



Talun Eco-Products Inc.
Certified Kelp Extract Powder
For Organic Agriculture
A Supplemental Fertilizer
Recommended Foliar Application

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Kelp Extract Powder

General Application Method

Kelp extract powder is intended to be used as a supplement to an existing fertilization program. It is compatible with most insecticides, fungicides, many conventional and organic fertilizers. If the desired combination has not previously been used, a compatibility test (jar test) is recommended. Do not use with strong acidic fertilizer or calcium-based compounds.

Dissolve 1 g (1/4 tsp) with 2 – 3.0 L of water.

Spray/water 3~4 times in whole growing period or after each picking.

To prepare a large volume solution, it is recommended to dissolve the powder in a smaller volume first and then adjust to the desired final volume.

Alternatively, prepare a stock solution, for example dissolve 10 g (2.5 tsp) of kelp extract powder in 100ml of water.

Add 10 ml of stock to 2 - 3L of water as final solution. Store the stock solution in cold places such as the refrigerator.

For maximum effect, apply in the morning or the evening.

Foliar application or spraying is the most economical way to feed your plant with this product.

Dosage: 1-1.5 kg/ha.

Drip irrigation:

Since this product is 100% soluble in water, therefore it can be introduced into a drip irrigation system through a reservoir or an injector.

Direct addition to substrate(growth media/soil mix):

Kelp extract powder can be added directly to your substrate/potting mix at 2:100.

It is important to mix thoroughly of the mixture before use.

Hydroponic Solution:

Add 1g to every 10 liter of solution (1:10,000). Replenish every week. Do not add directly to stock solution eg. Phosphate stock solution.

NOTE: Users are encouraged to experiment and make modification to derive the best application method that best fit to their specific growing condition.

1:3000 dilution - Apply 1-1.5Kg/ha or 300-500g/Acre.		
Vegetables	Timing	General Application
Eggplants, Pepper, Melon, and Squash.	Spray at six-leaf stage → Early bloom → First fruit set → Four weeks later (optional).	
Bean and Peas	Six-leaf stage → First bloom → First pods.	Every 2 weeks and after each picking.
Cabbage, Broccoli, and Cauliflower	Six true leaf stage → 3 weeks later → Head initiation.	
Cucurbits and Cucumbers	Six-leaf stage → Just prior to bloom → early fruiting.	Every 3-4 weeks and after each picking.
Onions, Carrots, Chicory, Leeks, & Turnips	2 to 3 weeks after emergence/5-leaf stage → Root enlargement.	Every 2-3 weeks.
Potatoes	Six-leaf stage → When tuber approx. pea size → Beginning of bloom → Bulking up.	
Tomato	Six-leaf stage → pre-bloom → At fruit set → 2-3 weeks later.	Every 2-3 weeks and after each picking.

1:3000 dilution - Apply 1-1.5Kg/ha or 300-500g/Acre.		
Fruits	Timing	General Application
Grapes	20~30cm cane → 45~60cm cane → Full blooming → repeat every 2-3 weeks.	
Citrus	Early bloom → Petal fall.	Every 3 weeks.
Apples/Pears	Green tip → Pre-bloom → pink bud → Full blooming → Early fruit formation.	Every 3 weeks.
Bananas	Plant emergence → 5-10 days later → Fruit at half size.	Every 3weeks.
Strawberry & other berries	Right after transplant → Before bloom.	Every 3 weeks and after each picking.
Plums & Cherries	At budding → Full bloom → Early Fruit Formation.	Every 3 weeks.

1:3000 dilution - Apply 1-1.5Kg/ha or 300-500g/Acre.		
Crops	Timing	General Application
Cotton	Seedling stage → Flower emergence → Fully Bloom.	Every 2-3 weeks.
Oilseed crops	3-5 leaves stage → Before reproductive growth → Full flowering.	Every 4 weeks.
Tobacco	Early emergence → After each picking → Early Bloom.	Every 4 weeks.
Hops	Early emergence → Five weeks later.	Every 4 weeks.
Alfalfa (Lucerne)	After each cut.	
Coffee & Macadamia	Bud-breaking.	Every 2-3 weeks.
Soya Bean	Spray at 3rd trifoliolate stage; use 2Kg/ha → Spray again after 10-14 days later; use 1Kg/ha.	
Sugar Beet	Once at 4 to 8-leaf stage using 2Kg/ha.	
Tea	Apply after each picking.	

