



Cairo University
Faculty of Veterinary Medicine



**Preparation of Improved Trivalent Inactivated Avian Influenza (H9N2),
ND (LaSota) and IB (M41 and Var2) Viral Vaccine**

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Abstract

we prepared formalin inactivated combined vaccine with montanide 71 adjuvant containing H9N2, Lasota, IB M41 and variant IB. we measured the immune response levels in SPF and commercial layer chicken vaccinated and booster vaccinated by 1ml of the prepared vaccine until 6 months after the booster vaccination using HI test for H9N2 and laSota and ELISA test for IBV, these testes were made periodically every week in the first two months after the first vaccination then monthly to the end of the rearing period. Challenge tests also were repeated three times for all viruses used in this vaccine (after month from the first vaccination, after two months and six months from the booster vaccination). The shedding titers were measured in the oropharyngeal swabs by real time PCR at 3, 5, 7 and 10 days post challenges. The histopathological examinations were done on trachea and spleen in NDV challenged birds and trachea and kidney in H9N2 challenged birds. The results of the serological tests revealed production of protective antibodies titer in the both chicken types till 6 months after the booster vaccination in the most of tests. Also the results of the all challenge tests revealed decreasing the shedding levels than the control +ve. In the histopathological examination, The control +ve sometimes were less severity than the vaccinated samples.

Key words: H9N2, NDV, IBV, inactivated vaccine, montanide 71, challenge.

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H9N2 AI and NDV shedding pattern in SPF and commercial layer vaccinated chicken with trivalent vaccine containing H9N2 AI, LaSota, classical M41 and var 2 IB viruses challenged at 1, 3 and 7 months post vaccination

Shedding pattern of classical and variant strain of IB challenge virus in SPF and commercial layer vaccinated chicken with

trivalent vaccine containing H9N2 AI, LaSota, classical M41 and var 2 IB viruses at 1, 3 and 7 months post vaccination

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