

BAB V

KESIMPULAN DAN SARAN

A. Kesimpulan

Berdasarkan penelitian experimental dan studi pustaka yang telah dilakukan peneliti menyimpulkan bahwa:

Pertama, dari penelitian experimental bakteri genus *Bacillus* sp mampu menghasilkan enzim fibrinolitik.

Kedua, dari studi pustaka bakteri genus *Bacillus* sp mampu melisiskan fibrin secara *in vitro*.

Ketiga, dari studi pustaka bakteri genus *Bacillus* sp memiliki perbedaan variasi kadar protein dalam melisiskan fibrin secara *in vitro*.

B. Saran

Peneliti menyarankan untuk dilakukan penelitian selanjutnya mengenai penetapan kadar protein enzim fibrinolitik bakteri *Bacillus altitudinis* sebagai agen fibrinolitik. Perlu dilakukan pemurnian enzim fibrinolitik dari *Bacillus altitudinis* lebih lanjut dengan parameter stabilitas pH dan pH optimal, stabilitas suhu dan suhu optimal, serta substrat yang sesuai.

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Lampiran 1. Rumus aktivitas enzim

Aktivitas Enzim :

$$AE = \left[\frac{(Asp - Abl)}{(Ast - Abl)} \right] \times fp \times \frac{1}{t}$$

Keterangan :

Aktivitas enzim : Jumlah enzim yang dapat menghasilkan satu μmol substrat permenit (U/ml).

Asp : Absorbansi Sample

Abl : Absorbansi blangko

Ast : Absorbansi Standar

fp : faktor pengenceran

t : Waktu inkubasi (menit)

Lampiran 2. Rumus aktivitas spesifik

$$\text{Aktivitas spesifik} = \frac{\text{Aktivitas total (U)}}{\text{Total protein (mg)}}$$

Atau

$$\text{Aktivitas spesifik} = \frac{\text{volume enzim (ml)} \times \text{aktivitas enzim (U/ml)}}{\text{volume enzim (ml)} \times \text{kadar protein (mg/ml)}}$$

Lampiran 3. Foto isolat bakteri *Bacillus altitudinis* pada media NA



Lampiran 4. Foto suspensi bakteri *Bacillus altitudinis*



Lampiran 5. Pengamatan suspensi bakteri pada standar kekeruhan *Mc Farland 0,5*



Lampiran 6. Foto alat penelitian

