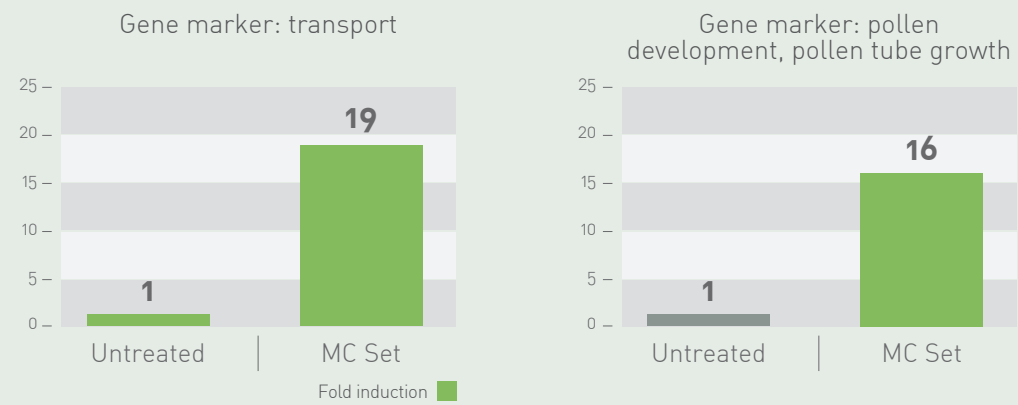



EXPERIMENTAL TRIALS

GENOMIC APPROACH "GENE CHIP ANALYSIS"

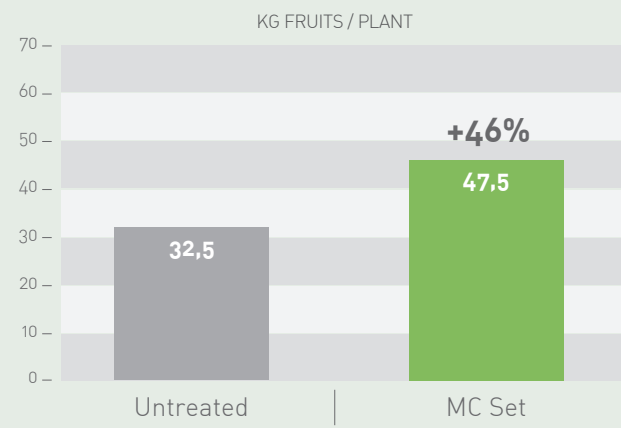
MC SET increased the activation of genes involved in the solutes transport, pollen development and pollen tube growth.
[according to TAIR description, www.arabidopsis.org]






 **CITRUS**
FRUIT SETTING
AND PRODUCTION

COUNTRY: Spain
LOCATION: Villamarchant
VARIETY: Ortanique

APPLICATION: 1 at flowering
SYSTEM: open field
RATE: 2 L/ha



DIRECTION FOR USE

 CROPS	 APPLICATION TIMING	 RATE
POME FRUITS	Beginning of flowering/ flowering , 2 applications every 7 days	1-2 L/ha 150-200 ml/hl
STONE FRUIT CROPS	Flowering, 2 applications every 5-7 days	1-2 L/ha 150-200 ml/hl
STRAWBERRY	Pre-flowering	1-2 L/ha
VEGETABLE CROPS	Pre-flowering/flowering, 2 applications every 7-10 days	1-2 L/ha
ROW CROPS	Flowering	1-2 L/ha

 **FOLIAR APPLICATION**

MC SET



Stimulates
flowering
and fruit setting



WHAT IS MC SET

MC SET is a biostimulant based on active phyto-ingredients extracted from *Ascophyllum nodosum* enriched with Boron and Zinc, specifically designed to stimulate and improve the processes of flowering and fruit setting. MC SET is the results of the specific and distinctive GEA 524 technology.

WE KNOW *Ascophyllum nodosum* LIKE NOBODY ELSE!

