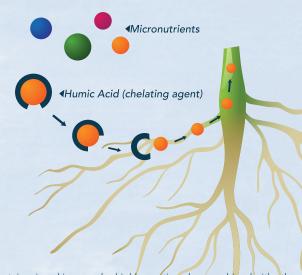
## HOW DOES IT WORK?

E-PLUS, which contains organic and mineral ingredients, is intended for use during the vegetative and early bloom stages of the plant. Its ingredients include kelp, yucca, humic acids, and calcium. These ingredients work with the plant's own natural systems to improve growth and overall plant health.

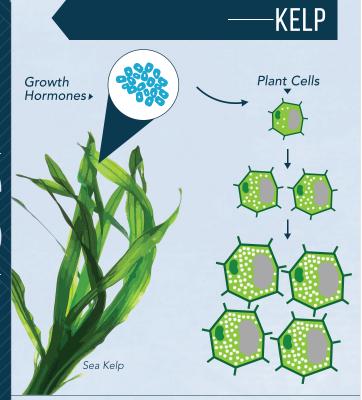
#### **HUMIC ACID**

One of the most important roles humic acid plays in horticulture is the ability to act as a chelating agent\* to the micronutrients. This allows the plant to uptake these nutrients much more readily and efficiently.



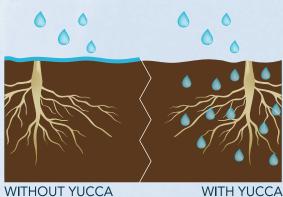
\* Certain mineral ions can be highly reactive when combined with other elements, such as calcium or phosphorus. This prevents the plant from absorbing them. In order to prevent this, the reactive elements are often treated with a chelating agent. The chelating agent will form a bond with the reactive ion, preventing it from forming bonds with other elements and keeping it "safe" until the plant is ready to use it.

# ADDITIVE E-PLUS KELP, YUCCA AND HUMIC ACID | 3-0-1



Sea kelp contains an abundance of naturally occurring growth hormones (cytokinins, auxins, and gibberellins) which enhance cell division and cell enlargement, as well as aiding in the development of chloroplasts.

#### YUCCA



WITH FOCCA



Cell walls

Pathogens

Calcium is needed in large amounts during the entire growing cycle. In the early growth stages, calcium aids in the formation of cell walls and membranes, which helps to strengthen and thicken cell walls. Increased thickness of cell walls improves pathogen resistance and creates a stronger plant stalk.

### Yucca contains natural wetting agents called saponins, which make water wetter by breaking the polarity of the water molecule. When adding yucca extracts to the nutrients and water it allows for better penetration of the soil (or soilless) surface and dispersion at the root zone. Thus, the nutrients are able to be used more efficiently and quickly by the plant.

#### **VEGETATIVE**STAGE





#### Sources:

http://www.simplyhydro.com/benefits\_of\_kelp.htm

http://homeguides.sfgate.com/sea-kelp-plants-24537.html http://www.oxyfertil.com/royaume-uni/role-ca-mg-plante.html

http://www.smart-fertilizer.com/articles/calcium-in-plants

http://www.helenachemical.com/services/articles/the-importance-of-calcium-in-plant-nutrition/www.plantphysiol.org/cgi/doi/ 10.1104/pp.900056 (Plant Physiology December 1, 2002 vol. 130 no. 4 1739-1740) http://www.planthealthcare.eu/files/Productbladen\_en/Yuccah\_en.pdf