

Soil Amendments



Rooster Booster 4-2.5-2

- Pelletised organic chicken manure
- Ongoing and steady nutrient release
- Organic fertiliser
- Excellent renovation amendment
- Pelletised for easy spreading
- Contains calcium, magnesium, sulphur, copper and boron

Suitable For

- Most turf surfaces either as a topical fertiliser or as an amendment at renovation or construction
- Sand mediums
- Greens
- Sand sports fields



Benefits

- Organic, therefore suits those who do not want to use synthetic fertilisers.
- Requires conversion by soil microbes to a form of readily available nutrients to the plant – therefore provides some slow release characteristics.
- Promotes strong root growth and corrects poor CEC levels.



General Information

Organic fertiliser (chicken manure) for healthy robust turf.

Caution

Water well after application to avoid burn.

Application Rates

Apply 25-50 g/m²

Pack Size: 25 kg



Bioboost 6-2-0 + trace elements

- Organic slow release
- 2.4 mm non-burning granule
- Heat dried bio solid from surplus wastewater micro-organisms (not manufactured from sludge)
- New Zealand's equivalent to US leading organic fertiliser Milorganite

Suitable For

- Amenity turf
- Fairways
- Tees
- Ornamental areas
- Gardens



Benefits

- Organic, non-burning, slow release and weed-free.
- Typically 12% of nitrogen is water soluble. The remainder requires conversion by microbes in the soil, therefore very slow release (6-9 months and little leaching).
- 70% organic matter – therefore excellent soil conditioning properties.
- Manufactured in accordance with NZ Health Department requirements.
- Very cost effective fertiliser.



General Information

Bioboost is a heat dried bio-solid manufactured from the surplus micro-organisms used in aeration ponds of municipal waste water treatment. (Note: it is not manufactured from the sludge). These "clean" micro-organisms are separated from the "clean" effluent water, and rotationally dried in a high temperature thermal drying process which sterilises, pelletises and dries Bioboost to 90% solids.

Caution

Not to be applied to grazing land. Dried to 90% solids but improper (damp) storage may release objectionable/foul odours. Note precautions stated on the bags.

Application Rates

Surface application: Spring 100-150 g/m², summer 50-100 g/m².

Renovation: 150-200 g/m². Tees and greens reconstruction: 200-400g/m² incorporated to a depth of 75-100 mm.

Pack Size: 25 kg, 500 kg, 800 kg and bulk.



Regen-R-8

Soil Amendment Fertiliser for Turf Renovation N P K 6-3-3.5

- 25% Agromate (17.5% granular humic acid)
- 25% Sea plant meal, from Sand-Aid
- 30% Slow release starter fertiliser
- 15% Granular soil wetter
- 5 % Coated potassium
- Up to 10 weeks performance
- SGN 1.25 to 1.5 (approximately)

Suitable For

- Renovating greens
- Tees
- Bowling greens
- All other turf surfaces



Benefits

- Mini prill formulation for easy spreading onto renovation areas and fine turf. Small enough to fall into grooves and core holes.
- Stimulates rapid growth recovery after renovations.
- Increases CEC levels in sand profiles.
- Contains the benefits of humic acid (a high CEC organic prill) which increases microbial activity in soil/sand profiles - helps prevent thatch build up .
- Sand-Aid, an internationally recognised granular organic Sea-Plant Meal - encourages fantastic recovery and root growth .

General Information

A pre-mixed granular renovation product which contains 5 of the most commonly used products in turf renovation. Customers' results speak for themselves with this product, especially recovery from renovation, increased root growth, along with the benefits of methylene urea slow release nitrogen, slow release coated potassium and granular wetting agent.

Application Rates

Apply 2-4 kg/100m²

Pack Size: 25 kg bags. Exclusive to PGG Wrightson Turf.



Sand-Aid Sea Plant Meal Granular



- Natural organic amendment to be soil incorporated during renovation and aerifying
- Extraordinary source of nutrients – every major, secondary and micro nutrient known to play a role in turf grass management
- Improves quality, appearance, playing characteristics, ability to withstand stress and disease

Suitable For

- Greens
- Tees
- Sand turf surfaces



Benefits

- Solves many of the problems associated with high sand content turf areas.
- Five times more cation exchange sites (CEC) than peat.
- Fastest decomposing soil amendment currently available.
- Stimulates microbial activity and won't "layer".
- Increases moisture and nutrient retention.
- Micronutrients and trace elements are all calculated.
- Environmentally safe, non toxic, non contaminating, and biodegradable.

General Information

Sand-Aid is an extraordinary source of nutrients, secondary micronutrients and trace elements. Sand-Aid improves moisture and nutrient retention and is cost effective, and often assists in reducing disease pressure. It has an extraordinary level of CEC and is the highest of any natural organic product. Sand-Aid contains 52% simple plant carbohydrates which can be used by the plant in stress periods so it makes a dramatic difference in overall turf grass stress tolerance. Greatly increased root growth in sand mediums experienced with this product.

Application Rates

For construction of sand (USGA) specification greens use 200-250 g/m (2-2.5 tonnes/ha).

For renovation/aerifying apply 30-50 g/m² (300-500 kg/ha) whilst aerification holes are open, work material in thoroughly.

For topdressing apply 25 g/m (250 kg/ha), read instruction on label when topdressing.

