

Biosecurity Control Systems in Two Phases for Poultry Farms

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Abstract : In this work was developed and implemented a thermal fogging disinfection system to counteract pathogens from poultry feces in agribusiness farms, to reduce mortality rates and increase biosafety in them. The control system consists of two phases for the conditioning of the farm during the sanitary break. In the first phase, viral and bacterial inactivation was performed by treating the stool dry cleaning, along with the development of a specialized product that foster the generation of temperatures above 55 °C in less than 24 hr, for virus inactivation. In the second phase, a process for disinfection by fogging was implemented, along with the development of a specialized disinfectant that guarantee no risk for the operators' health or birds. As a result of this process, it was possible to minimize the level of mortality of chickens on farms from 12% to 5.49%, representing a reduction of 6.51% in the death rate, through the formula applied to the treatment of poultry litter based on oxidising agents used as antiseptics, hydrogen peroxide solutions, glacial acetic acid and EDTA in order to act on bacteria, viruses, micro bacteria and spores.

Keywords : innovation, triple helix, poultry farms, biosecurity

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