BAB VI
KESIMPULAN DAN SARAN

6.1. Kesimpulan

a. Ketahanan *Lactobacillus acidophilus* FNCC 0051 terimobil pada kondisi asam lambung semakin menurun seiring dengan meningkatnya konsentrasi Na-alginat yang digunakan. Ketahanan sel tertinggi dengan jumlah sel hidup $2{,}6x10^8$ cfu/gram diperoleh dari penggunaan Na-alginat 1%.

b. Ketahanan *Lactobacillus acidophilus* FNCC 0051 terimobil pada kondisi asam lambung semakin meningkat seiring dengan meningkatnya konsentrasi tepung pepaya. Ketahanan sel tertinggi dengan jumlah sel hidup $2{,}2x10^8$ cfu/gram diperoleh dari penggunaan tepung pepaya 6%.

c. Interaksi konsentrasi Na-alginat dan tepung pepaya serta masing-masing faktor tersebut tidak berpengaruh nyata terhadap ketahanan *Lactobacillus acidophilus* FNCC 0051 terimobil pada kondisi garam empedu, namun sel bakteri bersifat tahan pada kondisi garam empedu setelah kontak dengan asam lambung yang ditunjukkan oleh jumlah sel hidup yang tetap sekitar 10^7-10^8 cfu/gram.

6.2. Saran

a. Perlu dilakukan pengujian tekstur *beads* setelah kontak dengan asam lambung dan garam empedu agar diperoleh informasi mengenai keadaan fisik *beads* setelah kontak dengan asam lambung dan garam empedu.

b. Perlu dilakukan pengujian lebih lanjut tentang ketahanan sel imobil secara *in vivo*.

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