

## ORGANIC FERTILIZERS - Quick Reference List

Select the low application rate to maintain fertility. Apply the higher rate only for extremely poor soil. Calculate actual need from a soil test. Don't guess. Too much is as harmful as too little.

Nitrogen or N Sources	% Composition	Application rate per 100 sq ft.
Blood meal	12%	From 1 to 4 lb
Fish meal	9-10%	From 2 to 5 lb
Soybean meal	7%	From 4 to 8 lb
Cottonseed meal	6%	From 5 to 10 lb
Fishbone meal	6%	From 2 to 5 lb
Alfalfa meal	2-3%	From 5 to 15 lb
Liquid Fish (emulsion or hydrolysate)		Mix according to directions on label
Molasses (granular or liquid)		Dilute about 20 parts water to 1 part molasses. For activating compost pile, mix 5:1.

Phosphorus or P sources		
Rock phosphate	33%	Up to 10 lb
Bone meal	20%	Up to 5 lb
Fishbone meal (cod)	6-10%	From 2- 5 lb

Note that FBM is a 2-ingredient-in-1 application: N & P are both present. Compute application rate according to your need for N only.

### Potassium or K sources (note: most soils have adequate levels of K; add Ca and microbes to help release it and make it available to plants.)

Greensand	6-7%	Up to 10 lb
Sul-Po-Mag = K-Mag	22%	Up to 6-7 lb Use only if deficient in Mg.
Sulfate of Potash	50%	From 1/2 - 1 lb
Wood ash	varies w. wood	-- Only a light dusting to avoid severe rise in pH.
Kelp meal	1.2%	-- Never use more than 1 lb/100 sf. So, choose another K source to go with the kelp meal. <b>OR,</b>

-Soluble Kelp Powder (Maxicrop) **or**  
 -Liquid Kelp & Potash (Down to Earth) 8% use the Maxicrop or Down to Earth liquid form of kelp. Mix according to pkg. directions & apply monthly as drench &/or foliar feed.

### Fertilizers, Pre-Blended

Down to Earth All Purpose Fertilizer	4-6-2	in 6 lb box, 25 lb bag
Sustane	8-2-4	in 5 lb box, 20 lb bag, 50 lb bag
Sustane	4-6-4	in 5 lb box, 20 lb bag, 50 lb bag



### Fertilizers, Pre-Blended Liquid form

Down to Earth Liquid All Purpose	4-1-3
Down to Earth Liquid Bloom	2-6-4
Alaska MorBloom	0-10-10

## FoxFarm

*Con't – liquid blended fertilizers*

**Fish - Liquid** Various brands; quart or gallon size.

**Emulsion:** Alaska brand      **5-1-1** for vegetables

**Fish Hydrolysate**                      **2-4-1 and 4-4-.05**

## Others Specifically For A General Boost In Trace Minerals

**Azomite, compost, rock phosphate, kelp** (see notes above), and various liquid fertilizers made from fish, seaweed, & even plant teas made from nettles, horsetail, comfrey, etc.

## Building Organic Matter & Beneficial Soil Food Web Microbes

**BioChar:** Activate by mixing with microbes & organic fertilizer. Then apply at 5 to 15% by volume of potting soil.

**Green Manures/Cover Crops:** AK Mill's own **AK Soil Booster** blend contains peas, fava, & oats. Sow, grow, & when 2-5" high, chop and cultivate back into soil. Effectively builds nitrogen, organic matter, & microbes right in place. Sow 100sq ft with 6lb seed, 1000sf with 60lb seed. Apply w. proper inoculant.

**Compost or Worm Castings:** The first year, apply up to 3" deep, or 1 cu. yd. per 100 sq. ft. Then keep adding 1/2" compost yearly.

**Actively aerated compost tea:** a highly effective way to fertilize, build soil foodweb, and suppress disease. Apply 5-15 gal/acre. Must be used within 8 hours or refrigerated up to 5 days. Dilute 5 parts de-chlorinated water to 1 part tea.

**Soil ProVide with Soil ReVive:** a new stabilized form of actively aerated compost tea with accompanying microbe food. This gives all the benefits of compost tea without brewing it. Just mix from package when you are ready to apply it.

*----Don't kill your soil food web microbes with inorganic fertilizers.-----*



## Home-made Organic Amendments

**Compost-** see above.

**Manures from livestock:** Apply about 50 lb or 4 cu feet or 1/2" per 100 sq. ft. High in weed seed.

**Manure tea:** soak manure in mesh bag in water barrel. Not as effective as compost tea, but a good way to make manure spread farther without the weed seed problem of spreading solid manure. Avoids weed seed factor.

**Urine, human:** dilute at least 10:1 up to 20:1 with water; otherwise it is too salty for plants and beneficial microbes.