GRANDER®
REVITALIZED WATER



GRANDER® FARMING JOURNAL

A different approach to one of farming's most important resources: **water**.
Exploring applications in farming and agriculture.

GRANDER® Water UK farming.granderwater.co.uk



THE WATER FACTOR

IS YOUR FARM GETTING EVERYTHING IT COULD FROM ITS WATER?

You measure feed, production, growth and costs. But have you ever measured the difference your water could make?

THE QUESTION NOBODY IS ASKING

Modern farming is an exercise in precision.

Feed is carefully formulated. Genetics are selected for performance. Housing, lighting, temperature and ventilation are monitored. Every percentage point matters, and even small improvements can make a substantial difference to profitability.



Yet one of the most important inputs on the farm is often taken for granted - **Water**.

Every bird drinks it. Every animal depends on it. Every crop needs it. And every day, thousands of litres move through farm tanks, pipes, troughs and drinking systems.

Farmers invest heavily in ensuring that water is clean, safe and available.

But once those requirements are satisfied, how often is the water itself investigated as a potential performance variable?

What if water that meets every conventional quality requirement still has untapped potential?

Not because it is unsafe. Not because it needs another chemical treatment.

But because there may be more to water management than simply delivering the required quantity at an acceptable quality.

It's a question worth asking, particularly when the smallest differences in farm performance can have significant commercial consequences.

THE OPPORTUNITY HIDING IN PLAIN SIGHT

What if a small change to water could make a measurable difference to your bottom line?

Consider the questions farmers already ask every day.

Could we produce more saleable eggs?
Improve egg grading or shell strength?
Achieve better feed conversion?
Reduce mortality?
Improve growth rates?
Reduce deposits and maintenance in drinking-water systems?

These are not small questions.

Across thousands of birds, a modest improvement in any one of these areas can have meaningful financial consequences. Improvements across several areas could be even more valuable.

Yet water is rarely the first place farmers look for those opportunities.

GRANDER® water revitalisation challenges that assumption.

It offers a passive approach to water treatment that can be incorporated into suitable existing farm water systems, without chemical dosing, electrical power or complex ongoing maintenance.

The important question is not simply what the technology does to water.

It's what difference, if any, that change makes to the farm.

And that difference can be investigated using the performance measurements farmers already understand.

Egg numbers. Egg grading. Bird weight. Feed conversion. Mortality. Water-system condition.

FROM QUESTION TO COMMERCIAL EVIDENCE

At Nafferton Wold Farms in East Yorkshire, this question became something much more than a theory.

A commercial comparison was established involving approximately 32,000 laying hens, divided into two groups supplied from the same borehole.

One group received GRANDER®-revitalised water.

The other received untreated Control water.

The feed, lighting and management conditions were comparable.

One flock. Two water systems. One important question.

Would the difference in drinking water be reflected in measurable flock performance?





IT STARTED WITH A PROBLEM

32,000 HENS. ONE FLOCK. TWO WATER SYSTEMS. ONE IMPORTANT QUESTION.

Could changing the way drinking water is treated influence the performance of a commercial laying flock?

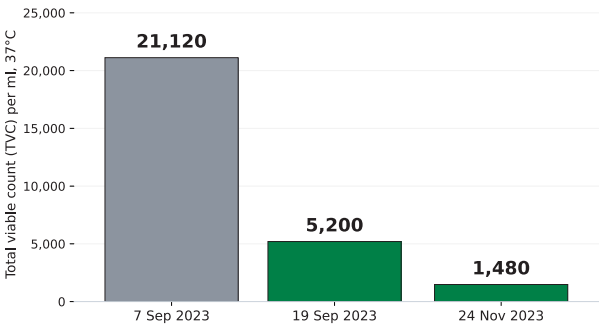
At Nafferton Wold Farms in East Yorkshire, the GRANDER® story began in 2023 with a challenge that even experienced commercial poultry producers can encounter.

Despite years of farming experience and established management practices, the farm was facing persistent concerns involving drinking-water quality, bird behaviour and flock condition.

Water analysis had identified substantial bacterial contamination, including Pseudomonas, Staphylococcus aureus, coliforms and E. coli. Within the poultry housing, there were concerns about feather pecking, restless birds, mortality and unpleasant odours.

BACTERIAL COUNT IN DRINKING WATER

Nafferton Wold Farms | Historical sampling at one drinking-line location



Source: Nafferton Wold Farms, 2023. Historical observations; not a disinfection claim.

These were not simply inconvenient problems.

In a commercial flock of 32,000 laying hens, persistent welfare and water-quality concerns can have far-reaching consequences.

Higher mortality means lost productive birds. Poor flock condition can affect laying performance and egg quality. Additional cleaning, monitoring and intervention increase the demands on farm management. And where problems persist, the implications extend beyond immediate costs to animal welfare, flock consistency and the long-term performance of the business.

For an experienced farmer, these are concerns that cannot simply be ignored.

The farm had already explored conventional approaches to managing the water-quality problem, but the results had not provided a satisfactory long-term solution.

Something different was needed.

In 2023, two GRANDER® double-cylinder revitalisation units were installed in a 10,000-litre water tank supplying approximately 32,000 free-range laying hens.

Within 11 days, water samples showed substantial reductions in bacterial counts at several drinking-line locations. The farmer also reported calmer birds, reduced pecking, improved housing air quality and greater willingness among the hens to range outside.

But perhaps the most compelling observation wasn't in the laboratory results.

It was what the farmer noticed when he walked between his poultry houses.

The GRANDER®-equipped barn appeared different. The birds looked healthier, the atmosphere was more pleasant and their behaviour seemed calmer than in the untreated barns.

Different flocks and other management factors could have contributed to these observations. Nevertheless, the experience was sufficiently encouraging for the farmer to make another commercial decision.

He invested in GRANDER® for a second 32,000-hen barn.

FROM EXPERIENCE TO EVIDENCE

The farmer was now seeing differences within his own business.

He also had an important question.

Were the apparent improvements connected with GRANDER®, or was he simply seeing differences between flocks?

When the next poultry barn was developed, the opportunity arose to investigate that question more directly.

This became the farm's third GRANDER investment, but this time the installation was deliberately arranged to allow a side-by-side commercial comparison.

Approximately 32,000 hens from the same flock were divided into two groups of around 16,000 birds.

Both groups received the same feed and lighting programme, with comparable housing and management conditions.

Both received water from the same borehole.

Only the water treatment arrangement was deliberately different.

GRANDER: A dedicated 10,000-litre tank containing two GRANDER double-cylinder revitalisation units.

CONTROL: A separate 10,000-litre tank supplying the same borehole water without GRANDER revitalisation.

The farm could now examine egg production, grading, shell strength, bird weight and flock performance under everyday commercial conditions.

Why go to this trouble?

Because across 16,000 hens, even a small difference in productivity or saleable egg quality can have substantial financial consequences.

And if the results were meaningful, the implications could extend far beyond one poultry house.

ONE FLOCK. ONE WATER SOURCE. TWO DIFFERENT WATER SYSTEMS.

Was the farmer seeing the effect of water revitalisation, or simply the natural variation between flocks?

The next two pages examine what the commercial records revealed.

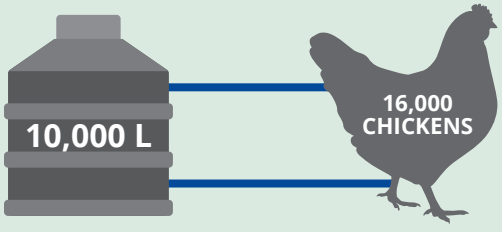
COMMON BOREHOLE WATER

GRANDER®



Borehole water held in a dedicated 10,000-litre tank fitted with two GRANDER® double-cylinder revitalisation units before being supplied to the birds.

CONTROL



The same borehole water supplied through a separate 10,000-litre tank, without GRANDER® revitalisation.



THE RESULTS:
WHEN SMALL DIFFERENCES BECOME BIG QUESTIONS

At Nafferton Wold Farms, the comparison moved beyond impressions of healthier birds. The farm's production records revealed differences with real commercial significance.

WHAT DID THE BIRDS AND EGGS REVEAL?

Heavier birds. Stronger shells. More large eggs.

The two groups came from the same flock, received water from the same borehole and were managed under comparable commercial conditions.

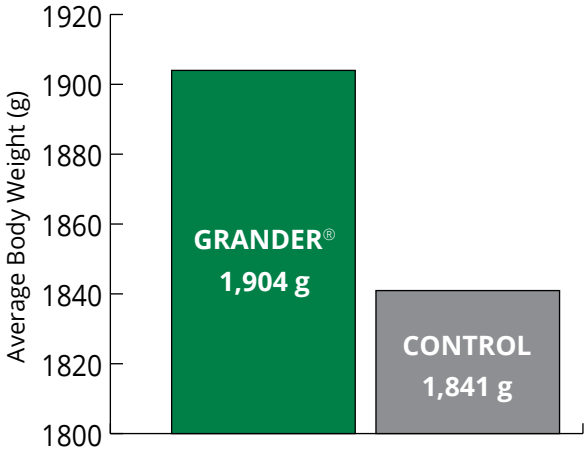
But their performance records were not identical.

Bird weight: an early difference

At approximately 43 weeks of age, the GRANDER® group averaged 1,904 g, compared with 1,841 g in the Control group.

THAT IS A DIFFERENCE OF 63 G PER BIRD, OR APPROXIMATELY 3.4%.

EARLY COMMERCIAL FLOCK MEASUREMENT



Eggbase records continued to show heavier birds in the GRANDER® group across the available comparison period up to 53 weeks.

Eggshell strength: a difference that matters

As laying flocks mature, maintaining shell quality becomes increasingly important.

Weak or damaged shells can mean fewer saleable eggs, additional handling losses and reduced commercial returns.

The November 2025 Eggbase analysis recorded stronger eggshell measurements in the GRANDER® group than in Control.

Egg grading: more large, fewer medium

The same Eggbase analysis recorded more Large eggs and fewer Medium eggs in the GRANDER® group through 51 weeks of age.

For producers whose contracts reward higher egg grades, even a modest shift in the grading profile can influence revenue.

Heavier birds. Stronger shells. A greater proportion of Large eggs. Together, these differences point to opportunities that matter at the farm gate.

But what could they mean in pounds and pence?



THE COMMERCIAL QUESTION

It's not just how many eggs you produce. It's what you can sell.

A commercial laying flock generates value through several connected factors: daily egg production, egg grading, shell quality, feed consumption and the number of productive birds remaining in the flock.

A difference in any one of these measurements may seem small.

Across thousands of hens and an entire laying cycle, the financial implications can be substantial.

Consider a 16,000-hen flock

At a 94% laying rate, 16,000 hens produce approximately 15,040 eggs per day.

At 91%, the equivalent is 14,560 eggs.

That's a difference of 480 eggs, or 40 dozen, in a single day.

At £1.60 per dozen, that difference is worth approximately £64 in daily gross egg revenue, before considering grading, rejects or production costs.

The reported 94% and 91% laying rates illustrate the value of a three-percentage-point difference: 40 additional dozen eggs a day from a 16,000-hen flock. The full-period production records will determine the cumulative value.

Beyond the UK: happy hens egg farm

Nafferton is not the only poultry business to report changes following GRANDER installation.

At Happy Hens Egg Farm, a GRANDER poultry case study reported 10–12% savings relating to feed conversion, together with reduced odours, fewer broken eggs, improved weight gain and lower mortality.

For an egg producer, these gains matter together: feed, egg quality and bird survival all influence the return from each laying cycle.

If water management influences more than one performance measure, what could the combined effect mean across an entire poultry business?

At Nafferton, the farmer's decision to extend GRANDER across additional barns speaks to the value he saw in his own operation.

The complete production records will help quantify what those differences mean over a full laying cycle.

What might your own flock records reveal?



WHAT COULD THREE PERCENTAGE POINTS MEAN?

16,000 laying hens | 94% vs 91% laying rate

480	40	£64
MORE EGGS PER DAY	MORE DOZEN PER DAY	GROSS REVENUE PER DAY

Illustrative revenue calculation based on laying performance recorded at 53 weeks, using an egg price of £1.60 per dozen.





BEYOND EGGS: THE WATER FACTOR IN POULTRY GROWTH

For meat-poultry producers, the commercial equation is different. But the question about drinking water is just as important.

