

## **BAB VI PENUTUP**

### **6.1. Kesimpulan**

- a. Penggunaan konsentrasi tepung pepaya 6% (P<sub>3</sub>) secara nyata mampu meningkatkan ketahanan *Lactobacillus acidophilus* FNCC 0051 terimobil pada kondisi asam lambung, sedangkan jumlah sel kultur yang nyata dapat bertahan pada kondisi asam lambung adalah dari pengenceran terbesar (K<sub>3</sub>).
- b. Penurunan jumlah sel terimobil pada berbagai konsentrasi tepung pepaya dan jumlah sel kultur setelah kontak dengan asam lambung masing-masing adalah 1,39-1,64 log cfu/gram dan 0,55-2,06 log cfu/gram.
- c. Interaksi konsentrasi tepung pepaya dan jumlah sel kultur yang menghasilkan ketahanan *Lactobacillus acidophilus* FNCC 0051 terimobil pada garam empedu adalah yang menggunakan kultur pengenceran 100x (K<sub>3</sub>) dengan penurunan jumlah sel terimobil 0,08-1,32 log cfu/gram..
- d. Penggunaan tepung pepaya P<sub>1</sub>, P<sub>2</sub>, dan P<sub>3</sub> (1%,3%, dan 6%) serta jumlah sel K<sub>1</sub> dan K<sub>2</sub> (pekat dan pengenceran 10x) menghasilkan *beads* dengan jumlah *Lactobacillus acidophilus* FNCC 0051 terimobil lebih dari atau sama dengan 10<sup>6</sup> cfu/gram.

### **6.2. Saran**

Penelitian lebih lanjut tentang ketahanan sel imobil terhadap asam lambung dan garam empedu secara *in vivo* perlu dilakukan untuk mengetahui efek produk sinbiotik dalam saluran pencernaan.

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