Magnetic Water and its Benefit in Cattle Breeding, Pisciculture and Poultry

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INTRODUCTION

Most of water enters inside of the farms, greenhouses and poultry farms have so many impurities with it. These impurity directions improves water taste and has a positive effect on the health of livestock and poultry but such impurities, with entering the water to house or farmland during under heat affecting and maintaining a period of time. Bivalent ions or anions such as combination of insoluble carbonate compounds in the interior wall of the tube. And this sediment is caused blocking pipe. These issues are problematic not only in domestic but also in the agricultural and manufacturing industries and swimming pools forming disorders. These sediments are causing the extinction of irrigation pipes and equipment. In addition, it comes at a heavy cost to fix them. With the advancement of science and technology, a new technique to deal with this problem is to discover and develop. Currently the most common method of making chemically tasty water based on using...
baking soda sweet deal rests. This method has problems in terms of durability and cost followed bellows some significant issue:

This method has problems in terms of durability and cost followed bellows some significant issue:
1-Use baking soda, the equivalent of 1 kg to 1,000 liters of water which involves a high cost relatively high loss of water up to 20
3-Non-effectiveness of impurity combination onto tube

After passing this process, it is thought that we have pure water with the best quality while this cleans water is dead water. In fact, we apply as human beings doing the mechanical, thermal and chemical for water treatment, we are caused to be killed it. It is meant that we destroy completely its vital energy. Water gets its energy from the sun, and energy that are stored in the ground to collect. In summer, water will be gone up to surface by power solar energy, in the winter that the solar energy is week, the water goes down the depth into the earth to obtain stored (potential) and converted energies. The first step of losing the nature water energy, is to direct the water into under pressure pipes. The high pressure is so damageable for water energy.

MATERIAL AND METHODS

The operation mechanism of magnetic field:

In the quantum physics orders, the non-charged particles are as the paramagnetic or nature condition. When the particles are charged by magnetic method, the motivated electrons shift their orbits to surface of magnetic pole. This energetic condition is known ortho. In this time, the protons shift their orientation opposite of magnetic pole that is caused to compose bipolar condition. The magnetic field is restrained to generate the mass by shifting in molecule structure on liquid. Whereas this treatment water also is consequently used, this Existing deposition will be missed up on the pipe surface. So many people may imagine, water is magnetic, when at least it may be exposed by one pole of the magnet. Nevertheless, when the magnetic field is effectiveness led to be changed at least the one of water features. To magnetize fluids is caused to change the chemical and physical of water nature parameters and led to water treatment features be developed. The water is generally formed uniform structure when passed within magnetizers that basically changes 14 important feature of water consists of: odor, flavor, Tensile electrostatic or Surface adhesion, Solution properties of water. Figure (1) shows the effect of magnetic force on the water molecules.

Fig. 1: The effect of magnetic force on the water molecules.

Effect of magnetic water on livestock:

It is clear that the changing of physical and chemical magnetic properties is effective on its biological properties. Magnetic water increases the solubility of minerals and as a result, improves nutrients Transport to all body parts that caused the Organisms will be led to more effective performance. The water effects on protein supply in animals body to increase it. For example, using of magnetic water for calf and pork drinking resulted high beef quality and non-formed fat layers. Some cows give milk hard that resulted giving milk of them is slow due to given milk machine. Also, rinse with magnetic water to improve livestock mastitis and increases resistance to disease. However, it also reduces the amount of bacteria present in the milk. Also if the consumed hay of livestock has been irrigated by magnetic water is effectiveness on livestock’s shape and appearance.

Select the magnetizers' pieces:

The choosing of magnetizers systems is related to pipe diagonal in livestock inbreeding. It can be used of magnetizers' pieces in according to table 1.
Table 1: Choice of magnetizer systems based on livestock raising water rates.

<table>
<thead>
<tr>
<th>Outflow rate of the device</th>
<th>The diameter of the magnetic device</th>
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</thead>
<tbody>
<tr>
<td>10 – 15 cubic meters per hour</td>
<td>1 inch</td>
</tr>
<tr>
<td>10 – 15 cubic meters per hour</td>
<td>1/5 inch</td>
</tr>
<tr>
<td>15 – 20 cubic meters per hour</td>
<td>2 inch</td>
</tr>
<tr>
<td>20 – 30 cubic meters per hour</td>
<td>3 inch</td>
</tr>
<tr>
<td>50 – 100 cubic meters per hour</td>
<td>3 inch</td>
</tr>
<tr>
<td>100 – 150 cubic meters per hour</td>
<td>4 inch</td>
</tr>
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</table>

To install this equipment must be installed on water supply system. The pipeline and its installation method are shown in Figure (2).

Fig. 2: The method of magnetizer device installation on water supply systems of livestock fold.

The application effects of magnetic water on livestock performance have been followed below: increasing of milk producing about 10%, increasing of fat milk capacity about 0/13-0/15. The average weight gain in calves up to 35%, Increase in average of pig weight by 48%, Increase in average of sheep weight by 12%, Increase in average of rabbit weight by 48%, Enhance the flavor of meat, Reducing disease, mortality rate doubles (8), Comfortable Pregnant and stronger bearing animals.

