



BIOSTIMULANTS

Specialists in Plant Health

# Carboplex

The Brix Building Biostimulant



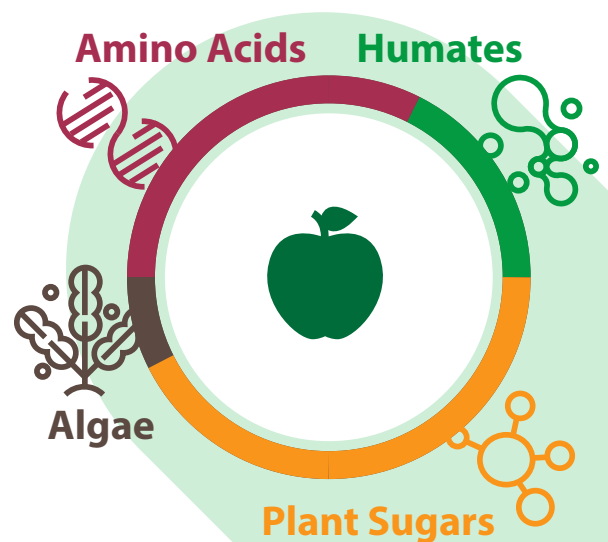
# Carboplex

## The Brix Building Biostimulant

Carboplex is a combination of naturally occurring biostimulant materials and trace elements formulated with the AMIX Active Uptake Complex delivery system, designed specifically for Brix building in plants and boost poorly performing plants. The bio stimulant package increases sugar content (Brix building) by stimulating the crop to convert carbohydrate to sugar and enhances the vegetative development of the plant and its subsequent growth including earlier flowering, fruiting and harvest.

### Features:

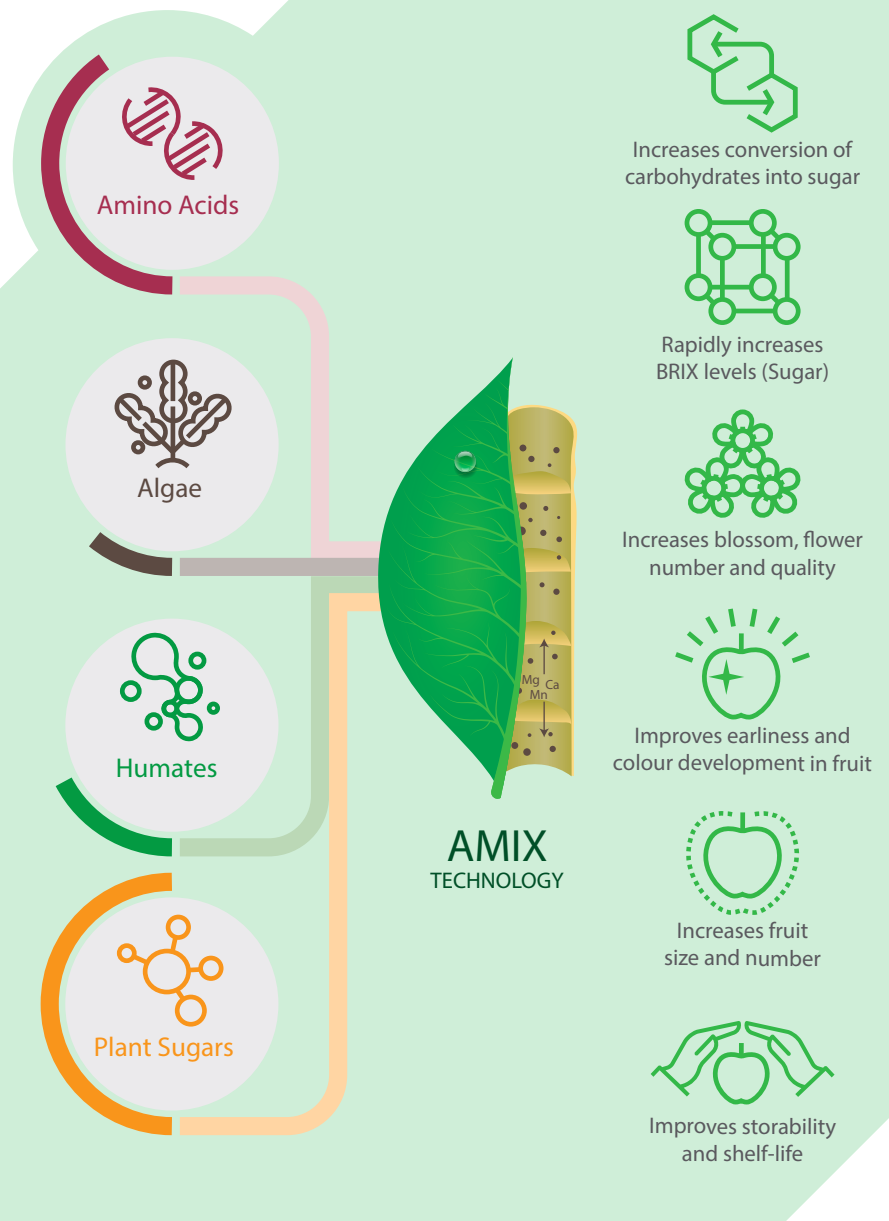
- Increases conversion of carbohydrates into sugar
- Rapidly increases BRIX levels
- Increases blossom/flower number and quality
- Improves earliness and colour development in fruit
- Increases fruit size and number
- Improves storability and shelf-life
- Helps alternate-bearing crops in programme with Multi-N
- Boosts growth and recovery in poorly performing plants





