عنوان مقاله:

Detection of invA, sivH, and agfA Virulence Genes in Salmonella spp. Isolated from Broiler Breeder Farms in Alborz Province, Iran

محل انتشار:

مجله آرشیو رازی, دوره 77, شماره 2 (سال: 1401)

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نویسندگان:

Z Mashayekh - *Department of Microbiology, North Tehran Branch, Islamic Azad University, Tehran, Iran*

S Moradi Bidhendi - *Razi Vaccine and Serum Research Institute, Agricultural Research, Education and Extension Organization (AREEO), Tehran, Iran*

P Khaki - *Razi Vaccine and Serum Research Institute, Agricultural Research, Education and Extension Organization (AREEO), Tehran, Iran*

خلاصه مقاله:

Salmonellosis, among poultry infectious diseases, not only imposes economic losses in the field of poultry breeding but also is considered a zoonotic disease. This study aimed to investigate the presence of invA, sivH, and agfA virulence genes in Salmonella species. The present study was conducted on ۳۰ Salmonella strains. Samples were cultured on selective and differential media, and afterward, the isolates were serotyped using specific antisera based on the Kauffman-White table. Subsequently, the samples were analyzed to detect invA, sivH, and agfA genes by polymerase chain reaction technique. The results indicated that ۳۰ (۱۰۰%) isolates had invA and agfA virulence genes and ۲۸ (۹۳.۳۳%) isolates had a sivH virulence gene. The highest frequency of serotypes was related to Salmonella infantis. Among the studied serotypes, Salmonella uno and Salmonella O۳۵ lacked the sivH virulence gene, unlike other serotypes. The findings of this study could pave the way for Salmonella monitoring and be used as a pattern to detect Salmonella bacteria-bearing genes encoding invasion and fimbria.

کلمات کلیدی:

Salmonella, agfA gene, invA gene, sivH gene, serotyping