

# Hit the gas, now!

INNOVATIONS FOR BIOGAS PLANTS



Additives for a  
noticeably better  
energy output.



**DR. ECKEL**  
creative solutions

# Anta<sup>Sil</sup> BG

**Acts naturally:**

The biological silage additive for co-substrate production.



## What is Anta<sup>Sil</sup> BG?

Anta<sup>Sil</sup> BG is a biological silage additive. It contains specifically selected lactic acid bacteria which improve the quality of the co-substrate.

## How does Anta<sup>Sil</sup> BG work?

Main component of Anta<sup>Sil</sup> BG is the heterofermentative lactic acid bacterium *Lactobacillus buchneri*. Apart from lactic acid it also produces acetic acid and thereby improves the aerobic stability of the co-substrate, which is used for the biogas plant. The result: energy losses of the co-substrates are minimised and the gas yield in the fermentation reactor is increased lastingly. In addition more acetic acid is provided for methane formation, which further enhances the biogas yield.

## What does Anta<sup>Sil</sup> BG achieve?

The results are convincing: by adding Anta<sup>Sil</sup> BG, the quality of your co-substrates is improved. A higher methane yield is the result.

# Good grades for your biogas!

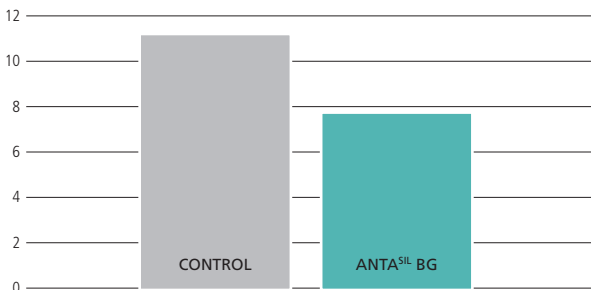
More than thousand words: the facts.

The test results impressively demonstrate the effectiveness of Anta<sup>Sil</sup> BG and Anta<sup>Ferm</sup> BG.



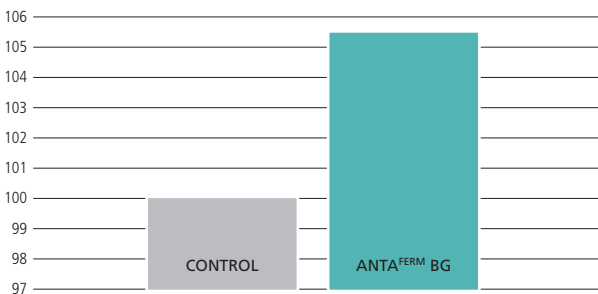
*Influence of Anta<sup>Sil</sup> BG on the dry matter losses of maize silage.*

Dry matter losses (in %)



*Influence of Anta<sup>Ferm</sup> BG on the methane yield.*

Methane production (Control = 100%)



# Anta<sup>Ferm</sup> BG

A product with impact: active micro organisms, specific blends of activated yeast extracts and substrates as well as minerals improve the fermentation process in the biogas plant.



## What is Anta<sup>Ferm</sup> BG?

Anta<sup>Ferm</sup> BG is an optimised fermentation aid for biogas production. A combination of selected active micro-organisms and a specific blend of activated yeast extracts, which are rounded off by characteristic substrates and minerals account for the effect of Anta<sup>Ferm</sup> BG.

## How does Anta<sup>Ferm</sup> BG work?

The fermentation aid Anta<sup>Ferm</sup> BG owes its impact to the synergistic effect of different complex components. The activity of the contained micro organisms, for example, optimises the environment in the biogas fermenter. At the same time the high enzyme activity of Anta<sup>Ferm</sup> BG breaks down the used substrates and releases important nutrients for the microbes. This mechanism is supplemented by specifically combined salts of acetic acid, which is an essential precursor of methane production and therefore particularly valuable for biogas production.

## What does Anta<sup>Ferm</sup> BG achieve?

With the application of Anta<sup>Ferm</sup> BG you increase the efficiency of the fermentation process. The proven result: a better utilisation of the substrate, a higher methane yield.

# More gas, more power.

Hit the gas, now!



## With the new biogas products of Dr. Eckel.

Breaking new grounds is part of our philosophy. Therefore we focus on the development of innovative products in close co-operation with international research institutes. The results are most valuable for our customers: The new biogas production additives by Dr. Eckel - **Anta<sup>Sil</sup> BG** and **Anta<sup>Ferm</sup> BG** - optimise the effectiveness of your biogas plants.

We emphasise two objectives: First, **Anta<sup>Sil</sup> BG** optimises the quality of the co-substrate, building the base for a good yield of the fermentation process. In the second step **Anta<sup>Ferm</sup> BG** improves the fermentation process itself in the reactor.

Owing to our know-how from industrial fermentation processes, we succeeded in increasing the economy of biogas plants considerably. Consult our experts for details.

**Use our drive. For your success.**

# We have understood.

We are driven by the requirements of your business.



Experience the success of our new, intelligent additives for biogas production and the outstanding know-how of our committed, service-oriented team. With our highly trained specialists you have professionals at your side.

Inform yourself about our novelties and make use of our potential!

We look forward to hearing from you and will gladly advise you!



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