## Typical analysis:

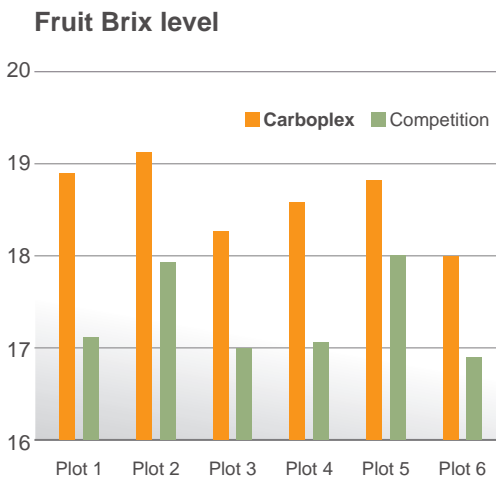
|                      |                |
|----------------------|----------------|
| Nitrate Nitrogen     | <b>0.70%</b>   |
| Phosphorus           | <b>0.01%</b>   |
| Potassium            | <b>0.50%</b>   |
| Trace elements       | <b>1.10%</b>   |
| Mannitol             | <b>1.50%</b>   |
| Vitamins A, B1, C, E | <b>50 ppm</b>  |
| Amino Acids          | <b>1.80%</b>   |
| Polypeptides         | <b>1.35%</b>   |
| Oligosaccharides     | <b>1.00%</b>   |
| Sulphated sugars     | <b>0.40%</b>   |
| Cytokinins           | <b>110 ppm</b> |
| Fluocoidan           | <b>1.40%</b>   |
| Alginates            | <b>2.00%</b>   |
| Plant sugars         | <b>2.20%</b>   |
| Humates              | <b>0.80%</b>   |



## What does Carboplex do to the crop?

### 1 Increases sugar transfer to the fruits and fruit Brix levels

Carboplex provides naturally plant sourced sugars for an increased carbohydrate production by the crop, but also teases the plant into converting stored carbohydrates into sugars at a faster rate and under unfavourable conditions (eg. Low temperatures).



