

PacificGro

2-1-0.3

Seafood for the Soil®with crab and shrimp

Pacific Gro is an organic source of a great range of nutrients that improves soil health and builds humus. Fish oil is a preferred food source for soil microorganisms, particularly beneficial fungi. Farmers notice a proliferation of soil life and restoration of a healthy fungal-bacterial balance. It's often applied with microbial products. It's also used as a foliar with other inputs – the fish oil acts as a sticker, there's plant-available calcium and the amino acids chelate nutrients.

Pacific Gro is produced from ocean-caught salmon, shrimp and crab that are ground and enzymatically digested without removal of any of the natural oils or proteins. It is naturally high in fish oil. Most of the nitrogen is in amino acid form. The raw material is collected from seafood processors. The naturally occurring enzymes and vortex action in the breaking tanks digest the shells, fish bones and fish scrap into a fine colloidal suspension.

GUARANTEED ANALYSIS:

Total Nitrogen (N)	2.0%
1.6% water soluble nitrogen	
0.4% water insoluble nitrogen	
Available Phosphate (P_2O_5)	1.0%
Soluble Potash (K ₂ 0)	0.3%

Derived from fish protein hydrolysate stabilized with sulfuric acid, and seafood protein hydrolysate.

GENERAL USAGE & APPLICATION RATES:

Mix well before adding water. Dilution rate: 10:1 to 30:1 for general use.

Minimum Dilution: Soil Use 5:1 (20% solution)

For Foliar Use, at least 50:1 (2% solution)

Row Crops

- 1 to 2 gal/acre in row as starter
- Up to 4 gal/acre sidedressed
- 1 to 2 quarts in 10 to 20 gal water/acre foliar

Orchards and other perennial crops

3 to 10 gal/acre before bud break and again post-harvest

Vegetables and other annuals

3 to 5 gal/acre at planting and/or before flowering

- Made from micronized shrimp, crab and other seafood waste
- Cold processed hydrolysate
- Screened to 150 mesh for trouble-free spray and drip application
- No oils removed, allows for soil lock and foliar sticking
- Good food product promoting beneficial microbial activity, especially fungal





Seafood for the Soíl ™

Application Guidance for Row Crops and Annual Crops

Mix product well before use, best done by circulation pump. Separation of oil and water does occur, but the product returns to a colloidal suspension upon mixing.

Use up all product that has been diluted. When pH exceeds 4 the biology gets active and will cause diluted product to foam and expand. Fungal mycelia may grow in diluted product.

This is a bio-active product. Flush drip lines well after use. Thoroughly clean and rinse out any tanks before filling.

Protect drip lines from clogging by jar testing mixtures with other inputs and high pH irrigation water, and use a screen downstream injection. Do not mix with synthetic forms of phosphorus.

Ground Application Sprayers <u>To avoid screen clogging</u>: Circulate product, dilute at least 10:1 in water, change main pump screen to 40 - 50 mesh, remove screens from valves and tips, use 15 - 20 gal/acre tips, reduce pump pressure to 40 - 50 psi.

Dilution Rates by Type of Application	Dilution (parts water per part of product)
Minimum dilution, if no plant contact (Starters, pop-up)	4:1
Soil drench, pre-planting and near established trees and shrubs	10:1
General use in season with foliar contact (1/2 cup per gal)	30:1
Drip fertigation (1/2 to 2 oz./gal)	50:1 or more dilute
Foliar spray (1/2 to 2 oz./gal)	50:1 or more dilute

Pacific Gro Oceanic Hydrolysate These quantities refer to the amount of product prior to dilution

Use Pacific Gro Oceanic Hydrolysate to establish healthy soil biology and also to chelate and provide nutrients for plant uptake. Apply both to soil and to foliage with foliar nutrient applications.

Use <u>Pacific Gro Sea Phos 1.7 - 7 - 0</u> to provide phosphorous with new plantings (for root development), and at flowering to provide energy for grain set.

Consult with a professional agronomist or consultant for specific guidance for your crop and particular conditions.

	Professional Program		Simpler Program
Corn Total use per year: 3 – 10 gal/acre (can cut N use 20% - 40% at 8+ gal/acre)	Pre-plant Starter/Pop-up Foliar, 1 or 2 times Side dress	3 – 15 gal/acre 2 gal/acre 1 gal/acre (at V4 – V8) 2 – 10 gal/acre	3 – 5 gal/acre at planting
Soybeans Total use per year: 5 – 15 gal/acre	Pre-plant Starter/Pop-up Foliar	3 – 10 gal/acre 2 gal/acre 1 gal/acre	
Wheat, irrigated Total use per year: 15 – 25 gal/acre (can cut N use 20 - 40% at this rate)	Pre-plant Starter/Pop-up Dormancy break Stem elongation Boot stage	2 – 10 gal/acre 2 gal/acre 4 - 10 gal/acre 4 – 10 gal/acre 2 – 4 gal/acre	
Dryland Wheat, Legumes Total use per year: 3 – 5 gallons per acre	In furrow Foliar, 1 or 2 times	2 - 3 gal/acre 1 gal/acre	3 gal/acre at planting
Alfalfa Total use per year: 5 – 15 gallons per acre	At green-up After each cutting	5 gal/acre 3 – 5 gal/acre	
Cover Crops and Pasture Total use per year: 3 – 10 gallons per acre	At green-up Mid-season	5 gal/acre 3 – 5 gal/acre	

Wash off with water any contact with skin.