

DEVELOPMENT AND TESTING OF INACTIVATED VACCINE AGAINST SWINE ERYSIPELAS

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Summary. Selection of adjuvants is very important for producing vaccines against swine erysipelas. The objective of our study was to prepare the experimental vaccine against swine erysipelas using oil emulsion adjuvants - Emulsigen 75 and Emulsigen (MVP Laboratories Inc., USA), which in comparison with Freund's adjuvant and saponines are less allergic and harmful. For control the commercial vaccine against swine erysipelas produced with aluminum hydroxide as adjuvant was used. Twenty-one 2-3 month old pigs were divided randomly into 7 groups each of 3 pigs and vaccinated twice. Before and after vaccination the blood samples from the ear vein of experimental animals for antibody titres were taken. After vaccination all groups of piglets were infected with virulent erysipelas bacteria suspension (100 LD₅₀). The antibody titres reached their peak 28 days after the second vaccination and afterwards titres have shown tendency to decrease. The results from this study indicate that vaccine produced with 2% Emulsigen could be recommended for production of monovalent vaccine against erysipelas in pigs. Further, the results of antibody titres showed that efficacy of vaccine against erysipelas in pigs produced with Emulsigen corresponds to commercial vaccines against swine erysipelas.

Key words: pigs, erysipelas, adjuvant, inactivated vaccine, antibody titres.