



FERTILISER



# CARBology® Kelp

Reg. No. B5117 Act No. 36 of 1947

## A seaweed suspension containing Auxins for use on various crops.

The ancient Greeks harvest seaweed and used it as a nutrition for their crops to promote growth and yield.

Later, the use of seaweed became a universal practice. **CARBOLOGY® KELP** is the modern version of this ancient practice.

The base of **CARBOLOGY® KELP** is *Ecklonia maxima*, a seaweed species that occurs on the South African coast. *Ecklonia maxima* grows exponentially and due to the fast growth rate, a lot of micro- and macro elements are absorb in the mineral-rich seawater through the plant tissue.

When seaweed is harvested and applied to cultivated crops as a nutrition or supplement, all of these micro-elements are made available to the crops.

**CARBOLOGY® KELP** is approved for use in organic agriculture.

Over the past century, comprehensive research emphasized that plants, and especially kelp, contain hormones that promote plant growth and yield.

**CARBOLOGY® KELP** is naturally rich in gibberellins and auxins. Auxins are critical for root development, root establishment and later on flowering and seed formation. Gibberellins play an important role in cell elongation, stem elongation, germination and flower and fruit enrichment.

**CARBOLOGY® KELP** contributes to root system enlargement when it forms part of a spray programme, bringing the unique combination of hormones and natural nutrients into direct contact with the living roots.

This again can contribute to increased absorption of nutrients and moisture that can increase yield.

### What is CARBOLOGY® KELP:

**CARBOLOGY® KELP** is a natural organic plant growth stimulant formulated from seaweed (*Ecklonia maxima*). **CARBOLOGY® KELP** is not extracted from seaweed, but a suspension of *Ecklonia maxima* that contains all the natural plant growth stimulants. Only the youngest / newest growth seaweed is used, as it contains the highest concentration growth stimulants.

### Benefits CARBOLOGY® KELP can offer:

- **CARBOLOGY® KELP** is extremely effective during stress conditions, e.g. during drought or heat stress, cold wet conditions or where seedlings experience transplant shock.
- **CARBOLOGY® KELP** serves as plant growth stimulant and also act as a catalyst during abiotic stress conditions in plants. Thus offering the plant more resistance against stress.
- **CARBOLOGY® KELP** is effectively absorbed by the plant and is formulated to be used as a foliar spray, as well as soil drench.
- Alginate acid is released during the unique extraction of **CARBOLOGY® KELP**, which serves as a natural wetting agent and humectant. The wetting agent and humectant increases the absorption and efficacy of **CARBOLOGY® KELP** drastically. The alginate acid also serves as a protector against leaf burn.
- **CARBOLOGY® KELP** is an excellent product to use with selective herbicides to counteract stress conditions caused by the herbicide.
- **CARBOLOGY® KELP** is compatible with most agrochemical products.
- **CARBOLOGY® KELP** benefits the absorption of other nutrients.
- **CARBOLOGY® KELP** is approved for use in organic agriculture.

## When to use CARBOLOGY® KELP:

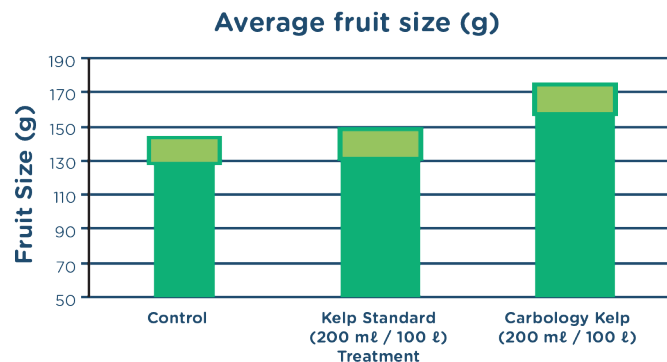
- It is recommended to apply CARBOLOGY® KELP every 7-14 days as a supplement.
- CARBOLOGY® KELP is recommended during germination, transplant, bud initiation and fruit development.
- **CARBOLOGY® KELP** is also recommended during periods of stress, such as high and low temperatures, excessive wet conditions and drought.
- **CARBOLOGY® KELP** should preferably be applied in the early morning or late afternoon to allow optimal absorption.
- The rate of application is determined by the plant growth stage, stress levels and desired reaction. The lower rate should be used for maintenance and the higher rate for periods of severe stress.
- **CARBOLOGY® KELP** is compatible with most agrochemical products, but a compatibility test may be performed beforehand if uncertainty occurs.
- Consult with your Crop Solution Specialist, consultant or manufacturer should crop specific programs or any other information be required.

### ROOT DEVELOPMENT (MUNG BEAN TRIAL) UNIVERSITY OF KWAZULU-NATAL

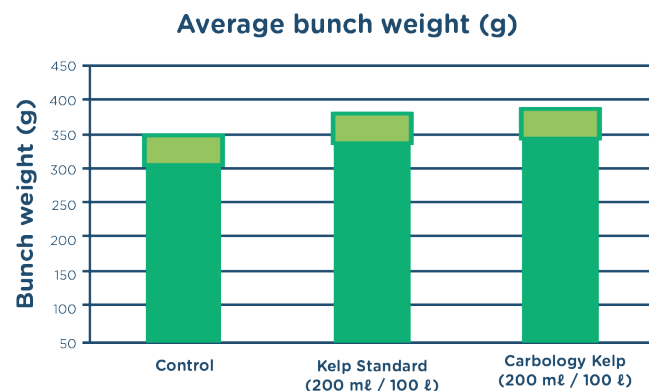


Figure 1: trial conducted with CARBOLOGY® KELP on apples and grapes, resulted in the following. From the trials it can be considered that CARBOLOGY® KELP proved to be better than the current kelp product used in the market.

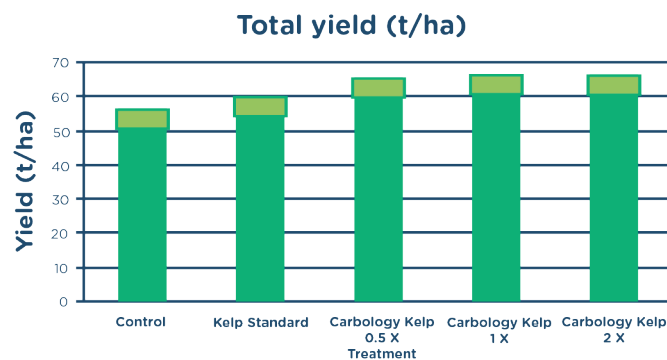
### Apples:



### Grapes



### Potatoes (Western Cape):



\*See label for further details and instructions.