquaCept	BioTabs	CoolTabs	Compost Teas Fungal Additive Bacterial Additive
Disease	Weakened plants and lack of competing beneficial microbes in the rootzone, thatch and lack of oxygen.	BioTabs CoolTabs	VermiExtract	Compost Teas Fungal Additive Bacterial Additive	MycoGro Fertilisers
Poor germination and establishment	Too much thatch and/or a bacterial dominant rootzone with little or no mycorrhizal fungi that support perennial grasses.	Mycorrhizal Inoculant	Liquid Endo Mycorrhizae	Mycorrhizal Grass Seed Coat	GreenCircle
Nematode damage	Root eating nematodes invade the root system when there are not enough predatory and other beneficial nematodes to maintain a balanced population.	VermiExtract	Compost Teas Fungal Additive Bacterial Additive		
Poor spring growth	Lack of carbohydrate in the plant and limited nutrient uptake due to low microbial activity.	Mycorrhizal Inoculant CoolTabs	Liquid Endo Mycorrhizae	Mycorrhizal Grass Seed Coat	GreenCircle
Compaction, and excess water retention	Lack of oxygen, humus and microbial activity to create space for air and water and assimilate locked up nutrients.	Compost Teas Fungal Additive Bacterial Additive	VermiExtract	ThatchEater DegrAID	BioTabs CoolTabs
Algae in ponds, lakes and irrigation water	Water ecosystem out of balance due to high nutrient input or artificial construction.	BlueWater			
Transplant losses planting trees	Wrong type of nutrients and lack of mycorrhizal fungi.	Transplanter	WhipDip		
Oil spills	Machinery malfunction	Oil Remover	Oil Degrader		



Working with you to achieve excellence





Combined excellence

or desired outcome. We work closely with grounds

To find out more about Origin Amenity Solutions and our plans for the future of the turf industry, follow us on X and LinkedIn.



Our brands:









