



XCELL ROOTSTIM



Xcell Rootstim is a liquid 4:14:0 Kelp and Amino Acid-based growth stimulant, specifically designed to enhance root establishment and general plant growth.

HAZARD STATEMENT
Harmful to aquatic life



PRECAUTIONARY STATEMENT
Keep under lock and key and out of reach of children



Manufactured by:
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 **Introlab**
outperform the norm

www.introlab.co.za

ACTIVE INGREDIENTS

| | | |
|------------------|----------------------------------|-----------|
| Nitrogen | (N) | 40 g/ℓ |
| Phosphorous | (P) | 60 g/ℓ |
| | (P ₂ O ₅) | 137 g/ℓ |
| Boron | (B) | 2045 mg/ℓ |
| Zinc* | (Zn) | 1060 mg/ℓ |
| Iron* | (Fe) | 2045 mg/ℓ |
| Manganese* | (Mn) | 1045 mg/ℓ |
| Copper* | (Cu) | 1020 mg/ℓ |
| Molybdenum | (Mo) | 150 mg/ℓ |
| Free Amino Acids | | 7 g/ℓ |
| Auxins | | 15 mg/ℓ |
| Cytokinins | | 10 mg/ℓ |

Also contains: Ecklonia Maxima 15 %
Protein Hydrolysate 5 %
*EDTA Chelated
SG (@ 20 °C) = 1.16 ± 0,02



WARNING

See enclosed for full details.  See container side for both Batch No. and Manufacture Date. Product expires 2 years after date of manufacture.

Product Description:

- **Xcell Rootstim** is a liquid kelp and Amino Acid-based growth stimulant designed to enhance root establishment and general plant growth.
- **Xcell Rootstim** is completely water soluble.
- **Xcell Rootstim** contains natural growth stimulants, Auxins, Cytokinins and plant available Amino Acids.
- **Xcell Rootstim** is chlorine free and safe to use on all crops including seedlings.

Compatibility:

- **Xcell Rootstim** is compatible with most agricultural remedies.
- It is however advisable to do a miscibility test prior to mixing Xcell Rootstim with other agricultural products.
- Do not tank mix Xcell Rootstim with highly alkaline materials such as lime sulphur or Bordeaux mixtures.

Mixing Instructions:

- Shake the container thoroughly before use.
- Follow the standard tank mixing procedure if this product is applied in combination with other agricultural products.
- Ensure good agitation throughout application.

Storage:

- Store in the original, well-sealed container away from direct sunlight in a cool dry environment.
- Keep away from children, uninformed people, animals and foodstuffs.

Application Instructions:

- **Xcell Rootstim** can be applied as a foliar or soil application.
- **Xcell Rootstim** is recommended for use during the early growing periods of plants.
- **Xcell Rootstim** should preferably be applied in the early morning or late afternoon.
- Consult your chemical distributor, consultant or the registration holder should crop specific programmes be required, or if any additional information and guidance is required concerning the use of this product.
- For optimum results **Xcell Rootstim** should be used in a balanced plant nutrition programme.
- Do not apply to plants that are undergoing moisture or heat stress.
- Ensure good even coverage of the plants.
- Use the lower dosage rate as a maintenance application and the higher rate to correct deficiencies.

Directions for use: (Use only as directed)

FOLIAR APPLICATION:

| Crop | Rate/ha | Remarks |
|--|-------------------------------|--|
| Berries | | |
| i. Blueberries, Blackberries, Raspberries | 3 - 5 ℓ 3 - 5 ℓ | i. Apply at the start of the growing season ii. Repeat 2 - 3 times with 14 day intervals Apply in 300 ℓ water/ha |
| ii. Strawberries | 2 - 3 ℓ 2 - 3 ℓ | i. Apply 2 weeks after transplant ii. Repeat 14 days later, repeat 2 - 3times Apply in 200 ℓ water |
| Bulb, Tuber & Root Crops | | |
| i. Onions, Garlic | 2 - 3 ℓ 2 - 3 ℓ | i. Apply 2 weeks after transplant ii. Repeat 14 days later, repeat 2 - 3times Apply in 200 ℓ water |
| ii. Potatoes, Sweet Potatoes | 3 - 5 ℓ 3 - 5 ℓ 3 - 5 ℓ | i. Start of emergence ii. Apply 1 week after 100 % emergence iii. Apply 14 days later Apply in 500 ℓ water/ha |
| iii. Beetroot, Carrots | 2 - 3 ℓ 2 - 3 ℓ | i. Apply 1 week after emergence ii. Apply 14 days later. Repeat application 14 days later if required. Apply in 300 ℓ water/ha |
| Cotton | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| Cruciferae | | |
| Broccoli, Cabbage, Brussel Sprouts, Cauliflower | 2 - 3 ℓ 2 - 3 ℓ | i. Apply 2 weeks after transplant ii. Repeat 14 days later, repeat 2 - 3times Apply in 200 ℓ water |
| Cucurbits | | |
| Cucumbers, Marrows, Melons, Pumpkins, Baby marrows | 2 - 3 ℓ 2 - 3 ℓ | i. Apply 2 weeks after transplant ii. Repeat 14 days later, repeat 2 - 3times Apply in 200 ℓ water |
| Grain Crops | | |
| i. Maize, Sorghum | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| ii. Barley, Oats, Wheat | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |

