

Natural Concept

Biology at heart
of sustainable development

LES 5 KEYS
of the «NATURAL
CONCEPT»



FAVOR
robustness and
feed efficiency



PREVENT
disease
risks



STIMULATE
the immune
system



USE
the chemical only
in case of proven
pathology



TO GIVE BACK
to the earth the
necessary nutrients

Edito



Frédéric GRIMAUD
CEO of
Groupe Grimaud

It's already been 4 years since we laid the foundations for "Natural Concept".

First we had to overcome some internal resistance of the "why are we going in this direction, when nobody was really asking us to? And in any case, it'll never work..." type.

When we talk about strength in the world of research as a criterion for natural selection, people said you couldn't measure it scientifically. Anyway...

I can still see the cautious looks of the first people we presented the "managed bacterial ecology" concept to. How could we change the paradigm that considered all environmental bacteria to be a potential danger, into a reasoned approach where some could become our allies?

In fact, why not become pro-active and try to modify certain entrenched reflexes? Hasn't the time come to put molecules as precious as antibiotics to proper use, only prescribing them for proven bacterial disease rather than dishing them out systematically at the first sign of a cough? Just in case...

Of course, we have no intention of completely turning upside down all the ways we use them in our professions, but simply to try to move forward together to better, more sustainable practices more effective to as many as possible.

That is the ambition of Natural Concept.

■ Ducks watered on well or lake water

"In total, we use nearly 1000 cubic metres of water a week!" This is what led our team at the Roussay site (in France) to rethink the water-management system and to invest in a ready-to-use clean water treatment plant developed by SME Opuntias. It is an intelligent and autonomous water recycling management system, specifically adapted to meet the operational requirements of agricultural businesses.

Frédéric Bomard, hatchery maintenance manager at Grimaud Frères Sélection, was involved in piloting the project. "Part of what we use comes from well water, another from the mains supply and a third part from a lake located on site. The aim of our scheme is to maximise well-water use, optimise lake-water in addition, for watering the animals and cleaning the buildings, so that we can eventually stop using mains water".

Results: since the plant began operating, the ducks raised on the site no longer drink any mains water, as this has been replaced by ultra-violet treated lake water; a filtration and UV treatment process guaranteeing constant water quality.

"Using clean water reduces the risks of infection, reduces antibiotic consumption on farms and significantly improves animal digestion as well as consumption levels", adds Jean-Paul Augereau, Chairman of Opuntias.

According to our calculations, the plant uses 342 euros of electricity a year. "That's a drop in the ocean compared to the energy savings that can be made over a year, thanks to the plant," says Frédéric Bomard. Backed by calculations and figures, the plant should permit savings of 15,000 euros per year in water, including the electricity.

Frédéric Bomard adds: "This investment is part of an overall scheme to lower energy costs at our La Corbière site. We've looked at other ideas at the same time, the plan being to discover new ways to enable us to reduce our energy consumption further still".





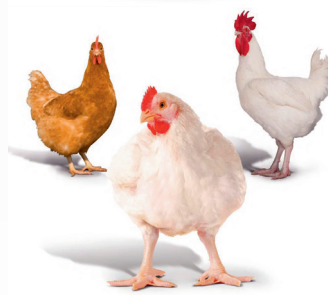
■ The leader of Dutch supermarkets launches «the Chicken of Tomorrow»

It was big news at the VIV Europe international trade show on 20th May this year in Utrecht (NL). The previous day, the Albert Heijn group, the leading Dutch supermarket chain, had launched the "chicken of tomorrow". A chicken with improved welfare and an ADG not exceeding 50 grammes.

Bred for a slower (differentiated) rate of growth, it is raised in greater space whilst still being acceptably priced for consumers. The standard newly applied for this chicken also promises strict controls in terms of antibiotic use.

The first fresh cuts of this "chicken of tomorrow" raised in more welfare-conscious conditions, were initially supplied by the Plukon Group, one of the leading poultry slaughter businesses in the Netherlands.

The genetic solution selected by the Plukon Group to meet this new standard was supplied by Hubbard, in this case chicken JA 987 whose mother was JA 87 from a "differentiated growth" line and the father was standard male M 99.



Paul van Boekholt, in charge of Northern Europe for Hubbard reports: "With this chicken whose cumulated ADG was less than 50g at 46 days, the target average weight is 2.275 kg at the same age, with a growth index of around 1.83". The selector adds that this cross-breed is also popular for its particularly competitive breast meat yield.

He also pointed out the low mortality rate noted with this type of rustic cross in rearing. This is an observation appreciated by consumers' associations in the Netherlands reacting against animal breeding that relies too heavily on veterinary products. The Plukon Group's choice resulted, according to Paul van Boekholt, from field tests performed by the slaughterhouse and Hubbard, which has over 45 years' experience in the selection and sale of alternative, slow

or differentiated-growth chickens. These advantages are not just reflected in better tasting chicken, but also better animal welfare and economic results for hatchery operators, breeders and slaughterhouse.

■ Gaec Gesrel moves to verrat P 88



Verrat P 88 is positioned within a context of de-medication, in accordance with "Natural Concept".

Since January 2013, pigs sold by Gaec Gesrel have been reared with verrat P 88. "I had a favourable impression straight away, watching the piglets in the farrowing house, they looked livelier, and the same in transition, post weaning. They were resistant to the diarrhoea that had previously affected the farm", says Antoine Gesrel, manager of the farm. Results for growth performance and carcass quality still needed to be seen. "Added value was slightly higher on these batches, with similar growth". Thus the change in male genetics was approved two years ago.

For over a year, the feed manufactured on the farm (Faf intégrale), has been completely free from antibiotics at the time of weaning. "Transition between 1st and 2nd age feeds is a little longer", the breeder concedes. "Verrat P 88 is selected not only for its growth and carcass performance but also its resistance to Coli K88. Only homozygous animals are sold, which cannot transmit the susceptible allele to their descendants, explains genetics advisor Arnaud Guérin. "We have also recorded an increase in speed of growth, which was already pretty good", continues Antoine Gesrel. The pigs leave more quickly. Hot carcass weight, currently 94 kilos on average, has increased without losing G3 (13.8). The proportion of lean is 61.2 on average, between castrated males and females. The ceiling for fattening is set at 2.45 kilos of feed, alongside correctly observed biosafety rules, starting with stall-density. Technical added value, previously close to 14 centimes per kilo of carcass, has risen since the change of male genetics to 15.5 centimes.

■ A new generation of barrier flora

Antibiotic resistance, acquired by pathogenic bacteria after antibiotic treatment is a priority concern for health authorities in Europe and worldwide for the protection of both animals and man.

The specifications that Filavie set itself for its Filafloor range was a major challenge but also a measure of its effectiveness:

- Provide a broad spectrum of activity through a cocktail of 12 "good" bacteria: 8 Bacillus and 4 lactic acid bacteria, working in harmony to fight Salmonella, Colibacillus and Clostridia among others;
- Guaranteed high content in every strain, through separate production in specific locations and in rich liquid form that ensures good conservation when refrigerated (18 months), especially for the lactic acid bacteria in highly fragile vegetative form (absence of spores) ;
- Easy application through animal drinking water (Filactis liquid) or as an environmental spray (Filafilm) using flexible and economical programmes.

The results speak for themselves and there are many – mainly poultry – farms that no longer use any antibiotics, whilst maintaining first rate breeding results.