The wide knowledge of *Ascophyllum nodosum* is the result of the “Vertical Integration” that Valagro realizes with its Norwegian subsidiary Algea. In more than seventy-five year of experience on plant physiology, we have studied seaweeds in depth characterizing more than 95% of *Ascophyllum nodosum*.

THE PHENOLOGICAL PHASE OF FLOWERING AND FRUIT SETTING: what are the main limiting factors?

Fruit setting is the initial phase in the development of fruit following flowering. This process begins after the pollination of the flower or the fertilization of the egg cell and subsequent development of the seed. It is also a development phase subject to strict hormonal control. In species of agricultural interest, and in cultivated plants in general - especially those grown in greenhouses - **environmental factors** come into play that can have a negative effect on the success of the fruit setting.

Adverse external factors can actually cause problems such as **reduced formation of pollen, obstacles to pollination, difficulties of growth in the pollen tube** and **reduced fertilization**. From a purely physiological perspective, in all of these cases the hormonal levels necessary to achieve fruit setting are not reached, with subsequent **deterioration of the floral parts** and with negative repercussions in terms of production.



TOMATO

short day, cloudy weather, low light intensity

low pollen production, pistil elongation above the staminate cone

difficult pollination



GRAPEVINE

floral anomalies, adverse environmental conditions (e.g. rain)

lack of anthesis, bursting of the pollen tube

abnormal fertilization

MC SET: the solution to promote flowering and fruit setting

In unfavourable conditions such as those described, the use of specific formulas can have a positive effect during fruit setting and the delicate phonological phases connected to it, playing a key role in the formation and growth of the fruit.

MC SET is based on natural **active biomolecules** such as amino acids, betaines and other biologically active compounds which have a strong ability **to stimulate the physiological processes** underlying blooming and fruit setting. These substances are also capable to induce a “**hormone like activity**”, improving the **plant hormonal perception** and amplifying their action.

The action of MC SET has a **positive effect on fertilization** and is continued during the stages immediately following setting.



ACTIVE PHYTOINGREDIENTS AND USE FUNCTIONS:

BIOLOGICALLY ACTIVE INGREDIENTS

These substances perform a series of functions related to the control of **growth and development** by **modulating the physiological processes** of the plant. They can act as chemical messengers in inter-cellular communication and interact with specific proteins called receptors.

AMINO ACIDS

Represent the “building blocks of the proteins and are important in conditions of **abiotic stress**. Precursors of multiple active molecules.

BETAINES

They produce beneficial effects even in a very small quantity (as in SEs). Physiological role in the **response to stresses** (osmotic stress, drought, high temperatures, salinity etc.). Favour the **retention of water inside the cells**, protecting them against dehydration, enhance **leaf chlorophyll** content and **photosynthesis protection**.

MICRONUTRIENTS (B, Zn-EDTA)

Required in small amount by the plant, fundamental in influencing the **reproductive processes** as well as **several metabolic pathways**.

WHY CHOOSE MC SET

1 It is totally **safe and natural**

2 It maximizes plant’s performance and results thanks to the exclusive **GEA 524 technology**

3 **Not only B and Zn;** It contains 100% phytoingredients from *Ascophyllum nodosum*

Specific **product target** 4

Easy to use: **liquid formulation** 5

A step beyond 6



Valagro is a leader in the production and commercialization of biostimulants and specialty nutrients. Founded in 1980 and headquartered in Atesa (Italy), Valagro is committed to providing innovative and effective solutions for plant nutrition and care. Its mission is to increase the quantity and quality of plants and harvested crops while enhancing productivity and reducing the environmental impact of cultivations. Valagro uses science in the service of mankind to improve nutrition and quality of life while respecting the environment.



INNOVATION ACCORDING TO GEAPOWER

Use of Science to seize and exploit the potential of Nature with an eye to environmental sustainability:

This is the basic principle behind GeaPower, the unique technology platform developed by Valagro to transform potential active principles into high-quality nutrient solutions. A technology based on four pillars:



Deep knowledge of active ingredients and raw materials



Proprietary Extraction Processes



Advanced Screening and investigation technologies



Proven ability to provide effective solutions for customer’s specific requirements