

TÍTULO: SENSITIVITY PROFILE “IN VITRO” OF SEROVARS’S *Salmonella enterica* ISOLATED OF THE PRODUCTIVE CHICKEN’S CHAIN FACE TO IMPORTANT DISINFECTANTS FOR FOOD INDUSTRY

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ABSTRACT:

Salmonella spp. is one of the main microorganisms involved in illness transmitted through the foods, therefore becomes necessary take measures for eliminate of this pathogen, thus being disinfection one of important methods for the elimination of microorganisms such as *Salmonella*. The aim of this study was to verify the sensibility “in vitro” of different serovars of *Salmonella enterica* isolated from the chicken productive chain face to disinfectants based on sodium hypochlorite, quaternary ammonia and peracetic acid. Fifty samples of *Salmonella enterica* serovars Schwarzengrund, Albany, Heidelberg, Enteritidis, Kentucky, Panama, Typhimurium, Enterica (O:4,5), Agona, Derby, Orion, Muenchen, isolated from the cut chicken productive chain from the State of Maranhão were evaluated. The strains were submitted to the efficacy test “in vitro” through the suspension in tubes using the recommended concentration and half of the recommended concentration at the contact times of 5, 10, 20, 30 minutes. Sodium hypochlorite and quaternary ammonia were efficient against the different *Salmonella* serovars with 100% of the strains sensitives at all concentrations and contact time evaluated. Serovars showed resistant to the peracetic acid at the recommended concentration, of the 28 resistant strains, 24 kept active within five minutes of exposure, at half of the recommended concentration, of the 46 strains, 17 were resistant, keeping active within 30 minutes of contact. Serovars that showed resistant to the peracetic acid were highlighted *Salmonella* serovars Schwazengrund, Heidelberg, Panama, Enteritidis, Kentucky, Enterica O:4,5, Agona, Muenchen. It was conclude that disinfectants based on quaternary ammonia and sodium hypochlorite were efficient against the different serovars of *Salmonella enterica* than the peracetic acid and which the same at its recommended concentration was not able to eliminate pathogens in less time than twenty minutes. These results reinforce the importance of studies and reviews about the resistance of agent pathogens to recommended concentrations of disinfectants adopted in hygiene programs of the food industries.

Keywords: chicken carcass, peracetic acid, resistance

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