

CHARACTERIZATION AND ISOLATION OF *INSULINE-LIKE GROWTH FACTOR I (IGF-I) COMPLEX* OF SEMINAL PLASM OF THE DERIVATED ETTAWA GOATS

Anik Susiati

ABSTRACT

The aim of this research is to know that *Insuline-like Growth Factor I (IGF-I) Complex* were exist in seminal plasm of derivated Ettawa goats and to know the molecul weight of *Insuline-like Growth Factor I (IGF-I) Complex*. The isolat of protein will be used as bioactive material to repair and increasing the quality of spermatozoa. Seminal plasm has been isolated from the semen of the derivated Ettawa goats using cold centrifugation. Protein was purified from seminal plasm using absolute ethanol. Characterization of *IGF-I Complex* of seminal plasm using SDS PAGE 12% method. Followed by isolation using Electro Elution technic. Measuring of protein value using **Biuret method**. Observated parameters were protein bands and protein value. The result showed **that there are 7 protein bands** namely 150,29 kDa, 103,49 kDa, 76,16 kDa, 53,25 kDa, 35,38 kDa, 14,1 kDa and 11,5 kDa (respectively, the protein band with the 150,39 kDa molecul weight estimated as an *IGF-I Complex* of seminal plasm of the derivated Ettawa goats) and the protein concentration of *IGF-I Complex* of seminal plasm of the derivated Ettawa goats was 34666,67 µg/ml.

Keywords : seminal plasm, *IGF-I Complex*, derivated Ettawa goats, molecul weight, protein concentration