

The Polymorphism of Coagulase Gene as Searching Strain Variability of Staphylococcus aureus from Bovine Mastitis Cases

Abstrak :

Mastitis is an inflammation of the udder and is common in dairy herds which causing important economic losses. It cannot be eradicated but can be reduced to low levels by good management of dairy cows. Understanding to the epidemiology of Staphylococcus aureus (reservoirs, transmission pathways, and risk factors) has resulted in excellent control of this major mastitis pathogen in many herds. The experiment to be done to show the polymorphism of coagulase gene as searching for strain variability of Staphylococcus aureus from bovine mastitis cases. The first step of test was to prepare pure culture of Staphylococcus aureus. Milk samples were collected from mastitic cases at the afternoon milking time. Preparation of pure culture were confirmed by MS agar, hemolytic activity, catalase test and coagulase. From mastitic milk samples could be identified Staphylococcus aureus isolates by using criteria such as : Staphylococci are perfectly spherical cells about 1 micrometer in diameter and grow in clusters, β hemolysis, coagulase (+), catalase (+) and Gram (+). Determination of strains variability of Staphylococcus aureus isolates from milk of cows with mastitis in three dairy herds was done through approaching of encoding gene of coagulase. The result showed that there were three polymorphisms on coagulase gene of Staphylococcus aureus. The molecular size of polymorphisms were 680 bp, 740 bp and 850 bp.

Keyword :

Daftar Pustaka :

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