EVERY GRAM COUNTS

In broiler production, profitability depends on turning feed into saleable liveweight as efficiently and consistently as possible.

Growth rate, feed conversion ratio (FCR), mortality, flock uniformity and days to target weight all influence the financial outcome of a production cycle.

Producers invest heavily in genetics, nutrition, housing and environmental control. Yet drinking water, which accompanies every feeding cycle, is rarely investigated as an independent performance opportunity once conventional quality requirements have been met.

What if a change to drinking-water management could influence how efficiently birds grow?

The feed conversion question

Consider a broiler flock of 100,000 birds marketed at an average liveweight of 2.5 kg.

At an FCR of 1.60, producing that liveweight requires approximately 400 tonnes of feed.

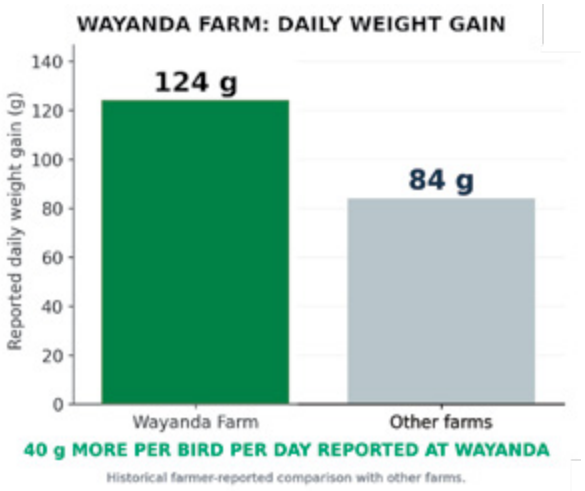
A 5% improvement in FCR, assuming the same saleable liveweight, would reduce the feed requirement by approximately 20 tonnes.

At an illustrative feed cost of £350 per tonne, that represents £7,000 per production cycle.

That is £7,000 of feed cost in one production cycle. It shows why even a modest shift in feed efficiency deserves attention.

An international experience: Wayanda Farm

At Wayanda Farm, daily weight gain was reported at 124 g compared with 84 g at other farms.



That is a reported increase of 40 g per bird per day.

The farm also reported lower mortality, clearer drinking lines and reduced deposits.

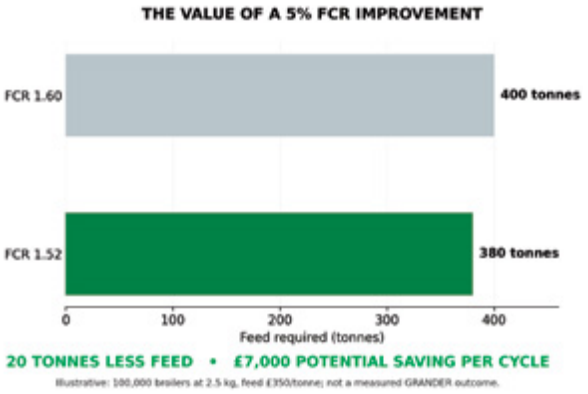
For a commercial broiler producer, the implications are considerable. Faster growth, improved feed efficiency and fewer losses can make a substantial difference to the profitability of each production cycle.

When thousands of birds are involved, small changes in growth efficiency can have significant commercial consequences.

MORE THAN ONE FARM. MORE THAN ONE MEASURE.

The Nafferton Wold Farms comparison provides our principal UK commercial evidence.

International poultry experiences point to opportunities beyond egg production, including growth, feed efficiency, fertility and mortality.



Australia: Tonial Quality Quails

At Australia's Tonial Quality Quails, the producer reported improvements in fertility and bird condition following GRANDER® installation.

The farm also reported at least a 10% reduction in mortality.

In a business hatching approximately 20,000 birds each week, improvements in survival and fertility can have significant commercial value.

Every bird that survives to productive or marketable age contributes to the potential return from the flock.

Different operations. A common question.

Nafferton, Happy Hens, Wayanda and Tonial represent different poultry businesses, but their experiences point towards the same opportunity: examine the role of drinking water in flock performance.

The measures vary from farm to farm, but the commercial goal is familiar: healthier birds, stronger output and more efficient production.

