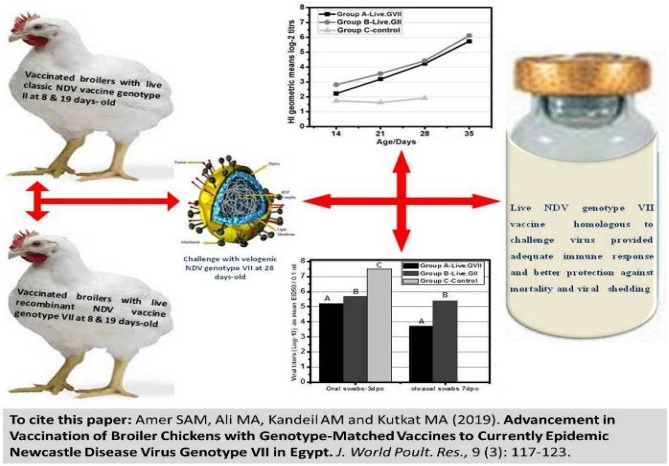
Previous issue | Next issue | Archive

Volume 9 (3); September 25, 2019 [Booklet] [EndNote XML for Agris]



To cite this paper: Amer SAM, Ali MA, Kandeil AM and Kutkat MA (2019). **Advancement in Vaccination of Broiler Chickens with Genotype-Matched Vaccines to Currently Epidemic Newcastle Disease Virus Genotype VII in Egypt.** *J. World Poult. Res.*, 9 (3): 117-123.

Research Paper

Advancement in Vaccination of Broiler Chickens with Genotype-Matched Vaccines to Currently Epidemic Newcastle Disease Virus Genotype VII in Egypt.

Amer SAM, Ali MA, Kandeil AM and Kutkat MA.

J. World Poult. Res. 9(3): 117-123, 2019; pii: S2322455X1900015-9

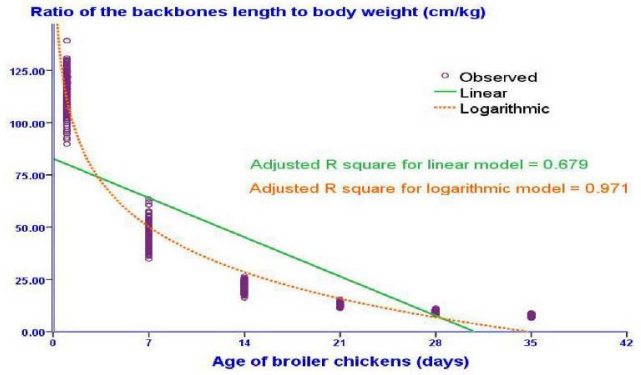
DOI: https://dx.doi.org/10.36380/jwpr.2019.14

ABSTRACT:

Newcastle disease virus (NDV) outbreaks still occur frequently in Egypt in spite of the heavy implementation of classic NDV vaccines for a long time ago, where NDV genotype VII has become the dominant genotype in Egypt from 2012 until now. Many previous studies have recommended using genotype-matched NDV vaccines against the epidemic virus for providing better protection and minimizing virus shedding. Therefore, the present study evaluated the efficacy of two available live NDV vaccines in Cobb 500 broilers. The group A and B (20 birds each) were vaccinated with live attenuated NDV vaccines genotype VII and II, respectively with double doses at 5 and 19 days of age. Also, group C consisting of 20 unvaccinated birds was studied as a control group. The efficacy of live vaccines was determined using virus challenge test. Hence, all groups were challenged with velogenic NDV genotype VIId at a dose equivalent to $10^{6.0}$ 50 percent Embryo Infective Dose (EID_{50}) via the intramuscular route at 28 days-old. Serum antibodies level was assessed by hemagglutination inhibition test. Moreover, virus shedding was measured by EID_{50}. The obtained results indicated that vaccinated birds had similar haemagglutination titers with no significant difference prior challenge. Meanwhile, group A showed significant protection against mortality, as well as a significant reduction in virus shedding 7 days post-challenge compared to Group B. We concluded that live recombinant-genotype VII vaccine homologous to challenge virus could improve the protective efficiency in chicken against NDV compared to live classic genotype II vaccine. It is suggested that the implementation of genotype-matched NDV vaccines confer better protection in commercial broilers vaccination programs.

