

# **Seasol Commercial**

**TECHNICAL GUIDE** 



A LIQUID SEAWEED EXTRACT THAT PROMOTES PLANT HEALTH AND PRODUCTIVITY







# Seasol Commercial

**TECHNICAL INFORMATION** 

## **OVERVIEW**

**Seasol Commercial** is a 100% liquid seaweed plant conditioner that provides a synergistic range of natural compounds, trace elements, alginates and carbohydrates from a blend of brown kelps. Seasol promotes root growth, and improves plant tolerance to environmental and climatic stress. By promoting root growth, Seasol also has the effect of enhancing fertiliser efficiency.



Seasol Liquid Seaweed extract



# Seasol Commercial Seaweed Concentrate - Stimulates root growth. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Increases tolerance to odersee environmental conditions. - Stimulates root growth. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Increases tolerance to odersee environmental conditions. - Stimulates root growth. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aids plant establishment and reduces transplant shock. - Enhances soft microbial activity. - Aid activity

## **ABOUT SEASOL**

Seasol is made from Durvillaea potatorum and Ascophyllum nodosum. Durvillaea potatorum is sourced from King Island and the west coast of Tasmania where the kelp is swept ashore after storms. Collection of storm cast kelp is sustainably managed under licenses issued by the Tasmanian Government. Ascophyllum nodosum is widely used in the northern hemisphere where it is sustainably harvested from managed kelp beds. The kelps are blended together in our own dedicated processing facility near Launceston to produce the wonderful seaweed solution that is Seasol.

## **FEATURES AND BENEFITS**



Aids plant establishment and reduces transplant shock



Increases tolerance to adverse environmental conditions



Stimulates root growth and enhances flowering



Enhances soil microbial activity

Seasol seaweed extract is rich in organic content, has a high molecular diversity and contains a range of trace elements. Seasol seaweed extract has 8% total organic matter content and 3.7 % (w/v) Potassium (Typical Analysis April 2017). Seasol seaweed extract is manufactured from two types of seaweeds producing a refined liquid seaweed extract and filtered to 150micron for agricultural use.

Seaweed extracts are effective across a wide variety of plants and soils, and have many beneficial plant growth and plant health properties (Arioli et al, 2015; Shukla et al, 2019; Islam et al, 2020)

#### Soil and Fertiliser



Water / Seasol



# INCREASES TOLERANCE TO PLANT STRESS

Seaweed extracts offer increased tolerance to a diversity of non-lethal stresses including heat, drought and cold stresses, and to pathogen stresses. The ability of seaweed extracts to increase plant tolerance is based in part due to the way Seasol seaweed extracts recognise stress earlier and trigger natural plant responses and associated gene expression networks in the plant.

# INCREASES PLANT PRODUCTIVITY

Field trials have been used extensively to demonstrate that seaweed extracts improve plant growth, yield and fruit quality. The benefits have been found across a wide variety of crops such as almond, avocado, banana, broccoli, citrus, cotton, sugarcane, strawberry, lucerne, wine grapes, mangoes, and potato.

## **INCREASES ROOT GROWTH**

Plant roots are used to capture soil nutrients and water for plant growth and interaction with functionally important microbes that benefit plant growth and soil ecosystems. Seaweed extracts increase root structure and particularly root length. This ability enables plants to better utilise the nutrients in their soils and feed microbes with exudates released by the expanded root system.

Seaweed meal is liquefied by chemical hydrolysis using alkaline extraction. Seaweed extracts are complex and heterogenous in nature which makes their precise characterisation limited. These complex seaweed extracts are biologically rich activating multiple plant responses and growth systems. Rather than chemical composition, seaweed extracts rely on plant and field testing to demonstrate their beneficial plant and soil properties. Chemical composition tends be used for quality control in the manufacturing of seaweed extracts.

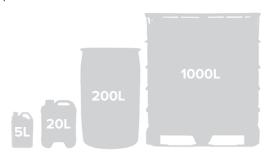
Their ability of seaweed extracts to promote root structure expands the beneficial root interactions associated with the soil carbon and nitrogen ecosystem processes.

#### Root growth on Strawberry runners



# **AVAILABLE IN 4 SIZES**

Whatever your requirements, we now have sizes to suit your needs. Seasol Hort & Ag is available in 5L, 20L, 200L & 1000L quantities.