Their experiences invite producers to look beyond water as an essential input and consider its relationship with measurable performance.

For laying-hen producers, the relevant measures include egg numbers, grading, shell quality and laying persistence.

For broiler producers, the focus shifts towards feed conversion, daily weight gain, mortality and flock uniformity.

The commercial question is the same: could your existing water system be an overlooked opportunity?

What would your own figures reveal?

GRANDER® is a passive, chemical-free water revitalisation system that can be incorporated into suitable farm water infrastructure without electrical power or ongoing chemical dosing.

For producers interested in evaluating its potential, the starting point is straightforward: identify a suitable installation, establish baseline measurements and compare the results using the farm's existing production records.

Your flock already generates the data. The question is whether your water deserves a place in the investigation.

Speak to GRANDER® Water UK about a practical poultry-farm evaluation.



THE AGRICULTURAL FUEL CHALLENGE



WHEN EVERY LITRE COUNTS, WHAT IF THE FUEL ITSELF IS PART OF THE OPPORTUNITY?

Diesel powers the working day on farms: tractors, combines, telehandlers, loaders, irrigation pumps and standby generators. Fuel prices may fluctuate, but the cost of getting work done never disappears.

Farmers scrutinise machinery choice, maintenance, tyres, field operations and fuel purchasing. Yet one question is rarely explored: could the way fuel behaves as it reaches the engine influence how much is consumed?

"The important measure is not litres saved in isolation. It is litres used to complete the same work."

A SMALL PERCENTAGE. A REAL COST.

For a farm spending £50,000 a year on diesel, a 5% reduction would represent £2,500. At £100,000, it would be £5,000. These are illustrative calculations, not promised savings.

Historical GRANDER® ECO-KAT reports provide a reason to investigate. The following page explores recorded fuel-efficiency and emissions results from working diesel equipment, alongside the potential opportunities for agricultural machinery and farm generators.



HISTORICAL ECO-KAT EXPERIENCE



7.5% LOWER DIESEL CONSUMPTION: A RESULT WORTH EXAMINING

At the Cemento Melón limestone operation in Chile, a published historical account describes a diesel vehicle fitted with GRANDER® ECO-KAT. It reported fuel consumption 5% lower after five days and 7.5% lower during the first month. Management subsequently decided to extend the application to other diesel-powered machinery.

Modern engines have more sophisticated fuel-management systems, so results may vary.

A DIFFERENT APPROACH TO THE FUEL LINE

The original ECO-KAT was an external device fitted around a fuel line. Fuel stayed inside the pipe; no additive was introduced, and the device required no electrical supply.

GRANDER proposed that treating fuel in this way could influence its behaviour during combustion. The mechanism and performance on any particular engine require independent evaluation.

BEYOND THE FUEL BILL

The Chilean account also reported reductions in measured exhaust emissions: carbon monoxide of 80% at low speed and 77% at high speed, and nitrogen oxides of 83%.



These are historical case figures, not predictions for agricultural engines. Farm generators, often using simpler engines, may offer another opportunity to investigate fuel efficiency and engine cleanliness.

SOURCE: Historical Cemento Melón account, ENERGIS 24 seminar material, Brno, 18 May 2017, p. 4



THE HIDDEN COST OF WATER PROBLEMS

FISH FARMING: WHEN WATER IS THE ENTIRE ENVIRONMENT

From egg incubation to fish health, how much is water quality influencing the performance of your fish farm?

32 PONDS. FOUR SPECIES. ONE WATER SYSTEM.

At an established German fish farm producing rainbow trout, brown trout, salmon trout and Arctic char, water quality influenced every stage of production.

The farm operated 32 ponds supplied by a stream, while a separate well provided water for egg incubation and young fish.

Despite years of experience, the operator faced persistent challenges.

Oxygen levels declined as water travelled through the ponds. Temperatures varied by up to 2–3°C. Fungal contamination threatened developing eggs, while incubation and rearing tanks required intensive cleaning.

WHEN WATER PROBLEMS BECOME BUSINESS COSTS

Every lost egg represents an investment that will never reach market. Every hour spent cleaning tanks is time diverted from productive work.

Additional oxygen, treatments and maintenance increase operating costs, while poor water conditions can affect fish health and survival.