Effect of magnetic water in poultry:

Based on conducted research, Effect of Magnetic Water has been proved Development of chick Skeleton structure. As a result, using of this water for feeding the chicks is caused to increase process of composing the skeleton that improving indirectly the blood morphology.

Briefly, the using of Magnetic water for poultry nutrition has the following advantages: reduce mortality by approximately 3.2-times, the average weight gain about 5-7 percent, increasing of Egg production by 10% and improve the Flavor of meat.

Effect of magnetic water in beekeeping:

It is obvious that the quality and amount of collecting honey is depend on healthy hives or colonies of bees Although environmental pollutions caused to increase the rate of bee diseases. Bee mite is the most common disease in bees. Initially, the disease reduces the quality and quantity of honey bee, thus caused to kill bees’ colonies. Scientists have discovered a relationship between the health of bees and a weak magnetic field. Based on this research, a special magnetic device called a magnetic threshold was made. This machine is magnetic water making for bees. It is noticeable that in all cases, the bees have chosen magnetic water for drinking. Thus, the habiting of bees is easily possible to use of this water. (10)

1 - How to get the bees to use of magnetic water in irrigation of used plants of bees
2 - Assign the small magnetic water in the hive
3 - Using of food syrup made from magnetic water during the winter

Most people who kept the bee hive 20-10 side so they can use three types of devices.

1 - Use the magnetic threshold for each hive
2 - Use of magnetic water exchanger 5/0 inches to irrigate the surrounding areas
3 - Using magnetic funnel for preparing syrups and nutrient solution
Benefits of Magnetic Water:
- Improving of bee biology navigation when searching and finding a flower or honey
- Increasing the bees body’s resistance to disease of insects bee mite
- A dramatic increasing in the quality of collected honey

The use of magnetic properties in honey production:
This technology can be used directly for the production of high quality honey. With continuous use of magnetic treatment, changes in taste, color and smell of honey will occur. In addition to the high quality of this honey also has healing properties. Honey magnetizing with passing through the magnetic funnel is performed (10).

Effect of magnetic water on Pisciculture:
Almost a year ago, many researchers have proved that the within solution contained the molecular structure of proteins is formed in accordance with environmental water.

Many facts have proved that the magnetization tap water, many changes occur in the structure and this is one of the main reasons for the use of magnetic water and biological properties of the index. Experiments on artificial and natural environments have been strongly verified the strong effect of water on cell exchanging in organisms life. This is the reason for using magnetic devices caused to increasing speed of Pisciculture. In this method, the food and water of fish must be magnetic. By using magnets maker technology, the content of water oxygen has reached upper than 5 milligrams per liter without applying of Aeration System. The magnetic field also caused to destruct bacteria in water and it consequently reduces diseases by more than 3 times. In addition to the water prevent algae growing up and boost the Efficiency of water consuming. The magnetized food caused to enhance weighing up to 2/2 times and improves its taste. It is also observed, by installing the system in Washington State, the fertility of rainbow trout largely increases.

Installation of artificial magnetic tank:
Spray - jet (Figure 3)
2- The inverse system (Figure 4)
3 - Water feeder pipeline (Figure 5)

Fig. 3: Magnetic system of artificial Pisciculture tank installed in the spray - a fountain.

The fountain system, magnetic piece was installed on the nozzles or existing jets of water into the swimming pool and makes it magnetic during fountain water system. The most important issue in designing of systems for Pisciculture is that because of magnetic properties of the water holds itself only up to 8 days. After this period, the water tank must be re-collected and magnetized to be held up to maximum of performance (1). Here, inverse system was innovated that is a specific method for aquaculture ponds. So after 8 days, pool water sucked by the pump and after the passed through a sand filter, disinfected and then magnetized by magnetizer and returned back to the pond. In third method, the magnetizer piece located directly on the water feeder pipe.

Choosing of magnetizer pieces:
System selection should be made according to tank size. For example, if the tank has a volume equivalent to 60 square meters, Magnetizer device should be used for 1 hour per day. Calculating and obtaining amount of water can be used from Table (1). It should be entwined, magnetic field amount of 10/1 is sufficient for all levels of water in reservoirs.
Fig. 4: Magnetic system of artificial Pisciculture tank installed in the inverse system.

Fig. 5: The installation of magnetic system on artificial Pisciculture tank as a water feeder pipeline.

Conclusion:
With regard to gained knowledge, no practical design and research of this new technology has been conducted in Iran. This is appropriate space, experts and student’s agricultural ever-increase their own science place for taking accurately advantage of this situation and the continuous research. Also with relation to academic departments, research centers of jehad agricultural, agro-industry, ministry of agriculture, this technology must be extended between farmers and industries. It is obvious that research led to fabricate devices by students and researchers and effectiveness of these devices compared with foreign devices is able to aid our country to achieve self-sufficiency.

REFERENCES