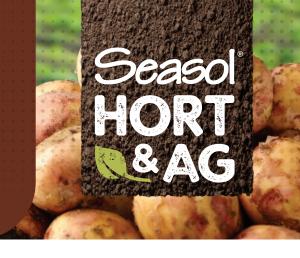






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## **INSTRUCTIONS FOR USE**

- 1. Seasol Commercial must be diluted in water. Use sufficient water to achieve adequate coverage when applying as a foliar spray.
- **2.** Shake or agitate before use. Maintain agitation during dilution and application if possible. **3.** Climatic stress use 5/10L / ha 3-7 days prior to and after extreme stress events (e.g. heatwave and frost) to mitigate crop damage and assist recovery.

## **APPLICATION GUIDELINES**

Category	Crop	Rate	Application / Critical Comments
Nut Trees	Almonds, Hazelnuts, Macadamias, Pecans	5-10L/ha or 1ml per sq mtr of plant area	Planting - drench or water in with 1:400 dilution. Apply from green tip/first growth flush. Recommend 5 applications at critical growth stages inc post harvest. Use higher rate for larger trees
Deciduous Fruit Trees	Pome Fruits, Stone Fruits and other deciduous species	5-10L/ha or 1ml per sq mtr of plant area	Planting - drench or water in with 1:400 dilution. Apply at each growth flush or 5 applications at critical growth stages and post harvest. Higher rates for larger trees
Evergreen Tree Crops	Avocados, Bananas, Citrus, Olives	5-10L/ha or 1ml per sq mtr of plant area	Planting - drench or water in with 1:400 dilution. Apply from Bud initiation and at each growth flush 10 L/Ha/month on mature trees, fertigated in every month that you irrigate
Fruiting Annuals	Capsicums, Cucurbits, Strawberries, Tomatoes, Pumpkins	5L/ha	Apply at seedling and transplanting and from 15cm growth. Every 10-14 days or 4 applications as required
Leafy Vegetables	Asparagus, Brassicas, Celery, Herbs, Lettuces	5L/ha	Planting out - 1:400 dilution (2.5 ml/L or 2.5L/1,000L water), for watering in of seedlings in a water wheel planter or similar device. Apply at seedling and transplanting and from 3-4 leaf. Every 10-14 days or 4 applications as required
Root Vegetables	Carrots, Onions, Potatoes, Sweet Potatoes	10L/ha	Apply from in furrow. 4-5 applications at critical growth stages
Vine & Berry Crops	Blueberries, Raspberries, Wine and Table Grapes	5-10L/ha or 1ml/sq mtr	Apply regularly during the growing season. As a minimum, use the product at times of plant stress or recovery such as Pre-Flowering, Fruit Filling & Post Harvest. Higher rates for larger canopies. <b>Do not apply directly over flowers where flowers are essential to crop productivity. Where bloom is a feature of fruit (e.g. blueberries &amp; table grapes) do not apply as a foliar spray once the bloom develops to avoid any damage</b>
Broadacre	Canola, Cotton, Pasture Crops (inc Lucerne), Sugar Cane, Turf	10L/ha or 1ml/ sq mtr	Apply at the start of the growing season and after each cut or grazing event in a rotational or strip grazing situation. Apply post emergence, 4-5 applications at critical growth stages. Seed coating (Cereals) Up to 4-10L/tonne of seed. Do not exceed a total of 10L of total liquid per tonne. Sugar Cane - 5L/ha in furrow or billet dip, 2nd app 10L/ha at tillering. Ratoon crops 10L/ha at tillering

#### **GENERAL INSTRUCTIONS**

**Foliar Spraying:** Apply the product as soon as possible after mixing in the spray tank. Maintain agitation in spray tank if possible. **Seasol Commercial** can be used as a foliar application or applied directly to the soil and can be applied with boom sprays, air blast sprays, drip systems, travelling irrigators, centre pivots and by aerial application.

**Fertigation:** Agitate the product regularly in the fertigation tank. For best results use the product on its own. **Seasol Commercial** can be mixed with a number of agricultural chemicals, DO NOT COMBINE WITH CALCIUM NITRATE. See tank mix compatibility information at www.seasol.com.au

#### **STORAGE AND HANDLING**

Not to be kept for prolonged periods in hot conditions (>30°C) or in direct sunlight. Always use safe work practices for lifting and handling drums. Once diluted, the product should be applied within 24 hours. Agitate the product prior to using and re-agitate if the product is left standing for an extended period of time.

#### **SAFETY DIRECTIONS**

Not to be taken. Keep out of reach from children. May irritate the skin and eyes. Avoid inhalation. Use in a well-ventilated space. Wash hands after use. Wash all edible plants before eating. If splashed, wash off with water. If swallowed or irritation persists, seek prompt medical advice. Additional information is listed in the Safety Data Sheet.

#### **CONDITIONS OF SALE**

This product must be used strictly in accordance to the directions. The efficacy of the product may be influenced by environmental conditions and application procedures and no warranty, express or implied is offered.







