

Profitability
Fertility of soil
Optimised use of effluents
Methanation

SOBAC SOLUTIONS

Marcel Mézy[®] Technologies

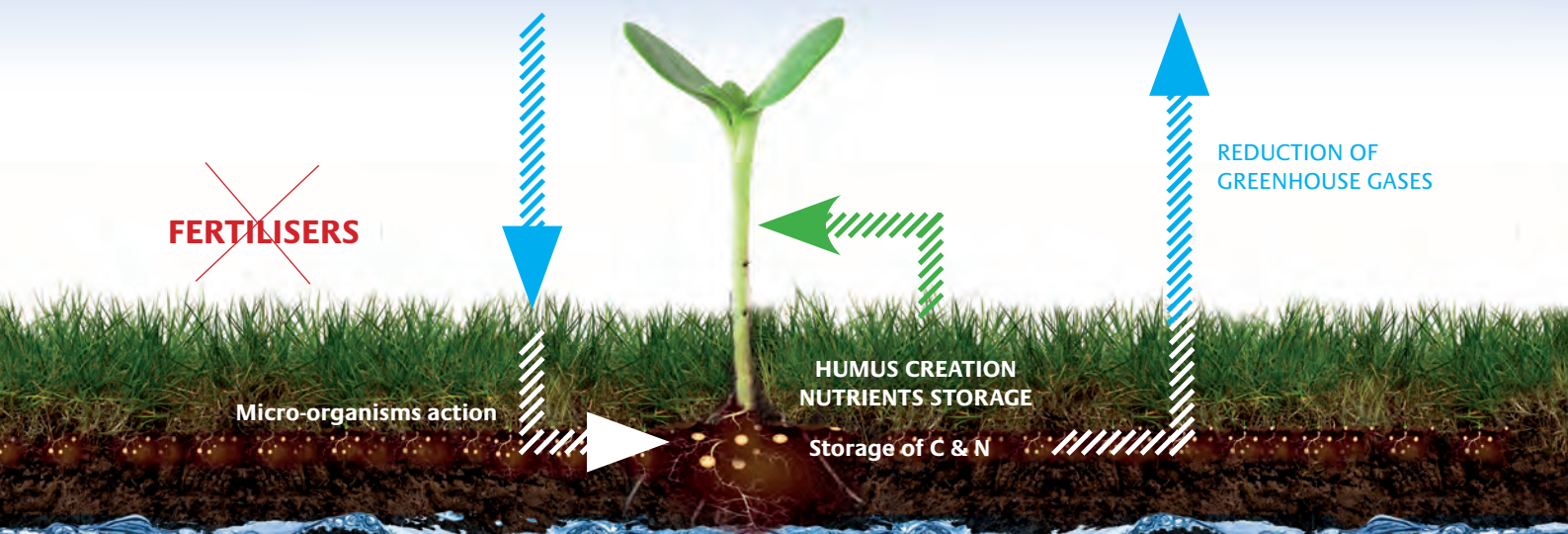
BACTÉRIOSOL[®] / BACTÉRIOLIT[®]

BACTÉRIOMÉTHA[®] / QUATERNA[®] PLANT



HUMUS FOR LIFE

SOBAC
For the soil, for a long time.



SOIL FERTILITY & PROFITABILITY

BACTÉRIOSOL®

BACTÉRIOSOL® - BACTÉRIOSOL® CONCENTRÉ - BACTÉRIOSOL® UAB* - BACTÉRIOSOL® CONCENTRÉ UAB*
SUITABLE FOR ORGANIC FARMING

**For the quick creation of humus in all types of soil,
enabling the development of fertility whilst reducing inputs and trapping carbon**

BACTÉRIOSOL® is based around the action of certain spontaneous micro-organisms from Marcel Mézy® technologies. These technologies recycle mineral elements that are not assimilated by plants and quickly increase the humus content of the soil. It boosts the fertility of the soil by enabling it to release its natural nutritional potential and to give back all those elements essential to the healthy growth of plants. Bactériosol® allows a significant reduction of inputs and helps optimise profits, thereby helping to increase autonomy and profitability. This unique technology protects "the living" and acts for the health and life of that soil.

It structures and balances the soil, makes it less compact, increases its porosity, regulates its pH levels and creates a favourable environment for plants to grow. It therefore boosts the relationship between the soil and the plant, which can be seen in the improvement of the nutritional quality of your crop and animal produce. Marcel Mézy® technologies are carbon traps, and were presented by ADEME at the Paris 2015 COP21 as agricultural solutions to global warming. They were also selected by the "4 FOR 1000" initiative launched by the Ministry of Agriculture.