Crop: Grapes 2014

Location: Spain

Application: of 1.0 L/ha 4 times:

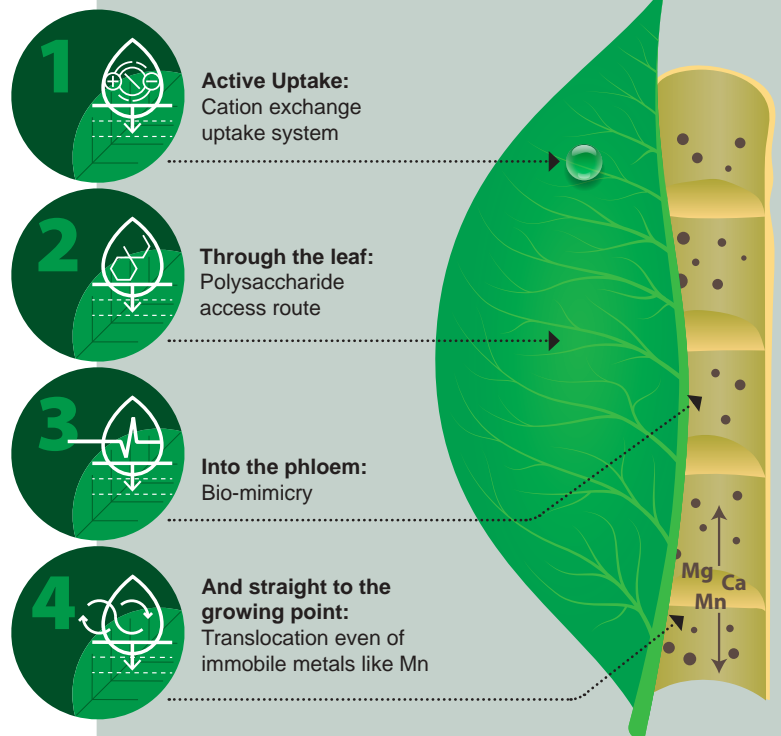
- 2 applications during early florescence and after fruit set.
- 2 applications from 6 weeks before harvest at 15 day intervals

Results:

BRIX Sugar levels were lifted by 30 (16%) over standard. Fruit cluster weight increase of 15%

## What is the AMIX Active Uptake Complex?

Micromix's proprietary AMIX Active Uptake Complex is based on Humic and Fulvic acids with lignin salts uniquely formulated to produce a low pH formulation that does not compromise the solubility of the Humic content. The AMIX Complex works with all divalent metallic cations to generate active uptake at the leaf surface (as opposed to passive) and has proven to consistently generate yield responses even in the absence of any measurable deficiency.



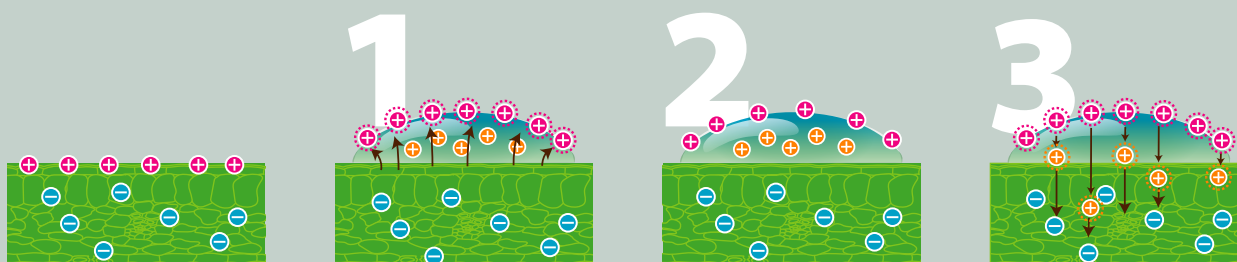
### 2 Helps biannual bearing tree crops

Carboplex will also solve a common challenge for tree crops called the alternate bearing syndrome as part of a programme.

Multi-N applied to the foliage after harvest causes the tree to store the extra nitrogen as carbohydrates over winter. Carboplex, applied when the leaves unfurl the next spring induces the tree to mobilise the stored carbohydrate as sugar, energising the tree and increasing blossom sites and potential yield.

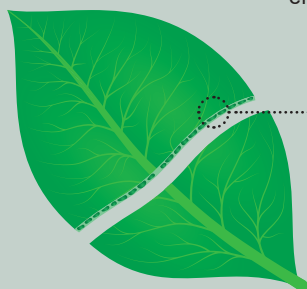
## 1. An active cation uptake system

The AMIX Complex creates an electrical gradient that moves the positive charge on the leaf surface to the top of the droplet, increasing the electrical potential difference. The positively charged metal ions in the product are repelled by the stronger ones at the top of the droplet and strongly attracted by the negative ones into the leaf.



