ABSTRACT

To get the detection method whether there is pork protein in food as the main material of meat, the research was carried out to analyse pork protein, beef protein and mixtures pork and beef in raw meat and boild meat using SDS-PAGE (Sodium Dodecyl Sulfat-Polyacrylamide Gel). This eletrophoresis method has one of the method for determining protein quantitatively, comparatively, characterization, accurately and fast, which separating protein based on the molecule weight. With composition difference of protein which can result the separating in protein band with different molecule weight, so we can find the marker band of the protein.

The research revealed that raw beef and pork meet it can be found some protein band which can be considered as marker. The protein marker was considered to be pork protein marker if the protein band can be found in pork but can't be found in beef or vice versa. For the raw pork can find band marker in Rf 0.0885; 0.1435; 0.2960 and 0.6825 with the weight of the molecule in order 54.71 kD; 46.64 kD, 29.96 kD and 9.76 kD. While in beef it can be found protein band marker in Rf 0.0965 and 0.827 with the weight of the molecule 53.46 kD and 6.42 kD. For mixtures of pork and beef with the comparation of 50:50 %, did not found the difference band with can be told to be a marker. In the boild meat did not identified any of band by using SDS-PAGE electrophoresis because the protein has been denaturated.

Key words; pork protein, beef protein, sodium dodecyl sulfate-poliacrylamide gel (SDS-PAGE)