

STIMOLO<sup>®</sup> MO



# REDUCES NITRATE ACCUMULATION IN CROPS



 STIMULATES ENZYMATIC ACTIVITY BY SPEEDING UP THE TRANSFORMATION OF NITRIC NITROGEN INTO ORGANIC COMPOSTS (amino acids and proteins - NITRATE REDUCTASE) IN PLANTS AND SYMBIOTIC NITROGEN FIXATION IN LEGUMINOUS PLANTS).
IDEAL FOR REDUCING THE NITRATE CONTENT OF ALL CROPS WITH A SHORT GROWING

STRENGTHS

- CYCLE IN WINTER (SALADS, SPINACH, SWISS CHARD, ETC.) • STIMULATES PLANT GROWTH AND QUICKLY AND EFFECTIVELY PREVENTS AND
- STIMULATES PLANT GROWTH AND QUICKLY AND EFFECTIVELY PREVENTS AN TREATS MOLYBDENUM DEFICIENCIES IN PARTICULARLY SENSITIVE CROPS





PACKAGE Bottles 1 L (20x1) Jerrycans 5 L (4x5)



# FEATURES

**STIMOLO MO** is a product specifically designed for **FHERSHCUT** crops and all crops that are clearly prone to **nitrate accumulation**.

STIMOLO MO is rich in low molecular weight amino acids to which MOLYBDENUM and ZINC are complexed.

The product penetrates quickly into the leaves, stimulating and increasing growth, speeding up the transformation of nitrate nitrogen into organic compounds (amino acids and proteins) and thus **significantly reducing the nitrate content at harvest.** The rapid supply of molybdenum promotes **NITRATE REDUCTASE**, even in situations of low temperatures and low light intensity **(short day)**.

COMPOSITION	arming
Total nitrogen (N)	5,0%
Organic nitrogen (N)	5,0%
Water-soluble molybdenum (M	o) 3,0%
Water-soluble zinc (Zn)	0,1%
Zinc (Zn) chelate EDTA	0,1%
Organic carbon (C)	15,0%
Total amino acids	33,0%
Free amino acids	6,0%

organia

### CHEMICAL-PHYSICAL PROPERTIES

Formulation: **liquid** pH [sol.1%]: **5.9 ± 1** Density: **1,240** Conductivity [1‰] mS/cm 18°: **0.23** 

# **DOSES AND METHODS OF USE**

# CROPS

Baby leaf, Fresh-cut vegetables (spinach, rocket, endive, valerian, lettuce, chard, onion, carrot, cabbage, cauliflower etc.) Aromatics Field vegetable crops (potato, carrot, melon, watermelon, courgette, strawberry, tomato, garlic, onion, leek ... etc.)

Industrial crops (soybean, green bean, pea, rapeseed, alfalfa)

Fruit crops: Citrus, Olive, Pome fruit, Stone fruit, Kiwi. Vine

Flower and ornamental crops Turf

CROPS All crops 250-300 ml/hl Interventions every 8-12 days from the

FOLIAR APPLICATION

4-leaf stage onwards 300 ml/hl

Regularly every 10-15 days.

300 ml/hl Regularly every 10-15 days.

200-300 ml/hl Regularly every 10-15 days.

200 ml/hl Regularly every 8-12 days.

# FERTIGATION

10-15 l/ha; repeated applications at pre-flowering, post-set and fruit filling

STIMOLO MO can be combined with all biostimulants for root application and fertigation.

#### ...PIÙ INFORMAZIONI ....MÁS INFORMACIÓN! ... MORE INFORMATION!

# WHAT ARE NITRATES

Nitrates are chemicals that are widespread in the environment and can accumulate in vegetables and water due to excessive fertiliser use or reduced metabolism due to poor light (short day in winter). Nitrates are nitrogen compounds; in their chemical formula they contain nitrogen (N) and oxygen (0).

#### WHAT NITRATES ARE USED FOR

Nitrates are indispensable elements for plant life. They nourish plants, which are able to metabolise them, making them valuable elements for their growth and development.

# NITRITES AND NITROSAMINES

Nitrates (NO<sub>3</sub>), once assimilated by the body, are reduced to nitrites (NO<sub>2</sub>), which react in an acidic N - H + HO - N = Oguamines and ureas to form nitrosamines. MUTAGEN AND CARCINOGENIC SUBSTANCES



# WATER POLLUTION BY NITRATES

Contamination of groundwater by nitrogen is mainly due to several factors:

• runoff from agricultural areas treated with nitrogen fertilisers; • disposal of livestock manure; • losses from landfills; discharges of urban and/or industrial waste water. In addition [water pollution has been promoted by intensive agricultural roduction methods, which have led to increased use of chemical fertilisers.

#### NITRATE CONTENT IN VEGETABLES

The amount of nitrate in plant tissue also depends on:

• species: 1 legumes generally do not accumulate nitrate, while wheat, grasses, flax, sorghum, barley, oats and rye have more problems of accumulation; • growth stage: nitrate concentrations are usually higher in young plants than in mature ones;

• plant parts: the parts closest to the soil contain the highest concentrations of nitrate.

• nitrogenous fertilisation, irrigation with water high in nitrates

# CLASSIFICATION OF VEGETABLES ACCORDING TO NITRATE CONTENT

(mg/kg of fresh product) Santamaria 1997

NO3	
Very low <200:	garlic, asparagus, yam, artichoke, watermelon, green bean.
Low (200-500):	carrot, cauliflower, broccoli, spring onions, pumpkin and courgette.
Medium (500-1000):	cabbage, Savoy cabbage, turnip greens.
High (1000-2500):	kohlrabi, leaf chicory, fennel, endive, leek, parsley, rhubarb, escarole, celeriac.
Very high (>2500):	chard, garden chard, chervil, lettuce, radish, rocket, celery, spinach, lamb's lettuce.

