



## Foliar Spray Recipe

1. Place the first three ingredients into the BioExtractor Bag™. For maximum extraction, ensure that bag hangs below water level and moves with the water.
2. Add liquids (kelp extract, fish hydrolysate, and liquid humic acid) directly into the water.
3. *Optional:* Aerate vigorously for 12-24 hours.
4. Mix the remaining inputs directly into the water and **use immediately**.
5. Spray for complete leaf and stem coverage every 1-2 weeks.

<u>Measure By VOLUME</u>	<u>Vegetative Growth</u>			<u>Flowering &amp; Fruiting</u>		
	1 Gal	5 Gal	25 Gal	1 Gal	5 Gal	25 Gal
Biologic Systems™ <b>Worm Castings</b>	2 TBSP	½ Cup	1.5 Cups	-	-	-
Biologic Systems™ <b>Humus</b>	2 TBSP	½ Cup	1.5 Cups	-	-	-
<b>Insect Frass</b>	½ TBSP	2 TBS	½ Cup	-	-	-
Biologic Systems™ <b>Fish Hydrolysate</b>	2 TBS	½ Cup	2 Cups	-	-	-
Biologic Systems™ <b>Liquid Kelp</b>	1 TBSP	¼ Cup	1 Cup	-	-	-
Biologic Systems™ <b>Liquid Humic Acid</b>	½ TBSP	2 TBS	½ Cup	-	-	-
<b>Armory™</b> ( <i>Bacillus &amp; Streptomyces</i> )	1 TBSP	¼ Cup	1 Cup	1 TBSP	2 oz	1 Cup
<b>DiPel™ DF</b> ( <i>Bacillus thuringiensis</i> <i>subs. kurstaki</i> )	1 TBSP	¼ Cup	½ Cup	1 TBSP	2 oz	4 oz



## Instant LBA vs Brewed Compost Tea

### ***What Are Liquid Biological Amendments?***

At Biologic Systems, we prefer to use the term “Liquid Biological Amendment” (LBA), rather than “compost tea.” We no longer recommend that it is necessary to aerate or brew an LBA for an extended period of time. When working with tested inoculum-grade inputs that contain proven beneficial biology, a very potent “Instant LBA” can be achieved by simply liquefying and applying the products to plants *immediately* without allowing for brewing time. After conducting numerous side-by-side trials comparing a brewed LBA versus an Instant LBA, we have concluded that the brewing process is not necessary and that the focus should be on using quality input materials. Instant LBAs can be made for both root drench and foliar applications. Although some specific contexts still exist for aerobically brewing an LBA in large agricultural contexts, we feel the professional hobby gardener or small-scale farmer can achieve maximum results without this added process.

### ***Instant LBAs may have many advantages over “brewed compost teas” including:***

- Time Savings – Instant LBAs can be made in a few minutes anytime on the fly.
- Eliminate the need for expensive air pumps, compost tea brewers, and tanks.
- Increase the odds of growing the “correct microorganisms” for your plant by allowing the reproduction of the organisms to occur in the soil and on plant surfaces rather than in a compost tea brewer. Extended brewing periods will select for organisms that can grow in water, which may or may not be the correct biology for your specific plant.
- The Instant LBA approach allows the grower to mix a highly concentrated LBA with no risk of it culturing anaerobic pathogenic organisms.
- Reduce anaerobic biofilm accumulation in tanks and hosing that is caused by exposure to highly active LBAs.