



agrichem[®]



Kelpak[®]

Natural seaweed extract for accelerating root development and improving plant health
100% Liquid Seaweed Concentrate

Benefits of Kelpak[®]

- An auxin-based product that promotes larger and more vigorous root systems, and thus growth
- As soil calcium can only be taken up by new root tips, Kelpak-driven new root growth facilitates uptake of calcium
- Natural plant hormones help crops recover from stress situations
- Encourages strong cell development
- Slows senescence in many crops
- Improved general plant health enhances plant resistance to nematodes and other pest and fungal diseases
- Completely plant available
- Can be applied with a wide range of other agricultural chemicals, reducing the number of spray applications needed

WHAT IS IN KELPAK[®]?

Kelpak[®] is the liquid extract of the fastest growing seaweed in the world - *Ecklonia maxima*. Kelpak[®] is the only extract produced using "Cold Cell Burst Method". This method ruptures the cell walls releasing sap and vital plant hormones without any denaturing. Other extraction methods can reduce the activity of certain plant hormones.

WHY IS KELPAK THE WORLD'S LEADING SEAWEED EXTRACT?

In comparison to other seaweed products, Kelpak[®] contains the highest levels of natural growth hormones auxins and cytokinins (11.0 mg/L of auxin and 0.031 mg/L of cytokinin). Natural high levels are preserved by the cold cell burst production process which is unique to Kelpak[®].

THE ROLE OF CYTOKININS

The cytokinins present in Kelpak play several vital roles in plant's physiology. These mostly relate to cell division and enlargement which is important for fruit quality. Maintaining RNA and protein levels is an important function as it can stop senescence and increases photosynthesis, thus increasing plant growth and development. Cytokinins increase shoot growth in plants.

THE ROLE OF AUXINS

The auxins present in Kelpak[®] are responsible for cell elongation and enlargement thus substantially increasing the growth of the plant. Auxins are directly linked to the development of adventitious roots in many crops and in horticulture including plants and cuttings.

Product Characteristics

Specific Gravity: 1.025

Colour: Green




NOTE: The suggested rates of application are designed for typical Australian conditions and such should be used as a guide only. Each farmer's climatic conditions, water quality, soil types, application processes and practices may differ and therefore necessitate corrections to ensure optimum results. Good agricultural practice requires that application be avoided under extreme weather conditions such as temperatures over 28°C, high humidity, frost, rain etc. It is recommended that when applying to a crop or area for the first time, or in combination with other chemicals, a small test area should be sprayed and observed prior to the total spray. Where possible, it is recommended that regular leaf (sap) tests are conducted to determine actual plant nutrient availability during each growth cycle. Soil tests at least once per year are essential.

Directions for Use

Agitate contents well before dilution. Suitable for application by:

 Root Dip	 Soil Drench	 Boom Spray	 Foliar
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CROP	RATE / ha	MIN DILUTION 	COMMENTS
ALMONDS - Foliar	1.5 - 3 L	1 : 400	Spray at 50% bloom and repeat twice at 14 - 21 day intervals
BANANAS - Foliar	1 L	1 : 60 (air) 1 : 500 (ground)	Apply throughout year with pesticide and nutrient sprays at 12 -14 day intervals
CANE - Planting - Foliar	2 L 2 L	1 : 200 1 : 300	Add 2 L / ha to dip tank or spray around billet as planted Apply at 60 - 90 cm leaf length stage
CANOLA - Foliar	1 - 2 L	1 : 300	Spray at 3 - 5 leaf stage
CEREALS - Foliar	1 - 2 L	1 : 200	Apply at 4 - 5 leaf stage
CHERRIES	3 L	1 : 300	Spray at 50% bloom and repeat twice at 10 - 12 day intervals
COTTON - Foliar	1.5 - 2 L	1 : 300	Apply at 12 true leaf and repeat again in 14 days time
FLOWERING & ORNAMENTAL PLANT - Transplanting - Foliar	10 ml / L 3 ml / L	1 : 100 1 : 300	Seedling trays dipped in solution prior to transplant Apply 14 days after emergence or plant-out Repeat 3 times at 3 - 4 weekly intervals
FIELD CROPS	2 L	1 : 200	Spray 14 days after emergence and repeat after 21 - 28 days
FRUIT TREE - Transplanting - Non-bearing trees - Bearing trees	1 L / 100 L 2 L 3 L	1 : 100 1 : 300 1 : 300	Dip roots in solution before transplanting to field Apply during early active growth at 21 day intervals Apply at flowering and repeat twice at 14 day intervals
GRAPES - Transplanting - Wine - Table	1 L / 100 L 2 L 3 L	1 : 100 1 : 300 1 : 300	Dip roots in solution before transplanting to field Spray at 5-leaf stage and repeat after 14 days Spray after full bloom and repeat twice at 12 - 14 day intervals (4 mm, 8 mm and 12 - 14 mm berry size)
LUCERNE	2 L	1 : 300	Spray at 7 - 14 days after cutting
MELONS ROCKMELON HONEYDEW WATERMELON	1 L / 100 L 2 - 3 L	1 : 100 1 : 200	Dip seedling in trays, or water the trays immediately before transplanting Spray 14 days after transplant and repeat after 14 - 21 days Start spray of direct seeded crop at 3 - 4 leaf and repeat twice
ONIONS - Transplanting - Foliar	1 L / 100 L 2 L	1 : 100 1 : 300	Dip seedlings in trays, or water the trays immediately before transplanting Spray 14 days after transplant and repeat after 14 - 21 days Start spray of direct seeded crop at 3 - 4 leaf and repeat twice
PASTURES	2 L	1 : 300	Apply at initial growth, repeat 2 - 3 weeks post silage cut or last grazing
POTATOES - In-furrow - Foliar	1 L / 300 L 2 L	1 : 300 1 : 300	Apply in-furrow as a spray with trace elements and pesticides. Apply at 14 -21 days after germination, as soon as enough leaf surface is present. Repeat 12 -14 days later, before tuber set
TURF - Planting - Maintenance	100 ml / 100 m ² 50 ml / 100 m ²	1 : 200 1 : 400	Apply at planting Repeat monthly as required
VEGETABLES - Transplanting - Foliar	1 L 2 L	1 : 100 1 : 300	Dip seedlings in trays, or water trays immediately before transplanting Spray 14 days after transplant and repeat after 14 - 21 days Start spray of direct seeded crop at 3 - 4 leaf and repeat twice

 Minimum Dilution: A dilution of 1 : 100 means 1 part product : 100 parts water.

In hot weather, use the higher dilution rate where applicable

IMPORTANT: Dilutions in excess of 1 : 500 for Kelpak® are not recommended as this may decrease the effectiveness of the product. Ensure pH of the tank mix is less than 7 to maximise efficacy