Directions for use: (Use only as directed)

| Crop | Rate/ha | Remarks |
|---|----------------------|---|
| Grapes Table and Wine Grapes | 3 - 5 ℓ 3 - 5 ℓ | i. Apply at 2-5 cm shoot length ii. Apply 14 days later Apply in 500-750ℓ water/ha |
| Leafy Vegetables Lettuce, Spinach | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| Legumes i. Dry Beans, Peas | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| Nut Trees: Macadamia, Pecan, Wall nuts | 5 - 10 ℓ 5 - 10 ℓ | i. Apply at the start of the growing season ii. Repeat 2 - 3 times with 14 day intervals Apply in 1000 - 2000 ℓ water/ha |
| Oil Seed Crops i. Canola | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| ii. Groundnuts | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| ii. Soy Beans | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| iv. Sunflower | 3 - 5 ℓ 3 - 5 ℓ | i. Apply 2 - 3 weeks after emergence ii. Apply 14 days later Apply in 200 ℓ water/ha |
| Ornamentals i. Cut Flowers & Bulbs | 2 - 3 ℓ | i. Drench seedlings before transplant (see drench application below). ii. Apply 2 weeks after transplant. iii. Repeat every 14 - 21 days. Apply in 200 - 500 L water/ha. |
| Pastures and Lawns | 5 - 7 ℓ 5 - 7 ℓ | i. Apply at the start of the growing season ii. Repeat application after 14 days Apply in 300 ℓ water/ha |

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| Crop | Rate/ha | Remarks |
|--|----------------------|--|
| Pineapples | 3 – 5 ℓ 3 – 5 ℓ | i. Apply at the start ii. Repeat application after 14 days Apply in 200 ℓ water/ha |
| Pome fruit Apples, Pears, Quinces | 5 – 10 ℓ 5 – 10 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 1000 - 2000 ℓ water/ha |
| Solonaceous Crops i. Chilies, Paprika, Peppers, Tomatoes | 2 - 3 ℓ 2 - 3 ℓ | i. Apply 2 weeks after transplant ii. Repeat 14 days later, repeat 2 – 3times Apply in 200 ℓ water |
| ii. Tobacco | 2 - 3 ℓ 2 - 3 ℓ | i. Apply 2 weeks after transplant ii. Repeat 14 days later, repeat 2 – 3times Apply in 200 ℓ water |
| Stone Fruit Apricots, Nectarines, Peaches, Plums | 5 – 10 ℓ 5 – 10 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 1000 - 2000 ℓ water/ha |
| Sugarcane | 3 – 5 ℓ 3 – 5 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 300 ℓ water/ha |
| Subtropical Fruit i. Avocados | 5 – 10 ℓ 5 – 10 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 1000 - 2000 ℓ water/ha |
| ii. Guavas | 5 - 7 ℓ 5 - 7 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 300 - 500 ℓ water/ha |
| iii. Lychees, Mangoes | 5 – 10 ℓ 5 – 10 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 1000 - 2000 ℓ water/ha |
| iv. Citrus | 5 – 10 ℓ 5 – 10 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 1000 - 2000 ℓ water/ha |
| Other Crops | 3 – 5 ℓ 3 – 5 ℓ | i. Apply at the start of the growing season ii. Repeat 2 – 3 times with 14 day intervals Apply in 300 ℓ water/ha |

Directions for use: (Use only as directed)

SOIL APPLICATION:

| | | |
|------------------|----------|---|
| All Crops | 5 - 10 L | Apply through irrigation water or apply directly to the soil with suitable applicator. Use sufficient water to wash into root zone. Use the lower dosage on younger plants and higher dosage for mature plants. Repeat application every 14 – 21 days as necessary. |
|------------------|----------|---|

DRENCH:

| | | |
|--------------------|--------------|---|
| Young Trees | 2 % Solution | Add 1 – 5 L solution as a soil drench or into the planting hole before planting. |
| Seedlings | 2 % Solution | Drench seedlings or seedling trays for 5 – 10 minutes in solution before transplanting. |

Warranty:

Although this product has been extensively tested under large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic conditions as well as method, time and accuracy of application