## 2. A polysaccharide access route to the heart of the leaf

The AMIX Complex utilises the polysaccharide route into the leaf. This polysaccharide is found both in the beds which anchor the trichomes sited to protect areas where the phloem is loading and in striations in the leaf wax running through the surface into the epidermis.

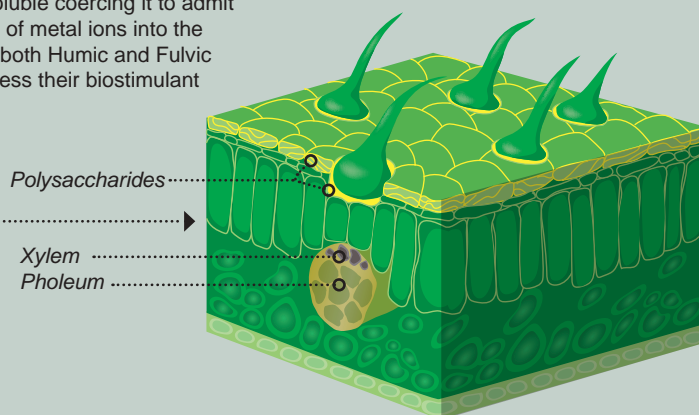


## 3. Using bio-mimicry to fool the plant

The AMIX Complex is formulated with natural Leonardite-derived Humic and Fulvic biostimulants, complexed with lignin salts in a unique way that does not compromise the solubility of the Humic content at lower pH's. The humic content therefore stays soluble coercing it to admit the AMIX solution of metal ions into the phloem. Allowing both Humic and Fulvic acids to fully express their biostimulant effect.

## 4. Active translocation and mobility

With the AMIX Complex, we obtain an optimal molecular weight, that optimises an efficient movement of the product into the phloem taking the elements to wherever the growth is taking place, even immobile elements like Manganese.



## 3 Improves flower number and quality, fruit size and number, earliness and colour development in fruit.

This unique combination and formulation of all biostimulant materials, accelerates flower and fruit development by short-circuiting some very energy-hungry processes.

The crop has more energy to produce flowers and this energy boost ultimately brings earlier harvest by providing the plant with metabolism boosters that accelerate the plants natural ripening processes.



*Crop: Lemon trees*

*Location: Spain*

*Growing conditions: Young trees (Year 1)*

- With 2 applications of 2.0 litres per ha leaf development dramatically increased and the young trees produced flowers!
- The flowers even developed into fruit allowing for a small harvest which had never been seen before



## How to use Carboplex?

|                                    |                                                                                                                 |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Almond &amp; Pistachio</b>      | 2.0 - 4.0 L/ha at 2 timings: early to mid-june and mid to late July.                                            |
| <b>Apple &amp; Pear</b>            | 1.0 L/ha at 2-4 timings: starting at petal fall and repeat at 7 to 10 day intervals.                            |
| <b>Melon &amp; Cucumber</b>        | 1.0 L/ha shortly after transplanting then repeat every 10 to 14 days up until harvest.                          |
| <b>Strawberry, Tomato, Peppers</b> | 1.0 L/ha when plants begin to blossom. Repeat at 7-10 day intervals during growing season.                      |
| <b>Beans, fresh/dry</b>            | 2.0 L/ha at sight of first bloom.                                                                               |
| <b>Oranges</b>                     | 2.0 L/ha when trees begin to bloom repeat after 10-14 days.                                                     |
| <b>Cotton</b>                      | 1.0 L/ha at pinhead square.                                                                                     |
| <b>Maize / Corn</b>                | 1.0 L/ha at 6-8 leaf stage.                                                                                     |
| <b>Rice</b>                        | 1.0 L/ha in 2 applications at 2-5 leaf stage and at panicle initiation.                                         |
| <b>Wheat &amp; Barley</b>          | 2.0 L/ha for winter varieties, at sign of first spring growth (GS 31), for spring varieties, at 2-5 leaf stage. |

