EFFECT OF WATER SANITIZERS IN CONTROLLING CONTAMINATION OF COLIFORMS IN WATER LINES IN POULTRY FARMS

S.Saravanan, T.R.Gopalakrishnamurthy, P.Srinivasan and B.Mohan
Avian Disease Laboratory, Veterinary College and Research Institute Campus, Namakkal, Tamil Nadu, India.
Sarava3@rediffmail.com

In modern day poultry production water should be provided as clean as possible in order to avoid the contamination with microorganisms. Good quality water is very important for good digestion and to create a healthy gut flora, which will help the bird to absorb all the essential nutrients. Farmers in Namakkal are using different types of sanitizers in drinking water which contain hydrogen peroxide, chlorine, per acetic acid etc. The majority of farmers are blindly using water sanitizer without checking its efficacy and some farmers checking only the source of the water (main tank) where the sanitizer is added. One study was conducted in Avian Disease Laboratory, Namakkal in which 68 farms were analyzed for the presence of coliforms in water after using the H$_2$O$_2$ based sanitizer (1-2ml of 35% H$_2$O$_2$ per 100 litre of water) from main tank, sub tank and nipples at different places. Out of 68 farms, 34 farms showed presence of coliforms in main tank and subsequently in sub tanks and nipples. Remaining 34 farms which showed absence of coliforms in the main tank in which only four farms were showed negative results in sub tanks and nipples but in the remaining 30 farms, water analysis showed the presence of coliforms in sub tanks and
nipples. Out of these 30 farms, five farms were selected and the water was treated with an increased dose of water sanitizer (5ml of 35% H₂O₂ per 100 litre of water) and again tested for coliforms. The results showed that absence of organisms in all the places. It was concluded from the study that contamination of water might occur not only in the main tank but also it might be contaminated with coliforms when pass through pipelines at various places. Hence the farmers should check the efficacy of water sanitizer in all the points, not only in the main tank and accordingly the dosage of sanitizer will be determined.