

## Protein Level of *Aedes Aegypti* Larvae

Andi Ernawati<sup>1,a,\*</sup>, Isra Wahid<sup>2,b</sup>, Moch. Hatta<sup>3,b</sup>, Syahribulan<sup>4,c</sup>

<sup>a</sup>Department of Medical laboratory technology, College of health sciences YAPIKA Makassar, Jl. Sultan Alauddin 98, South Sulawesi 90221 Indonesia. <sup>b</sup>Department of Biomedical, Microbiology, Faculty of Medical, Hasanuddin University Jl. Perintis kemerdekaan Km.10 Tamalanrea, South Sulawesi 90245 Indonesia. <sup>c</sup>Department of Biology, Faculty of Mathematics and Natural Science, Hasanuddin University, Jl. Perintis kemerdekaan Km.10 Tamalanrea, South Sulawesi 90245 Indonesia

\*rna.byexact@gmail.com, <sup>4</sup>syahribulan@unhas.ac.id

**Abstract.** This research is aimed to determine the protein content of *Aedes aegypti* larvae. In the research method, the following procedures are as follows; the larval protein extraction, the fractionation using the ammonium sulfate at saturation levels of 0-30% (S2), 30-40% (S3), 40-60% (S4), and 60-80% (S5), 80 -100% (S6), the dialysis using the buffer solution B and C, determination of protein by using the Lowry method, protein purification using ion-exchange chromatography, and protein molecular weight measured by the SDS page. The research results showed the protein content of *Ae. aegypti* larvae extract; the crude extract sample (S1) contains only carbonic anhydrase, the 0-30% fraction (S2) contains trypsin inhibitor, the 30-40% fraction (S3) contains a-lactalbumin, trypsin inhibitor, carbonic anhydrase and ovalbumin, fraction 40-60% (S4) contains a-lactalbumin, trypsin inhibitor, carbonic anhydrase, ovalbumin and albumin, fraction 60-80% (S5) without protein content, fraction 80-100% (S6) contains trypsin inhibitor.

**Keyword:** level, protein, *aedes aegypti*, larvae, SDS- page.