BAB XII
KESIMPULAN

- Bahan baku:

  Bahan baku utama yang digunakan adalah ampas teh, molase, dan bibit SCOBY. Ampas teh memiliki senyawa bioaktif seperti katekin sebagai nutrisi dalam substrat fermentasi, sedangkan molase sebagai sumber karbon untuk konsorsium bakteri dan *yeast*. Selain itu, bibit SCOBY akan diregenerasi sendiri di laboratorium.

- Proses dan produk yang dihasilkan

  Proses pembuatan biji bioplastik terdiri atas 5 proses utama yaitu persiapan bahan baku membran SCOBY, fermentasi SCOBY Kombucha dengan substrat ampas teh dan molase, proses *treatment* membrane SCOBY, proses pencampuran dari pulp SCOBY, kitosan, dan gliserol, serta proses pengeringan dan pencetakan biji bioplastik.

- Lokasi

  Pabrik biji bioplastik akan didirikan di Kecamatan Terusan Nunyai, Kabupaten Lampung Tengah, Provinsi Lampung, Ibu Kota Bandar Lampung. Pemilihan lokasi tersebut mempertimbangkan faktor ketersediaan bahan baku, utilitas, ketersediaan tenaga kerja, serta kemungkinan untuk perluasan wilayah pabrik di masa yang akan datang.

- Ekonomi
  - Laju pengembalian modal atau *Rate of Return* (ROR) setelah pajak diatas bunga bank yaitu 6,80%
  - Laju pengembalian modal atau *Rate of Equity* (ROE) setelah pajak sebesar 16,75%
  - Waktu pengembalian modal atau *Pay Out Time* (POT) setelah pajak, yaitu 7 tahun 6 bulan.
  - Titik impas atau *Break Even Point* (BEP) yaitu 38,18%

- Utilitas:
  - Air sanitasi = 7,2 m^3/hari
    Air proses = 45.115,8266 m^3/hari
    Chilled water = 375.937,4529 m^3/hari
    Air umpan boiler = 494.011,7447 m^3/hari
  - Listrik : 148.718,0511/hari

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