**Convincing results for the quality
of your produce that
increase the autonomy of your farm**



AGRONOMY

The creation of humus improves soil structure and fertility. This has numerous advantages :

- Optimised management of fertilization
- Nutritional qualities of your produce
- Improved resistance to hydric stress and disease
- Better rooting

FINANCE - INCOME

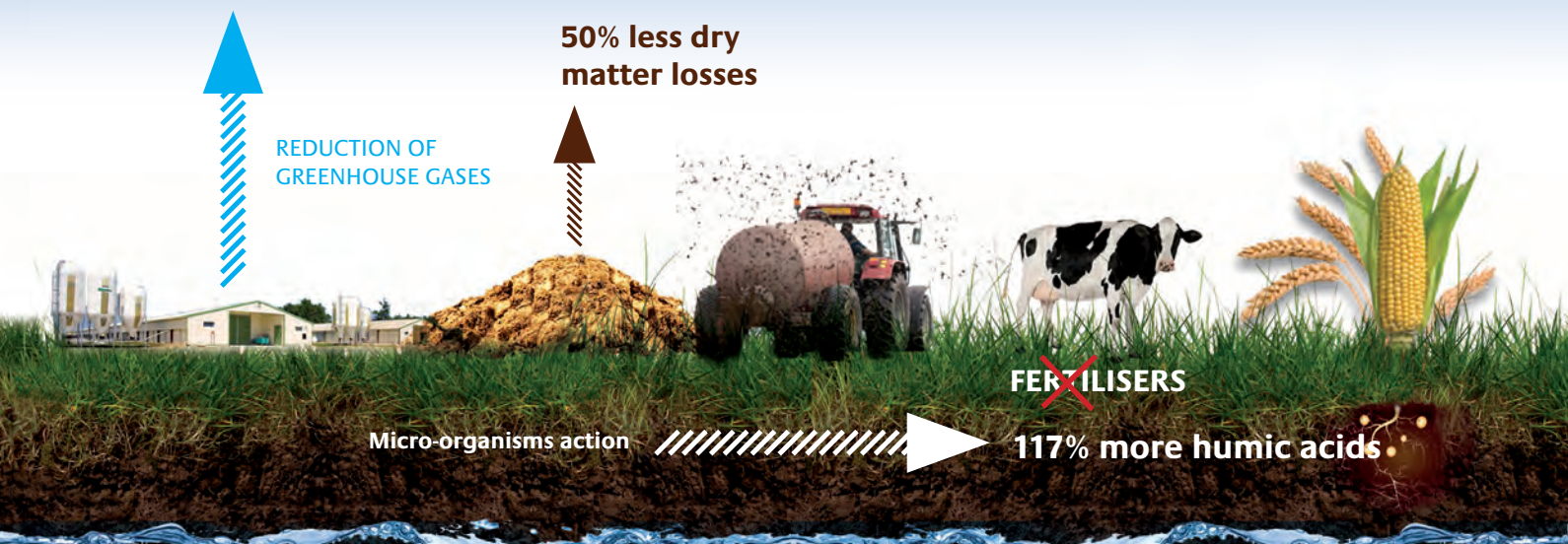
- Improved profit-hectare ratio
- Improved profit-LSU ratio

PROFITABILITY - AUTONOMY

- Replaces all mineral and organic fertilization
- Reduces phytosanitary products
- Optimises yield and quality

ENVIRONMENT

- Effective fulfilment of new agro-environmental standards.
- Reduces pollutants
- Reduces leaching of soluble elements, including nitrates



OPTIMISED USE OF EFFLUENTS & PROFITABILITY

BACTÉRIOLIT®

BACTÉRIOLIT® - BACTÉRIOLIT® CONCENTRÉ

SUITABLE FOR ORGANIC FARMING

To quickly transform manure and slurry into humus

For high-quality composted manure without

any need for mechanical operation and with a better C/N and N/P ratio

It structures and balances the soil, makes it less compact, increases its porosity, regulates its pH levels and creates a favourable environment for plants to grow. It therefore boosts the relationship between the soil and the plant, which can be seen in the improvement of the nutritional quality of your crop and animal produce. Marcel Mézy® technologies are carbon traps.

Effective in reducing CO₂ and nitrogen emissions, BACTÉRIOLIT® technology was presented by ADEME at the Paris 2015 COP21 as an agricultural solution to global warming. It was also selected by the "4 FOR 1000" initiative launched by the Ministry of Agriculture.

In 2013, this technology was recognised by "La France Agricole" and "L'Éleveur Laitier", receiving the "Inel d'Or" award for its work in sustainable development, transforming manure into agronomic-quality composts all the while reducing odours.

