



BIOPOWER[®] STIMULATE[®]

**LIQUID MARINE PLANT EXTRACT
PLUS NATURAL BIO STIMULANTS
4.5:2.0:4.8**

***A Pure Seaweed Bio Stimulant extracted from
fresh Ascophyllum nodosum***

For use in pasture, turf, arable crops, kiwifruit, viticulture, avocados and many other horticultural and vegetable crops as a bio stimulant to support plant growth, increase yields, improve fruit quality and to aid plants in overcoming climatic factors, leading to improved resistance from insect attack or fungal infection.

BioPower[®] Stimulate[®] is manufactured using biological fermentation under low temperature and negative pressure.

Net Contents 20 Litres

BioPower® Stimulate® Liquid Seaweed for General Use

BioPower® Stimulate® Liquid Marine Plant Extract is derived from fresh *Ascophyllum nodosum* marine plants harvested from clean, cool, sustainable, coastal environments. It is a natural storehouse of major and minor nutrients, carbohydrates, amino acids and naturally occurring plant growth promoting substances, which enhance crop health, nutrition and quality.

Benefits of Use: Consistent use of **BioPower® Stimulate®** supplements a well balanced nutritional programme. Use **BioPower® Stimulate®** to increase desirable yield, improve overall plant nutritional health, improve root growth and development, improve plant vigour and maximise crop potential during periods of stress. To achieve the desired results the levels of major and minor nutrients must be adequate to support the increased production potential from the use of **BioPower® Stimulate®**.

Storage and Handling: This product contains natural preservatives but should be stored away from intense sunlight and heat. Avoid spillage as product is very slippery and may create a hazard.

Compatibility: **BioPower® Stimulate®** is compatible with most herbicides, fungicides, insecticides and fertilisers. Some pH adjustment may be required with acidic mixtures. Add surfactants after the product has completely dissolved in the tank solution. When mixing with calcium products thoroughly mix **BioPower® Stimulate®** with the water in the tank prior to adding the calcium product. If compatibility of chemicals is unknown a "jar" test is recommended.

Safety Data Sheet: A safety data sheet is available from Grosafe Chemicals Limited.

Product Information Sheet: A product information sheet including a Certificate of Analysis detailing macro and micro nutrients, carbohydrates and amino acids is available from Grosafe Chemicals Limited.

Emergency Response: 0800 Chemcall (0800 243 6220)

DIRECTIONS FOR USE

BioPower® Stimulate® is water soluble and is suitable for use in liquid foliar, soil applied, irrigation and fertigation applications.

Mixing Instructions: When possible, add **BioPower® Stimulate®** to the spray or fertiliser tank mix first. Fill half the mixing tank with clean water, begin agitation and gradually add recommended quantity of **BioPower® Stimulate®** and the remainder of water.

Foliar Applications: Use enough water for good spray coverage. Foliar sprays should be applied as a fine mist with low fluid velocity until the foliage is wet. In general terms application rates should not exceed 2000 litres per hectare in dense tree crop situations and be scaled back in crops where the foliage is sparser. Do not foliar apply during times of moisture or heat stress. For best results apply during the cool part of the day (morning or evening), when temperatures are below 25degrees C. Do not spray just before or after rainfall or sprinkler irrigation. Use a non-ionic surfactant for maximum coverage and leaf adhesion.

Soil Applications: Soil applied treatments can be made by soil directed sprays of **BioPower® Stimulate®** on its own or tank mixed with other fertilisers or pesticides, by sidedress treatments, applications through irrigation systems or other methods which effectively apply **BioPower® Stimulate®** to the soil. When making irrigation treatments dilute 1 part **BioPower® Stimulate®** with at least 5 parts of water before adding to the supply tank. Continuous agitation of the supply tank is recommended. **BioPower® Stimulate®** can be applied through drip, micro sprinkler, overhead sprinkler, furrow, flood and other types of irrigation at recommended rates. For micro sprinkler, solid jet or drip irrigation apply after the system has reached operating pressure. Inject for at least one hour followed by a two hour flushing cycle to clear the system of all product. Avoid heavy irrigation following product application to prevent leaching of material from the plant root zone.

APPLICATION RATES

Fertigation (Irrigation application): used alone or as a synergising agent to mineral fertilisers. **Dosage 3.0 – 6.0 L/ha Seed Soaking:** Seed needs to be planted for 5 – 8 hours in a dilution of **3ml/litre of water (dilution rate of 1:333)**. Soakage time is dependent on the thickness of the seed coat.

