

NATURAL CLEAN

USE IN HATCHING CHICKEN EGG SANITATION PROGRAMS

HOW TO USE:

Mix 1 gram in 3 liters of clean water, make sure it is completely dissolved. Dip the eggs in the Natural Clean Water before incubation.

BENEFITS:

- **Safe and convenient method of sanitizing hatchery eggs**
- **Minimizing hatchery workers to hazardous chemicals (Formaldehyde, Potassium Permanganate, Quaternary Ammonium Compounds, etc)**
- **Very significantly increases the hatchability of the eggs treated with Natural Clean.**
- **Drastically reduces the number of deaths among chicks after a few days of hatching (reduced mortality rate).**
- **Effectively combat egg surface microbial contamination.**

Natural Clean water treatment is best if the eggs are treated immediately after collection from the breeder chicken. Natural Clean treatment can take place at any stage of the hatchery process.

NATURAL CLEAN

PRODUCT INSTRUCTION FOR POULTRY FARMING FOR POINT OF LAYING BIRDS

Drinking water MUST be mixed with Natural Clean.

APPLICATION RATE:

WEEK 1 AND WEEK 2

- **Apply 1 gram of Natural Clean per 3 liters of fresh drinking water. The water will have a slight tint to it. The birds will take this every day of the week for the first two weeks.**

WEEK 3

- **Apply 1 gram of Natural Clean per 3 liters of drinking water. The water will have a slight tint to it. The birds will take this every day of the third week.**

WEEK 4

- **Apply 1 gram of Natural Clean per 6 liters of fresh drinking water. The water will have a slight tint to it. The birds will take this everyday of the fourth week.**

WEEK 5 TO THE LAST LAYING WEEKS

- **The below ratio in the tables will be given from end of week 4 in the cage to end of laying.**

(STARTING FROM WEEK 5 IN THE GROWING PEN PROVIDE NATURAL CLEAN THREE TIMES A WEEK USING ALTERNATING DAYS OF THE WEEK. FOR EXAMPLE: MONDAY WEDNESDAY FRIDAY)

NO OF BIRDS	REQUIRED AMOUNT OF NATURAL CLEAN PER DAY	AMOUNT OF WATER REQUIRED FOR PREPARATION OF STOCK SOLUTION AND THEN ADD TO THE TOTAL VOLUME OF DAILY DRINKING WATER
50 - 500	10 grams	3 - 7 liters
501 - 1000	20 grams	3 - 7 liters
1001 - 1500	30 grams	3 - 7 liters
1501 - 2000	40 grams	3 - 7 liters
2001 - 2500	50 grams	3 - 7 liters
2501 - 3000	60 grams	3 - 7 liters
3501 - 3400	70 grams	3 - 7 liters
5000	100 grams	3 - 7 liters
10000	200 grams	3 - 7 liters
2000	400 grams	3 - 7 liters

Prepare product solution daily or the day of usage by dissolving while stirring in clean water.

- **No refrigeration necessary**
- **Water MUST be free from chlorine (<0.1ppm) and disinfectant contamination)**

PLEASE DO NOT APPLY WITH ANY DISINFECTANTS OR ANTIBIOTICS. IF YOU MUST USE ANTIBIOTICS STOP USING NATURAL CLEAN TILL

YOU STOP THE USE OF ANTIBIOTICS. ONCE YOU STOP THE USE OF ANTIBIOTICS THEN YOU CAN GO BACK TO THE BEGINNING OF APPLICATION PROCESS

NATURAL CLEAN

PRODUCT INSTRUCTION FOR POULTRY FARMING FOR BROILERS

Drinking water MUST be mixed with Natural Clean

For one day old chicks, once received in the farm, mix 1 gram per 3 liter of clean drinking water and sieve (filter) the mix treated water and spray the DOCs in their shipped boxes before releasing the DOCs into the brooding house.

APPLICATION RATE

- Apply 1 gram of Natural Clean per 3 liters of fresh drinking water. The water will have a slight tint to it. Administer mixture every day of the week.**
- The above ratio will be given from the first time/day in the brooding house.**
- Apply 1 gram of Natural Clean per 6 liters of fresh drinking water. The water will have a slight tint to it. (FIRST WEEK IN THE GROWING PEN) Administer everyday of the week.**

- The above ratio will be given for the first week in the Growing House
- The below ratio in the table below will be given from the second week in the Growing Pen to the market period.
(STARTING FROM THE SECOND WEEK IN THE GROWING PEN PROVIDE NATURAL CLEAN THREE TIMES A WEEK USING ALTERNATING DAYS OF THE WEEK. FOR EXAMPLE: MONDAY WEDNESDAY FRIDAY)

NO OF BIRDS	REQUIRED AMOUNT OF NATURAL CLEAN PER DAY	AMOUNT OF WATER REQUIRED FOR PREPARATION OF STOCK SOLUTION AND THEN ADD TO THE TOTAL VOLUME OF DAILY DRINKING WATER
50 - 500	10 grams	3 - 7 liters
501 - 1000	20 grams	3 - 7 liters
1001 - 1500	30 grams	3 - 7 liters
1501 - 2000	40 grams	3 - 7 liters
2001 - 2500	50 grams	3 - 7 liters
2501 - 3000	60 grams	3 - 7 liters
3501 - 3400	70 grams	3 - 7 liters
5000	100 grams	3 - 7 liters
10000	200 grams	3 - 7 liters
2000	400 grams	3 - 7 liters

(Maintenance rate – Continuous till harvest)

Prepare product solution daily or the day of usage by dissolving while stirring in clean water.