**Performance proven
through results of experiments
conducted in partnership
with official organisations
and livestock farmers**



AGRONOMY

- Enriches manure, slurry and digestates
- Creates humic acids
- Reorganises mineral elements contained in organic matter
- Facilitates spreading of manure
- Prevents formation of crusts and deposits in pits
- Better return to plants
- Optimises nitrogen management
- Improves the structure of soil
- Grass palatability guaranteed
- Better resistance of plants to hydric stress
- Reorganises nitrogen in livestock effluents into organic nitrogen

FINANCE - INCOME

- Improves overall profitability of farming operations

PROFITABILITY - AUTONOMY

- Replaces fertilisers and soil amendments
- Benefits the health of animals and significantly reduces veterinarian fees
- Increases autonomous production of both milk and meat

ENVIRONMENT

- Less leaching and losses through gas emanation
- Improves the atmosphere in livestock buildings : fewer ammoniacal nitrogen emissions and fewer odours
- Fewer gas emissions during storage and after spreading



LOCALISED FERTILISATION

BACTÉRIOSOL® BOOSTER

SUITABLE FOR ORGANIC FARMING

Localised action close to the seed for optimal crop quality

Thanks to spontaneous micro-organisms from Marcel Mézy® technologies, particularly fungi and bacteria, BACTÉRIOSOL® BOOSTER improves the physical, chemical or biological properties of the rhizosphere, beneficial for :

- soil-plant exchange
- development of roots
- micro-organisms like mycorrhizal fungi
- rhizospheric humus close to the seed.

Plants can fulfil their potential in terms of both yield and quality. They have a stronger resistance to external threats and are able to better benefit from the water and soil around them whilst being more economical in terms of inputs.

The action of BACTÉRIOSOL® Booster is localised to the rhizosphere while BACTÉRIOLIT® or BACTÉRIOSOL® take action on the soil when applied in full.

AGRONOMY

- Develops mycorrhizal exchanges
- Increases rooting
- Better resistance to external threats and diseases
- Homogeneity of crops

PROFITABILITY - AUTONOMY

- Optimises yield and quality
- Replaces starter fertilisers
- Helps increase profit margins

ENVIRONNEMENT

- Fewer inputs required
- Water savings

CROP SUPPORT

QUATERNA® Plant

SUITABLE FOR ORGANIC FARMING

A tool for successful crops for your plantations and complantations
(vines, trees, shrubs and market gardening plants)

Quaterna® Plant is a crop support used as a culture medium for certain plants. Its action helps create an environment with a porosity in air and water that boosts the development of roots and contact with nutritional solutions in the rhizosphere. It optimises exchanges between the soil and plants or trees, as well as the development of roots, hydric and mineral absorption and resistance to stress.

QUATERNA® Plant enables better regrowth of plants in new plantations and complantations.

The growth of plants is optimised thanks to better access to minerals and water.

AGRONOMY

- Develops mycorrhizal exchanges
- Better regrowth and sustainability of plants
- Root development
- Resistance to stress

PROFITABILITY - AUTONOMY

- Sustainability of plantations
- Quicker start of production

ENVIRONNEMENT

- Fewer inputs required
- Water savings



METHANATION

BACTÉRIOMÉTHA®

BACTÉRIOMÉTHA® - BACTÉRIOMÉTHA® TL (TOUT LIQUIDE)

**Optimising methane production
and improving the digestion process**

Bactériométha® is an additive for methanation substrates containing natural minerals and a selection of natural plants composted with spontaneous micro-organisms from Marcel Mézy® technologies. It acts throughout the different stages of the transformation process of the organic matter and in accordance with different modes of action to improve the production of energy.

Bactériométha® combined with substrates enables better accessibility for organic matter during the initial phases of methanation. It also enables a significant reduction in manure and liquid waste and during storage of substrates in pits or on concrete. It also boosts the release, stabilisation and balance of the digestion process.

PROFITABILITY – AUTONOMY

- Increases energy production
 - Better transformation of organic matter thanks to a better preparation of fibers
 - Improved fermentation process in digester
 - Possible savings in raw materials
- Less energy consumed, less wear
 - Reduction of floating layers
 - Improved mixing
 - Fibrous substrates easier to handle

ENVIRONMENT: FEWER ODOURS

- Reduction of leaching and odours prior to methanation

PARTNERSHIP

SEEDS*

IN ASSOCIATION WITH SOBAC TECHNOLOGIES

**A solid partnership.
One more step towards autonomy**

SOBAC has always worked with farmers to find production methods that help reduce chemical inputs for cleaner, more autonomous agriculture and better health whilst remaining compatible with farmers' financial needs and consumers' expectations, particularly when it comes to the nutritional quality of their farm produce.

