

THE INCIDENCE OF SALMONELLA STRAINS AND ITS DIFFERENTIAL DIAGNOSTIC IN POULTRY PRODUCTS

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Summary. Humans can be infected by *Salmonella* directly from infected animals and poultry or using a food-stuffs (meat, eggs or milk). The purpose of this study included the incidence of *Salmonella* strains in poultry products and its differential diagnostic. The poultry carcasses and separate their pieces (legs, wings, breast) were investigated over period from 2000 to 2002. More than 6000 samples from state and private poultry-yards were collected. *Salmonella* were identified by bacteriological, serological as well as PCR and DNA hybridization methods. It was found that during the years 2000-2002, 1.28-4.70% of poultry products were infected with *Salmonella*. The wings were less infected in comparison to legs and breast. During this period 11 *Salmonella* serotypes were determined, however *S. enteritidis* was predominant: 37.5% in 2000, 25.5%-2001 and 36.9% in 2002 year. The second most common serotype was *S. typhimurium*, 3.12% in 2000, 27.9%-2001 and 29.6% in 2002 year. *Salmonella isangi*, *S. gallinarum* and *S. bovismorbificans* serotypes were identified only solitary. In comparison to bacterial and serological methods, PCR and DNA hybridization tests were faster, more specific and prompt.

Keywords: *Salmonella*, serotype, PCR, DNA hybridization.