

# GROWERTALKS

## Growing With Griffin

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### Building Strong Plants with Organic & Natural Nutrition Options

*Karen Stever*

Product	Comments
Nature's Source 10-4-5 Nursery & Landscape Special	Organic-based
Nature's Source 3-1-1	OMRI
Verdanta EcoVita 7-5-10	OMRI, 100-day
Sustane 8-4-4 All-Natural	OMRI, 45-day
Verdanta K-Vita 2-0-20	OMRI
Verdanta PL-2 2-0-6	OMRI
Biomin Potassium	
Biomin N	OMRI
Biomin Booster 126	OMRI, WSDA
Biomin Calcium	OMRI, WSDA
Biomin Magnesium	OMRI, WSDA
SITKO 0-7-17	Contains silica, phosphite, salicylic acid
Sil-Guard 0-2-5	Contains silica and phosphite
Humax	OMRI, WSDA
Fulmax	WSDA
Essential Organic 1-0-1	OMRI

“Organic,” “natural,” “all-natural” and “chemical-free” are all terms deemed to add value to our food and flower crops. Even if you never intend to grow organically or chemical-free, the trend toward more natural products and sustainable methods is undeniable. Many consumers are concerned about chemical use in food and plant production, and are interested in reducing their exposure.

Growers have been struck with a need for more choices in plant nutrition and pest control to produce chemical-free crops economically and without losses.

Insect- and disease-control options can be very limited for specific crops—most notably, herbal crops. Nutrition and building a strong plant, of course, are the first lines of defense against pests and disease.

Several manufacturers have expanded their selections of organic (OMRI-listed or WSDA) and organic-based nutritional products and supplements to fill this need. Nature's Source 10-4-5 Nursery & Landscape Special Plant Food is an organic-based liquid product, but isn't organic-certified. Like Nature's Source OMRI-listed 3-1-1, the Nursery and Landscape formulation is a liquid product derived from an oilseed extract. However, the Nursery and Landscape product contains higher levels of the essential micronutrients.

Sustane Natural Fertilizer is developing water-dispersible organic products for fertigation and has at least one formulation on the market currently. Granular organic fertilizers with slow-release profiles are available in EcoVita 7-5-10 (100-day) by Verdanta and in Sustane's 8-4-4 All Natural (45-day). Both are OMRI-listed.

Vegetables and other crops with high potassium demand can be easily supplemented with Verdanta brand's granular K-Vita (OMRI), Verdanta's liquid PL-2 (OMRI) or JH Biotech's Biomin Potassium liquid non-organic formulation. Additionally, nitrogen content can be easily boosted as needed with the new Biomin N, 5% nitrogen in a liquid mix of amino acids derived from hydrolyzed plant protein (OMRI-listed) without increasing phosphate or potassium.

Organic formulations of micronutrients are also available. Biomin Booster 126 is a mix of micros, providing copper, iron, magnesium, manganese, boron and zinc. Biomin Calcium provides 5% calcium in a formulation that facilitates

calcium uptake through foliage or roots. Biomin Magnesium contains 3% chelated magnesium and can be applied as a drench or to the foliage. All are OMRI-listed and use natural chelates derived from plant products. Other elements are also available.

Beyond the nutrition basics, several products are designed to provide artificial growing media with more of the components found in natural soils. Silica has been shown to reduce pest and disease infestation of a number of crops. SiTKO 0-7-17 (5% silica) or Sil-Guard 0-2-5 (7% silica) by Growth Products can be used to add silica to growing media or to mineral soils.

Silica has been shown to increase the strength of cell walls, making at least some plants resistant to invasion by pathogens or insects. Drought resistance/recovery and reduced shock during propagation and transplanting are additional benefits. Silica also competes with sodium and can mitigate damage due to high salt content. Contact your supplier to determine if a silica supplement may be appropriate for your production.

Some of the most complex components of natural soils, humic and fulvic acids, are now available in a jug from JH Biotech, Inc. These complex materials originate from the breakdown of organic matter. They're known benefactors of plant growth, increasing the cation exchange of soils and facilitating the uptake of micronutrient metals. Humax is 12% humic acid and is OMRI-listed; Fulmax is WSDA organic. Even natural mineral soils can benefit from replenishing or boosting the silicate, humate and fulvate content in poor or depleted soils.

Essential Organic 1-0-1 combines 7% humic acid with a long list of other natural ingredients, including cellulose, lignin, amino acids, sugars, plant hormones and micronutrients calcium, magnesium, sulfur and iron, all in a non-settling, non-clogging formulation. The natural rooting hormones in Essentials Organic promote rooting in propagation and in production.

No matter which crops you grow, from organic produce to perennials, these products may have a place in your production and provide your plants with everything they need to grow strong. **GT**

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