Cairo University
Faculty of Veterinary Medicine

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Investigation into the Use of SeM Protein as Immunogenic Material against Equine Strangles Disease

A **thesis** presented by

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Under Supervision of

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Abstract

SeM protein extracts were prepared from locally isolated *S.equi* subspecies *equi*. Modification by further centrifugation of both the supernatant and sediment of the SeM acid extract was made. The resulting supernatants of both centrifugations were analyzed electrophoretically using SDS-PAGE, including SeM acid extract sediment (SeM1), SeM acid extract supernatant (SeM2), supernatant from centrifuged SeM1 (SeM3), and supernatant from centrifuged SeM2 (SeM4). Electrophoresis of SeM1 revealed the appearance of a band at MW 70.9 kDa, While SeM2 revealed the presence of 7 bands at MW of 105, 87.8, 70.9, 61.1, 44, 37.9 and 18.4 kDa. Five bands were detected in SeM3 at MW 70.9, 58.9, 37.2, 29.8 and 18.3 kDa, and SeM 4 showed four bands at MW of 72.0, 58.6, 29.8 and 18.0 kDa. Antibody titer was detected in the sera of rabbits immunized by SeM3 and SeM4 using indirect ELIZA.