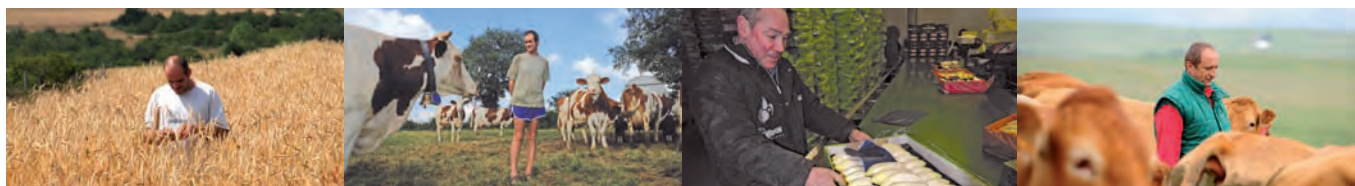
This is why SOBAC will be combining Marcel Mézy® technologies with a range of grass mixes to enable the production of high-quality fodder suited to different soil types and climates. A range of plant covers is also available, one more step towards autonomy.

* Organic range also available



SOBAC SOLUTIONS

Marcel Mézy® Technologies



30 years of know-how with trial results* certified by numerous scientific and institutional partners

AGROPARISTECH :

- Financial survey on farm incomes for beef cattle and dairy cattle in Limousin and Brittany
- Enrichment of manure (more N and dry matter)

INRA :

- Comprehensive study on beef cattle breeding and polyculture of the Nièvre region
- Manure dry matter losses halved

ITAVI (Technical Institute of Poultry Farming) :

- Nitrogen waste in air reduced by 82%
- Organic nitrogen in manure increased by 39%

LARA EUROPE ANALYSES :

- 117% more humic acids
- Reduced nitrogen wastage and water pollution

AGRA-OST GOE : Centre for Research and Experimental Agronomy of Eastern Belgium

- Preservation of organic and mineral elements in the soil during winter
- Improving the productivity and quality of grasslands

*Results available at www.sobac.fr



Our company has a long-term commitment to sustainable development, an history marked with numerous awards

In 1998, SOBAC was already the only ecosystem for farming and plants to feature in the ADEME* guide. Seventeen years later, along with Mezagri**, it will once again be the only company within the agricultural sector to be presented by ADEME* at the COP21 2015 in Paris as a solution to global warming.

Since then, we have received numerous environmental, agricultural and financial awards both regionally and nationally.

*A French Agency for the Environment and Energy Management guide «Product design and the environment, 90 examples of eco-design»

** Marcel Mézy® technologies are developed by Mezagri

2005: Selected as LEAD FIRM for the implementation of the Sustainable Development Standard (in partnership with AFNOR, the French industrial standards authority, and the Midi-Pyrénées Chamber of Industry and Commerce) - **2006 :** the "Environnement & Entreprise" award - **2006 :** Sustainable Development Grant (2 contests organised by the General Council of Aveyron) Acquisition of Standards ISO 9001 and 14001 for the Futuragri production plant - **2009 :** Bactériolite® selected for the "Grand Trophée d'Or Écoproduit" (the Eco-product Award)* - **2011:** Bactériolite® selected for the Trophée Coup De Coeur du Jury (the jury's choice award)** - **2012 :** SOBAC wins major sustainable development prize (prize awarded on Monday 17 December 2012 during the 4th edition of the "Grands Prix de l'Economie" organised by the financial magazine Objectif News) - **2013 :** SOBAC wins the national "Green Business" award* (prize awarded 21 October 2013 in Paris by L'Express and Ernst & Young during the 2013 Entrepreneur of the Year Award) - 2013: SOBAC receives an "Inel d'Or" from "La France Agricole" (prize awarded to SOBAC for Bactériolite® for the social category on 9th September 2013 in Rennes by La France Agricole and L'Éleveur Laitier) - **2015 :** SOBAC wins the Sustainable Development Prize (prize awarded on 23rd November 2015 in Rodez by the Aveyron Chamber of Commerce and Industry).

**Annual challenge organised by press group J under the patronage of the Ministry of Ecology, Energy and Sustainable and Oceanic Development,

60 dossiers examined in May 2009 by a jury of 24 sustainable development professionals.

40 dossier examined in May 2011 by a jury of 29 sustainable development professionals.

** Compost activator Bactériolite® by SOBAC, 2011 Coup de coeur Eco Produit (eco-product) award in the category of garden products (soil and soil enrichment products).