Keywords: Broilers, Genotype-matched vaccine, Genotype VII, Newcastle disease virus

[Full text- PDF] [XML] [Crossref Metadata]



Citation: Kongpechr S, Sohsuebngarm D and Sukon P (2019). **Model Estimation for Longitudinal Bone Growth Based on Age in Male and Female Commercial Broiler Chickens.** *J. World Poult. Res.*, 9 (3):124-132.

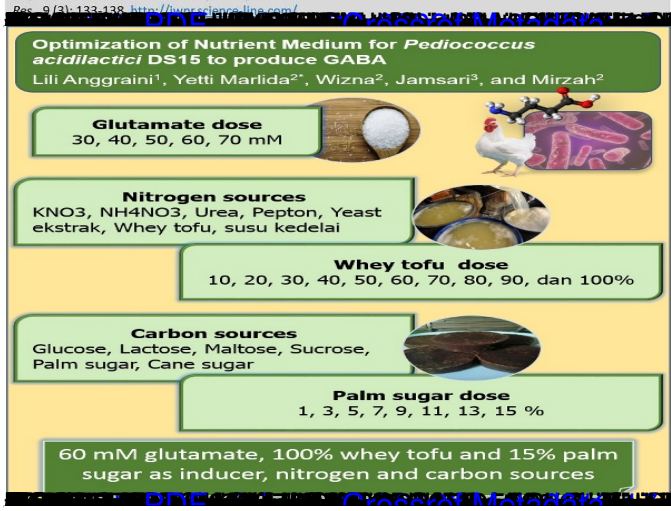
PDF Crossref Metadata

Comparison and the correlation between mean of protection and ELISA titer afforded by single and booster fowl cholera vaccination

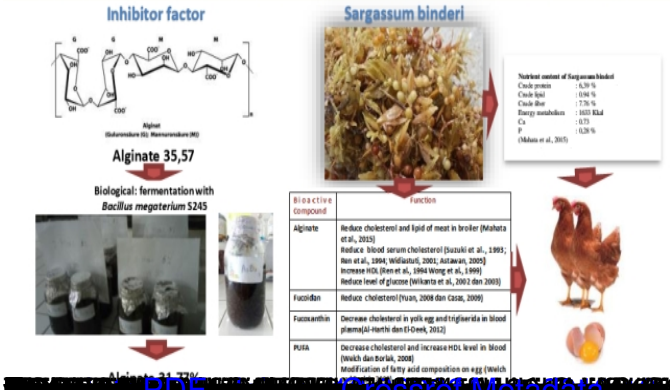
Results	No of tested batches	Single dose vaccination			Booster dose vaccination		
		Protection	Mean ELISA Titer		Protection	Mean ELISA Titer	
			Kit 1	Kit 2		Kit 1	Kit 2
Satisfactory	32	43.7	309	843	76.2	387	1053
Unsatisfactory	5	29	194	495	50	242	619

Citation: Salama SS, Gadallah FM, Gamal Abo-Elkhir FE-Z, Khedr AA and Ali MA (2019). **Uses of Single Dose Dependent and Relative Potency Assays for Evaluation of Inactivated Fowl Cholera Vaccine.** *J. World Poult. Res.*, 9 (3):133-138. http://jwpr.science-line.com/

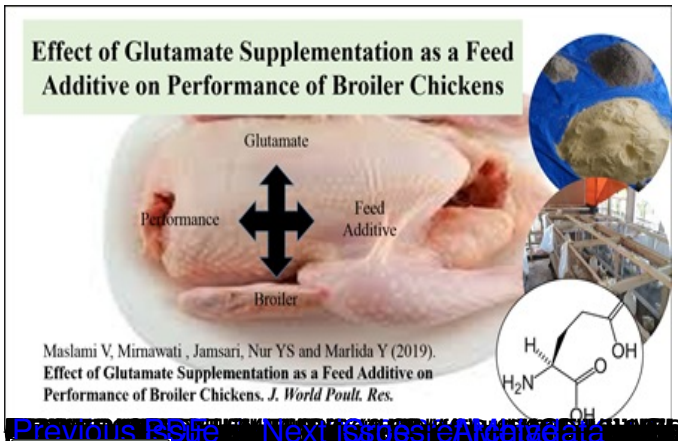
PDF Crossref Metadata



PDF Crossref Metadata



PDF Crossref Metadata



Previous Article Next Issue Archive