

HORTICULTURAL APPLICATIONS

■ WHO IS BOWISE

BioWise, a joint development initiative between SITA Organics and the Water Corporation of Western Australia, produces high quality compost mulch for horticultural producers. This material can be used by different horticultural industries, including vegetable, fruit and flower producers.

BioWise compost is derived from green organics, biosolids and food residue, and is carefully matured to ensure compliance with Australian Standard AS4454 Composts, Mulches and Soil Conditioners.

BioWise compost mulch has the following characteristics that are beneficial for horticultural producers:

■ GRADES

- Different textured grades of compost are produced for use in different horticultural applications
- Fine compost has been passed through a 15 mm screen and is suitable for seedling development
- Medium textured compost is ideal for application to established trees and vines such as fruit orchards and grape vineyards
- The product is produced and available all year round with a homogeneous composition

■ PRESENTATION

- Stability of the product means there are no offensive odours. BioWise compost has a pleasant earthy odour
- The product resembles a rich dark topsoil
- The compost does not contain chemical residues or contaminants harmful to plant or animal life

■ BOWISE COMPOST FOR HORTICULTURE

- Compost does not encourage fly breeding
- The fine texture of the compost will benefit propagation species
- Contributes to higher horticultural yields due to improved soil structure, nutrient availability and water availability



- Produces stronger root systems and healthier plant stands
- Reduces disease levels in a variety of horticultural crops
- Potential to improve horticultural produce storage performance
- Potential to yield a superior sensory quality in crops
- Reduces soil erosion and soil compaction through improved water infiltration, soil structure and soil aeration
- Improves soil fertility
- Moderates soil temperature
- Contributes to water conservation by reducing water loss from percolation, evaporation and run off
- Suppresses weed growth and snail activity
- Reduces requirements for pesticides, herbicides and fungicides thereby reducing costs and environmental impacts
- The product is safe to humans, pets and wildlife and easy to handle
- Dark colour increases soil temperature in winter thereby encouraging growth
- Compost does not require tilling into soil

■ BIOCHEMICAL PARAMETERS AND QUALITY

- BioWise product complies with stringent microbial and chemical contaminant criteria for unrestricted use (ARMCANZ Grade A) and all criteria for AS4454 Australian Standards

- Contains macro and micro-nutrients which assist plant growth and reduce the quantity of fertiliser required
- Contains beneficial microbial populations which encourage efficient uptake of nutrients and act as a disease suppressant
- Low salinity and phytotoxicity levels
- High in available trace elements

■ PHYSICAL PARAMETERS AND QUALITY

- BioWise is free of large stones, pieces of wood and other contaminants, such as glass
- BioWise has been processed to minimise weed seeds, pathogens and deleterious material
- Suitable moisture content for land application
- The compost is mature and stable and will not degrade rapidly
- Adds organic and humus materials to soil which improves water retention, reduces water runoff and evaporation

■ PRODUCT SPECIFICATIONS

Particle size grading:

- Fine and medium grade compost/mulch

Moisture content: 35-55%

C:N ratio: 15-20:1

pH: 6.0 – 8.0

Total Nitrogen: 0.8 – 1.7%

Total Phosphorus: 0.1 – 1.0%

(suitable for a variety of native and exotic plants, excluding P sensitive species)

NDI: 1.23

Organic matter: >35%

Note: all criteria above comply with AS4454

Australian Standard – Composts, Soil Conditioners and Mulches

BioWise can provide production details such as temperature records and turning times for each batch of compost.

■ RECOMMENDED APPLICATION RATES AND METHODS

Depending on the industry, compost can be applied in several different ways.

Flower Beds & Market Gardens

It can be spread as a mulch/topsoil up to 5 cm thick over large areas and lightly compacted. Tilling compost into the soil may give improved performance.

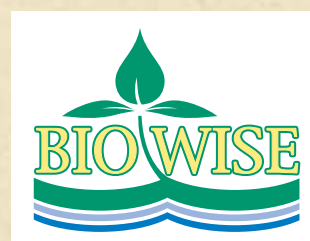
It can be added to each individual plant. Compost can be added to backfill at the time of planting.

Trees and Shrubs

Established trees and plants can have a 2 – 5 cm layer of compost placed around their base, or drip line. Compost should not be placed right up against the plant.

Lay 2.5 cm of compost around trees and 5 cm around shrubs. Do not place compost right up against plants. Apply and gently rake into the surface.

To prepare soil for new shrubs, cultivate the soil to a depth of 15 – 25 cm, depending on the size of the shrub. The depth should be twice the width of the root ball. Use approximately 5 – 10 cm of compost and mix thoroughly into the soil. If the soil is very poor use 15 cm of compost instead.



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