Oviductal fluid was collected from cow oviducts. Obtained material was lyophilized and separated by affinity chromatography on DNA-cellulose. Proteins in non-binding and eluted fractions were identified electrophoretically, while those in the eluted fraction were further determined through application of the MALDI-TOF MS method. The complete oviductal fluid demonstrated antimicrobial activity. Furthermore, glycosidase activity of proteins isolated from oviductal fluid was also tested. A column has been designed and prepared in order to avoid the possibility of glycosidase activity leading to degradation. In czech.