Note: In addition to Sand-Aid on its own, PGG Wrightson Turf also specialises in making up full renovation mixes with or without Sand-Aid as a base, but also incorporating other products such as agromate (granular humic acid), slow release starter fertiliser, granular soil wetter, potassium etc. Please see Regen-R-8 on the previous page.

Pack Size: 22.68 kg bags (45 bags per tonne)



Zeba Starch Based Soil Enhancer

- Starch based polymer hydrogel that absorbs, holds and then releases water and minerals
- Absorbs 400 times its weight in water, releases 95% back to plant
- Hydrates, then releases water on demand in response to plant capillary action
- Re-waters over and over again for at least 1 year
- Natural, bio degradable, non toxic
- SGN 150 mm (1.5 mm particle size) approximately

Suitable For

- New sowings
- Under newly laid turf construction and renovation in sports fields and greens
- All turf areas (in the ground)



Benefits

- Prevents drought stress by releasing water back to the plant on demand through capillary action
- Decreases water usage through longer irrigation intervals.
- Improves establishment of newly laid turf, especially root knit in.
- Potassium benefits, Zeba contains potassium as a positive iron instead of sodium.
- Non swelling (unlike PAM's polyacrylamides), absorbs water without swelling.
- Greatly benefits establishment of newly sown and laid turf, and in renovation of turf.

General Information

Zeba is a natural bio-degradable starched based polymer which creates a net like matrix in the form of a hydrogel, around the root zone of turf plants. It absorbs 400 times its weight in water and releases both water and nutrients to plants on demand. Its unique non swelling action absorbs water, but doesn't cause swelling in the ground. Being natural, non toxic and bio-degradable it is an attractive food source for plants, and over time the soil microbes consume the hydrogel molecules creating a richer environment than before the Zeba was added.

Zeba must be placed in the ground (not on top) and as it absorbs water easily, it should be added and quickly soil incorporated or covered to prevent the gel crystals sticking to turf equipment. It is an excellent additive to soil prior to laying turf, with huge improvement noticed in newly laid turf establishment.

Application Rates

New sowings:	0.5 kg/100 m ² (5 kg/1000 m ²)
Greens construction:	0.5 kg/100 m ² (5 kg/1000 m ²)
Greens renovation:	1-2 kg/1000 m ² (10-20 kg/ha)
Newly laid turf:	0.5 kg/100 m ² (5 kg/1000 m ²)
Sports fields (new):	1-5 kg/1000 m ² (10-50 kg/ha)
Sports fields (renovation):	1-2 kg/1000 m ² (10-20 kg/ha)

Note: Zeba must be placed in the ground, not on the surface.

Pack Size: 1 kg (foil packs) and 10 kg pails



Gypflo (Liquid Gypsum)

Gypflo is liquid Gypsum which is in an easy to apply flowable formulation. Gypflo out performs bulk gypsum (due to its smaller micron sizing), helps reduce compaction, increases CA and S levels and is chloride free. Gypflo is fast acting and greatly improves the friability of the soil.

Application Rates

Apply 20-100 litres/ha; depending on the severity of the clay content in the soil.

Use sufficient water to achieve coverage using a ratio of at least 5:1.

Pack Size: 20 litres

pH Plus (Liquid Lime)

Advanced technology liquid calcium suspension, which is a fast and effective alternative to bulk lime. It is more immediately available - where as bulk lime takes some time to be effective in altering pH.

Application Rates

pH 4.5-5.5 soils – apply 75-125 litres/ha

pH 5.5-6.5 soils – apply 50-75 litres/ha

Use sufficient water to achieve coverage using a ratio of at least 5:1

Pack Size: 20 and 110 litres

Trichoflow Turf

Trichoderma are saprophytic fungi which feed on organic matter material excreted by the roots of plants. Trichoflow Turf will establish itself in growing media and colonise the root zones of plants – and this provides an environment for the plant which is less conducive to disease. Trichoflow assists with disease protection from *Fusarium*, *Rhizoctonia*, and *Pythium* species.

Mixing Instructions

Ensure the tank is well cleaned and free from chemicals and chlorides. Strain the Trichoflow with a household strainer into the tank. Add the required amount of Aminogro Plus (more information on this product on page 87) and possibly Hydretain (root zone moisture management product). Remove fine strainers from the nozzles and agitate the mixture well during spraying.

Application Rates

Apply 5 kg/ha and “drench in” immediately afterwards with sufficient water to make the product move into the thatch.

Thereafter apply 2.5 kg monthly.

Note: If harsh chemicals are used, the rate of 5 kg/ha may need to be repeated to build up sufficient numbers of beneficial fungi spores again. Excellent when applied with Arcdian, AminoGro Plus, Hydretain and Sand-Aid or any microbe safe wetting agent.

Pack Size: 5 kg



Lime (standard)

Agricultural grade fine lime which adds calcium and raises the pH of the soil.

Rate/m ²	Rate/ha	Pack size
50-300 g	500 kg-3 tonne	25 kg

Gypsum Coarse – Calcium Sulphate

A soil amendment which improves soil structure and adds S and Ca.

Especially good for high clay soils and soils with a high Na (exchangeable sodium). Gypsum helps high clay soils flocculate – (group together) improving water movement through the soil and soil aeration.

Gypsum is neutral and therefore has little effect on pH.

Rate/m ²	Rate/ha	Pack size
50-300 g	500 kg-3 tonne	25 kg