- The above ratio will be given starting from week 2 in the growing pen and continues till harvest.
- No refrigeration is necessary

- **Water MUST be free from chlorine (<0.1ppm) and disinfectant contamination.**

Please do not apply with any disinfectants or antibiotics. If you must use antibiotics, stop the use of Natural Clean till you stop antibiotics use. Once you stop using antibiotics the go back to the beginning application process for Natural Clean.

NATURAL CLEAN

FISH HATCHERY METHOD BEFORE HATCHING WATER PREPARATION USING NATURAL CLEAN

STORAGE TANK (500 – 1000 LITERS): Put 50 grams in a pap type bag and deposit in the storage tank and let Natural Clean to leach into the water. Do this about three days before hatching. After three days, check and make sure the Ph of the Natural Clean treated water is about 7-8. Then discharge the treated water in your hatching tank.

HATCHING

Incubation will be carried out in static water in concrete tanks, fiber-glass troughs, jars, trays or boxes. The fertilized eggs usually hatch out between 18 – 30 hours after fertilization at a water temperature of about 27 – 30 oC. Water temperature below 24 oC may result in low hatching rates, the larvae remains in the incubation units for 3-4 days (depending on water temperature) until their yolk – sac becomes reabsorbed. The yolk fry is not

fed. Dead eggs during incubation will become whitish in color and should be siphoned out of the incubation system to avoid fungal and bacterial infection.

FRY MANAGEMENT

Fry rearing is an important aspect of hatchery management because the end products which are the fingerlings are derived from fry. As a result of their small size and delicate body they can easily be affected by infections, parasites and poor water quality. The hatchlings possess yolk sac, which serves as food for the first 3-4 days. After yolk sac absorption, the fry will start moving about searching for food. The use of live food as first feed ensures higher fry survival where live food is not available highly nutritious artificial starter feeds **MUST be used. Use the right particle size ranging from 00, 0.2 – 0.3, 0.3 – 0.5, 0.5 – 0.8, 0.8 – 1.2, 1.2 – 1.5mm as the fry grows.**

Feeding is carried out four to six times daily and fry is fed to satiation. For satisfactory growth and fry survival, the quantity of water and quality of the artificial feds are of great importance. Most fish feed manufacturers have feeding tables which serve as guide for the farmer. After 8 weeks, fry should weigh 5-8grams

Frequent grading and sorting of fry to remove shooters will enhance survival rates.

Good water quality is paramount for successful fry rearing. The desirable levels of some of the parameters are: water temperature 28oC – 30oC, dissolved oxygen = 3mg/l, pH of 7.0 – 8.5, ammonia <0,1mg/l and nitrite <0.5mg/l.

CLEANING AND MAINTENANCE of hygienic environment will reduce the risk of infection. Uneaten food, fish excrement, etc **MUST be siphoned out daily to prevent fouling of water.**

After siphoning of uneaten food, fish excrements and dead fry, reduce your water by 10 to 20% and replace with Natural Clean treated water in the storage tank.

The newly hatched larvae, 5 – 7mm size and 1.2 – 3mg in weight can be kept in the incubator, and do not have to be fed as they rely on food resource within the yolk sac for the first 2 or 3 days. The healthy larvae tend to stay in the dark therefore should never be exposed to direct sunlight. In the hatchling tank the water inlet should be covered so that the healthy larvae could gather in the dark. The egg remnants crippled and dead larvae are easily removed by siphoning without causing stress to the larvae.

After hatching the larvae can stay in the tank for 1 – 2 weeks.

The optimum temperature for larval rearing is 28oC – 30oC. Within the next 2-3 days after hatching (48 hours at 28oC) the yolk sac is absorbed and the hatchling is visibly developed into small cat fish and this fry starts to search for food, at this stage this fry **MUST be fed on external feed for its further development and survival.**

The feeding is with Artemia nauplii or microalgae, the success of the intensive production of fingerlings of the African cat fish are greatly dependent on the use of this Artemia or Microalgae as first feed. Shortly before the yolk sac is fully absorbed the larvae are first fed with live Artemia nauplii or Microalgae the feeding response of these larvae is stimulated by the movement of the nauplii in the water.

