

**ORAL PRESENTATION**

**Bacteriophages screening in poultry wastewater**

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*Salmonella* is one of the main causes of food-borne illness and a serious problem facing the poultry industry. The excess use of antibiotics to control these bacteria may lead to their resistance and, consequently to a public health problem.The use of bacteriophages must be considered as an alternative to chemical antibacterial agents against these foodborne pathogens. The purpose of this study was the screening for lytic bacteriophages that can affect different pathogenic *Salmonella*. Six isolates of *Salmonella* from poultries were isolated and purified and two referenced strains: *Salmonella typhimurium* ATCC14028 and *Salmonella enterica* ATCC 13076 were used as sensitive strains .The single-layer method was used by incorporation of these bacterial species in the soft agar with sample filtrates. After overnight incubation at 35°C, the obtained results revealed different lysis areas according to the sensitivity of the strains and the capacity of the filtrate. These lysis areas were the evidence of different lytic bacteriophages in the different sites of poultry slaughterhouses and Bousselam River.

**Keywords:***poultry*; *Salmonella*; *bacteriophage screening*; *poultry slaughterhouses*; *Bousselam River.*

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