For a commercial fish farmer, even modest improvements across these areas could make a meaningful difference to profitability.

A DIFFERENT APPROACH

In 2007, the farm introduced GRANDER® water revitalisation.

Four GRANDER® double-cylinder units were installed in the stream reservoir, with a fifth in the well supplying the incubation facilities.

The system operated passively within the existing water infrastructure, requiring no electricity or chemical dosing for revitalisation.

What happened next changed the farm's daily operating experience.

EVERY LOST EGG HAS A COST.

Every hour spent cleaning tanks, every additional oxygen refill and every lost egg adds to the cost of production.

THE RESULTS: LESS WORK. BETTER CONDITIONS.

FROM SEVERAL CLEANINGS A WEEK TO ONCE EVERY 3–4 WEEKS

One of the most striking changes reported by the German fish farm was the dramatic reduction in cleaning requirements.

Incubation and rearing tanks previously needed cleaning several times weekly. Following GRANDER® installation, cleaning intervals extended to three or four weeks.

Less cleaning means fewer labour hours, less disruption and more time for productive work.

THE HEADLINE RESULT

3–4 WEEKS BETWEEN CLEANINGS

Previously several times per week.

Operator-reported cleaning intervals.

THE BENEFITS DIDN'T STOP THERE

The operator also reported:

- **More stable oxygen conditions**, reducing supplementary oxygen requirements.
- **Fewer egg losses** and less fungal development.
- **More active young fish**, with behavioural changes observed within approximately one hour.
- **More stable water temperatures** across the ponds.
- **Less sediment and odour** during pond drainage.
- **Reduced antibiotic use** and improved fish condition.

Buyers also commented positively on fish quality and vitality.

WHAT IS YOUR WATER COSTING YOU?

For UK fish farms and hatcheries, the implications are significant.

How much labour goes into cleaning? What do lost eggs, supplementary oxygen and treatments cost? Could improvements in water conditions help protect productivity and profitability?

THE COMMERCIAL OPPORTUNITY

WHAT WOULD THAT SAVE ON YOUR FARM?

Less cleaning. Less supplementary oxygen. Fewer incubation losses. More productive time.

If even one operating cost could be meaningfully reduced, what would that be worth to your business?



BEFORE GRANDER®

Young fish appeared lethargic, swimming irregularly and avoiding the incoming water.



APPROXIMATELY ONE HOUR AFTER GRANDER®

Young fish appeared noticeably more active, swimming towards the incoming revitalised water.

Behavioural changes reported by the fish-farm operator.

Source: GRANDER® Fish Farming Case Study, Germany, installation from 2007. Operator-reported observations.

DAIRY FARMING



HEALTHIER UDDERS. LOWER SCC. LOWER COSTS.

How much are mastitis, high somatic cell counts and lost milk income costing your dairy operation?

High somatic cell counts can reduce milk quality and yield, affect milk payments and increase the risk of milk failing buyer specifications.

According to AHDB, a single case of clinical mastitis costs approximately £250–£300, including treatment, lost milk and reduced production. Across a commercial herd, repeated cases can quickly become a significant financial burden.

DENMARK: 25% LOWER VETERINARY COSTS

At his 120-cow organic dairy farm in Aulum, Denmark, Anders Laugesen reported a 25% reduction in veterinary costs per cow following the introduction of GRANDER® water revitalisation.

He also reported lower, more stable somatic cell counts, fewer cases of udder inflammation and retained placenta, and reduced cleaning-agent consumption.

AUSTRIA: MORE WATER. MORE MILK.

The Berger-Zechner family installed GRANDER® in their dairy operation in 2005. They reported a measurable increase in drinking-water consumption, followed by increased milk production and a significant reduction in cleaning substances used for milking equipment.

WHAT COULD A 25% IMPROVEMENT BE WORTH?

AHDB illustrated annual mastitis costs of £31,500 for a 120-cow dairy herd. A 25% reduction in those costs would represent a saving of

£7,875 PER YEAR, OR NEARLY £40,000 OVER FIVE YEARS.

Interestingly, a Danish dairy farmer using GRANDER® reported a 25% reduction in veterinary costs per cow, alongside improvements in somatic cell counts and udder health.