Root Dipping: Can reduce mortality rates by dipping planter bags, plant containers or bare rooted plants for five minutes. **Dosage 15ml/10 litres of water prior to planting (dilution rate of 1:666)**. After planting bare rooted plants a root drenching at the same dilution rate is recommended.

Foliar Application: Apply at 150 – 300mls per 100 litres of water. Apply a minimum of 3Litres per hectare. Do not exceed 2000 litres of water per hectare.

VEGETABLES	Foliar Application Timing — Application Rate 3.0 – 6.0 L/ha				Optional
	1st Application	2nd Application	3rd Application		
Beans and Peas	Six-leaf stage	Commencement of flowering	First pods		Pod fill
Broccoli, Cabbage, Cauliflower	Six-leaf stage	3 weeks after first application	Head initiation		Head development
Carrots, Leeks and Onions	2 weeks after emergence	Root enlargement	Every two weeks until harvest		
Capsicums, Eggplants, Melons Squash and Pumpkins	Six-leaf stage	Commencement of flowering	First fruit set		4 weeks after 3rd application
Cucurbits and Cucumbers	Six-leaf stage	Immediately prior to flowering	Every two weeks until harvest		
Sweetcorn	Six-leaf stage	55–75cm height	Just prior to tasselling		
Potatoes	Six-leaf stage	0.5cm tubers	Commencement of flowering		Tuber growth
Tomatoes (Fresh Market)	Six-leaf stage	Commencement of flowering	Apply at picking		2 weeks after 3rd application

FRUIT	Foliar Application Timing — Application Rate 3.0 – 6.0 L/ha				
	1st Application	2nd Application	3rd Application	4th Application	Optional
Grapes	20–30cm cane	45–60cm cane	Full bloom	Berry set	3 weeks after 4th application
Apples, Pears & Kiwifruit	Green tip	Pre-bloom pink bud	Full bloom	Early fruit formation	Every 3 weeks
Avocados and Citrus	Early bloom	Petal fall	Summer spray	Autumn spray	Every 3 weeks
Berry fruit	After transplant	Prior to bloom	While picking	3 weeks later	Every 3 weeks
Stone fruit	Bud burst	Petal fall	4 weeks after 2nd application	3 weeks after 3rd application	Every 3 weeks
Plums and Cherries	Pink white bud	Full bloom	Early fruit formation	3 weeks after 3rd application	Every 3 weeks

CEREALS	Foliar Application Timing — Application Rate 1.5 – 3.0 L/ha			
	1st Application	2nd Application	3rd Application	Optional
Wheat and Oats (Winter)	First node detectable	Flag leaf		After any environmental stress
Barley (Winter)	Early post emergence (2 leaf stage)	Flag leaf		After any environmental stress
Wheat and Oats (Spring)	1–3 Tillers (GS 12–13)	First node	Flag leaf and after any environmental stress	
Barley (Spring)	1–3 Tillers (GS 12–13)	First node	Flag leaf and after any environmental stress	
Maize	2–6 leaf stage	At 50–75cm growth	Just prior to tasselling	

BROAD ACRE	Broadcast Foliar Application, Overhead Sprinkler and Flood Irrigation Application: 3.0 – 6.0 L/ha as a broadcast spray in 200–300 litres of water per hectare BioPower® Stimulate® can be added to irrigation systems as a metred dose	
Lucerne	Apply after each cut.	
Pasture	1. Recommended to apply 'little and often' once a month throughout the year. 2. Apply as a Bio-stimulant to increase the number and activity of beneficial soil micro-organisms. This will improve grass growth and help reduce soil-born disease symptoms in pasture.	
Turf	1. Apply to greens, tees and fairways. 2. Regular applications (monthly) are beneficial. The Bio-stimulant activity of BioPower® Stimulate® will support beneficial soil micro-organisms, improve grass growth and help reduce soil born disease symptoms in turf. 3. Tilling in turf will also be increased, without excessive top growth.	

WARRANTY: This formulation is warranted to contain the specified contents when packed. The user bears the risk for the damage resulting from factors beyond the manufacturer's control. The manufacturer declines all liability for damage resulting from improper storage or use of the product.

EMERGENCY RESPONSE
0800 CHEMCALL (0800 243 622)

BATCH No:
DATE OF MANUFACTURE:



20 JEAN BATTEN DRIVE, MT MAUNGANUI
FREE PHONE 0800 220 002 • FAX 07 578 6241
EMAIL: info@grosafe.co.nz • www.grosafe.co.nz

BioPower® and Stimulate® are registered trademarks of Grosafe Chemicals Ltd.