1:3000 dilution - Apply 1Kg/ha or 400-500g/Acre		
Cereals	Timing	General Application
Winter Wheat & Oats	First node → Flag leaf.	Once between 2 and 5-leaf stage and after any environmental stress.
Winter Barley	Just after emergence.	Once between 2 and 5-leaf stage and after any environmental stress.
Spring wheat, Spring Barley & Oats	1-3 Tillers → First node.	Once between 2 and 5-leaf stage and after any environmental stress.
Maize & Sweet Corn	Six-leaf stage → 8-9 leaves stage → Just prior to tasseling.	

Fungi	Dilution	Timing
Mushroom	1:3000	size of mushroom head is 1-1.5 cm → size of mushroom head is 3 cm

Compost enrichment and degradation

The degradation rate and quality of compost can be improved by addition of diluted kelp extract. For example, add 500g - 2 Kg of kelp powder for every 100L of compost. To make sure even distribution of kelp extract on the compost. One should dilute the kelp powder with water at 200-300 times, and then sprinkle the liquid to the compost.

	Dilution	Timing
Roses	1:3000	Every month and after each pruning or cutting.
	1:1000	At the beginning of the growing season. Soak the soil with 200-300ml 3 times per week; subsequently, once a month
Lupins	1:3000	Spray once after 3-6 weeks of emergence.
Other flowering and Ornamental plants	1:1000	After transplanting, soak the soil around the seedling with ~ 100ml.
	1:5000	Spray every 2 weeks.
Turf and Golf Courses (600-800g/ha)	1:5000	Once or twice per month. More effective to apply often at a lower concentration.
Fairways (300-400g/ha.)	1:5000	
Pasture (1Kg/ha)	1:5000	Spray during early growth after emergence, grazing or cutting.
Hay/Meadow (1-1.5Kg/ha)	1:5000	Spray 2 weeks after emergence or when the hay is ~ 6-8" tall; repeat 2 to 3 times with 3-4 week intervals.

Material Safety Data Sheet

Section 1-Product and Distributor information

Product Identification: Kelp Extract powder

Active Ingredient(%): N: 0.5 %, P₂O₅ : 3.0%, K₂O: 18-22% , Organic matter: 50%

Distributor:

Talun Eco-Products Inc. www.talunecoproducts.com

Section 2-Composition/Information on Ingredients

Ingredient Name: N, P₂O₅, K₂O, Organic matter, Alginic acid

Section 3-Hazards Identification , Including Emergency Overview

Ingredients with unknown toxicological properties: None

Ingredients the supplier believes may be harmful : None

Section 4-First Aid Measures

This product is nontoxic so is harmless to persons

Eye contact: rinse eyes with a large amount of running water. Hold eye lids apart to rinse the entire surface of the eyes and lids.

Skin Contact: wash with plenty of water, including hair and under fingernails.

Section 5-Fire Fighting Measures

Hazardous Products of Combustion :None known.

Extinguishing Media :In case of fire, use water spray(fog), foam, dry chemical, or CO₂.

Unusual Fire and Explosion Hazards: None known.

Section 6-Accidental Release Measures

In Case of Spill or Leak: wash with plenty of water.

Section7-Handling and Storage

The products should be stored in cool condition and avoid to exposure in the sun.

Using the products with low-acid or alkalescence pesticides together will enhance the effect of fertilizer.

Section 8-Exposure Controls & Personal Protection

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material

Eye Contact: To avoid eye contact.

Skin Contact: To avoid skin contact

Inhalation: To avoid breathing spray or mist

Section 9-Physical & Chemical Properties

Appearance: Brownish- black brown powder

Odor: Kelp- like

Solubility in water: 100% soluble

PH: 8-10

Section 10-Stability & Reactivity Data

Reactivity

Stability: Stable Under Standard Conditions

Hazardous Polymerization: Will not Occur

Conditions to Avoid: None Known

Hazardous Decomposition Products

None Known

Section 11-Toxicological Information

This product is nontoxic.

Section 12-Ecological Information

This product is environment friendly

Section 13-Disposal Considerations

Waste Disposal Methods:

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

Section 14- Transport Information

The data provided in this section is for information only. Please apply the appropriate regulations

To properly classify your shipment for transportation.

Section 15-regulatory Information

SARA Hazard Notification

Section 302 Extremely Hazardous Substances: Not applicable

CERCLA Reportable Quantity: Not applicable.

Refer to section 2 for OSHA Hazardous Chemical(s) and Section 13 for RCRA classification

Section 16-Other Information

The information given here is not necessarily exhaustive but is representative of relevant, reliable data.

Follow all local/regional /national/international regulations

Please consult supplier if further information is needed.