THE QUESTION FOR YOUR FARM

What would fewer udder-health problems, lower veterinary costs or improved milk production mean across your herd?

Sources: AHDB Mastitis Control Plan and historical mastitis-cost illustration; GRANDER International, Anders Laugesen dairy-farm experience; GRANDER Journal V, p. 39.

The financial illustration applies a hypothetical 25% reduction to AHDB's historical mastitis-cost example. The Danish farmer's reported 25% reduction relates to veterinary costs per cow.

PIG FARMING



MORE PIGLETS. FEWER LOSSES. LESS ODOUR.

COULD WATER BE THE MISSING FACTOR?

Piglet mortality. Veterinary costs. Fertility. Feed efficiency. Slurry management.

Five challenges that determine profitability. One essential factor connects them all: water.

SWITZERLAND: **21.7% MORE PIGLETS PER SOW**

At a 170-sow Swiss breeding farm, specialist Thomas Niederoest reported an increase from 23 to 28 piglets per sow annually, alongside improved fertility, healthier animals and fewer losses.

AUSTRIA: WHEN THE SLURRY STOPPED STINKING

Pig farmer Franz Katinger had tried numerous products to tackle persistent manure odour, without success.

Then he tried GRANDER®.

He reported significantly reduced odour during slurry spreading, the disappearance of the floating surface layer and a more neutral pH, with less problematic fermentation and rotting.

DECADES OF WORLDWIDE FARMER EXPERIENCE. NOW SUPPORTED BY LABORATORY EVIDENCE.

For decades, farmers using GRANDER® across the world, from Europe and the Americas to Australia, Africa, the Middle East and China, have consistently reported substantial odour reduction and improved slurry management.

In 2026, a controlled wastewater evaluation with the Lagos State Wastewater Management Office, a Nigerian government agency, produced compelling laboratory results consistent with these longstanding observations.

WITHIN 24 HOURS:
Significant odour reduction.

WITHIN 48 HOURS:
COD reduced by 48% versus 15% in the untreated control.

BY DAY 23:
COD reduced by
79% versus 21% in the control,
with mean BOD 72% lower during later monitoring.

Decades of farmer experience. Now measurable changes in wastewater chemistry.

WHAT COULD THIS MEAN FOR YOUR FARM?

More productive breeding. Healthier livestock. Less troublesome slurry.

GRANDER® offers passive water revitalisation with a one-off investment, no electricity and virtually no routine maintenance.

Could better water management make a measurable difference to your farm?

Call GRANDER® Water UK: 0203 958 0009

Sources: GRANDER Journal V, p. 38; GRANDER Journal II, p. 25; GRANDER Lagos 50 L Wastewater Evaluation, 2026. Farm outcomes are reported experiences; laboratory findings relate to the wastewater conditions tested.

WHAT IS WATER COSTING YOUR FARM?

THE NEXT OPPORTUNITY COULD BE CLOSER THAN YOU THINK.

Every day, water influences what happens across your farm. From the health and productivity of your livestock to the performance of equipment, fuel consumption and the management of waste.

Some costs are obvious. Others are hidden in everyday operations.

What would even a small improvement mean across an entire production cycle?

More saleable eggs. Healthier livestock. Improved feed efficiency. Reduced fuel consumption. Less troublesome slurry and manure.

The experiences and evidence presented throughout this journal suggest that water deserves a closer look.

START WITH YOUR OWN NUMBERS.

You don't have to change everything to discover whether GRANDER® could make a difference.

Identify an opportunity on your farm. Establish how things perform today. Then explore how a suitable GRANDER® application could be evaluated against measurable results.

GRANDER® systems offer an important practical advantage: passive operation, a one-off equipment investment and virtually no routine maintenance. No continuous chemical dosing or additional energy input is required for the revitalisation process itself.

YOUR FARM. YOUR CHALLENGES. YOUR OPPORTUNITY.

Whether you manage poultry, pigs, dairy cattle or a mixed farming operation, we'd welcome the opportunity to discuss where GRANDER® might deliver measurable value.

LET'S DISCOVER WHAT BETTER WATER COULD MEAN FOR YOUR FARM.

GRANDER®
REVITALIZED WATER

START WITH A FARM DISCUSSION

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