The Artemia or Microalgae is administered 6 times per day at regular intervals, this intervals can be adjusted by checking the larval stomach content after every feeding. The introduction of fry feed does not commence until after 3 days of first feeding with artemia.

VERY IMPORTANT INFORMATION

DAY 1 and 2: regardless of how clean the water in the hatchery tanks may appear siphon dead eggs from the tanks and ensure that as many larvae as possible are salvaged from the dirt. Then flush out and refill hatchery tanks with fresh Natural Clean water.

DAY 3 and 4: at this stage, larvae have freed themselves from the bottom of the tanks and are swimming freely everywhere. This heralds the commencement of wet feeding with Artemia.

FROM DAY 5 daily cleaning of tanks and siphoning of excess feed, waste and dead larvae before feeding is very important.

DAY 7: dry feed is introduced.

Replacement of these dry feed is usually gradual and commonly accomplished to co feeding with Artemia which is gradually withdrawn and replaced with commercially available dry feed.

Management Practice

The water **MUST** be reduced 10-20% once every morning. Water reduction and replacement **MUST** be done prior to feeding in the morning.

15-20 minutes after each feeding in the morning and evening, the unconsumed feeds are to be removed by siphoning them out of the tanks into a drainage channel.

Once every week, reduce the water by 25-50%.

From Fingerlings to Harvest (week 1 to week 24 and up) for 500 fishes (concrete tanks, mobile tanks, plastic tanks)

Natural Clean Fish Farming Method trials in some Nigerian Farms.

50 grams of Natural Clean for the week 1, one day a week

Week 2: replace 10-20% of water

Week 3: replace 10-20% of water. Add 25gram of Natural Clean for the week 3, one day of the week

Week 4: reduce the water to 10-20% of the pond water and replace water to the original height

Week 5: reduce the water to 10-20% of pond water and replace fresh water to original height. Add 25gram of Natural Clean for the week5, one day of the week. Continue the above application process till harvesting time.

From fingerlings to harvest (week 1 to week 24 and up) for 500 fishes (Earthen Pond)

50 grams of Natural Clean for the week 1, and one day of the week

Week 2: replace 20% of the water

Week 3: replace 20% of the water

Week 4: replace the water to 10-20% of the pond water and replace fresh water to original height. Add 25gram of Natural Clean for the week 4, one day of the week.

Week 5: replace 20% water

Week 6: replace 20% water

Week 7: replace 20% water

Week 8: reduce water to 25cm – 50cm level of the pond water and replace fresh water to original height. Add 25gram of Natural Clean for week 4, one day of the week

Continue with the above application process till harvesting time.

Please do not apply with any disinfectants or antibiotics. If you must use antibiotics, stop the use of Natural Clean till you stop antibiotics.

Once you stop using antibiotics then go back to beginning of the process with Natural Clean.

WHEN SORTING FISH IS REQUIRED AFTER SORTING YOU MUST START LIKE IN WEEK 1 AS A NEW APPLICATION

NATURAL CLEAN

PRODUCT INSTRUCTIONS FOR PIG FARMING

APPLICATION RATE:

Starting week:

Week 1:

- **Apply 1 gram of Natural Clean per 3liter of fresh drinking water. The water will have a slight tint to it. Every day of the week.**
- **Apply 2 grams of Natural Clean per 1 kilogram of feed. Every day of the week**

Week 2:

- **Apply 2 gram of Natural Clean per 1 kilogram of feed. Every day of the week.**

Week 3:

- **Apply 1 gram of Natural Clean per 6 liters of fresh drinking water. The water will have a slight tint to it. Every day of the week.**
- **Apply 1 gram of Natural Clean per 1 kilogram of feed. Every day of the week.**

Week 4 to sale time:

- **The above ratio in week 3 will be maintained and continue till sales**
- **No refrigeration is necessary.**

Please do not apply with any disinfectants and antibiotics. If you MUST use antibiotics, stop using Natural Clean till you stop antibiotics use. Once you stop using antibiotics, then go back to the beginning of the application process.

NATURAL CLEAN

PRODUCTION INSTRUCTIONS FOR GOAT/SHEEP FARMING

Must start from newborn goat to sale period.

APPLICATION RATIO:

- **Apply 1 gram of Natural Clean per 3 liters of fresh drinking water. The water will have a slight tint to it. Use every day of the week.**
- **The above ratio will be given for the first week.**

Week 2:

- **Apply 1 gram of Natural Clean per 6 liters of fresh drinking water. The water will have a slight tint to it. Use every day of the week.**
- **Apply 1 gram of Natural Clean per 6 liters of fresh drinking water. The water will have a slight tint. Use three times a week
(Maintenance rate – Continuous till sales)**
- **No refrigeration is necessary**

Please do not apply with any disinfectants or antibiotics. If you MUST use antibiotics stop using Natural Clean till you stop antibiotics use. Once you stop using antibiotics, then go back to the beginning of the process with Natural Clean.