

BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil penelitian karakterisasi lendir biji kemangi (*Ocimum basilicum*) dapat disimpulkan bahwa:

1. Karakteristik Fisika :
 - a. Lendir menunjukkan nilai *swelling index* $294,5563 \pm 188,1747\%$ yang menandakan kemampuan menyerap air sangat tinggi.
 - b. *Bulk density* 0,455 g/mL dan *tapped density* 0,578 g/mL menunjukkan struktur serbuk yang ringan, porous, dan mudah terdispersi.
 - c. Pada konsentrasi 1%, viskositas mencapai $3776,66 \pm 130,12$ cPs (pada 0,6 rpm) dan menunjukkan sifat pseudoplastik.
2. Karakteristik kimia :
 - a. Hasil skrining fitokimia menunjukkan hasil positif tanin dalam jumlah kecil.
 - b. Lendir biji kemangi memiliki pH $6,69 \pm 0,04$, menunjukkan kondisi mendekati netral.
 - c. Spektrum FTIR menunjukkan gugus O–H, C–H, C=O, dan C–O yang merupakan gugus khas polisakarida.
 - d. Hasil $^1\text{H-NMR}$ mengidentifikasi keberadaan polisakarida utama seperti *glucomannan* yang menjadi komponen penting musilago.

5.2 Saran

Berdasarkan hasil penelitian yang telah dilakukan, saran yang dapat diberikan untuk penelitian selanjutnya adalah:

1. Perlu dilakukan penelitian lanjutan dengan menggunakan pembanding musilago yang telah diketahui potensinya dalam formulasi sediaan farmasi, seperti tablet, gel, atau suspensi, untuk menguji potensi lendir biji kemangi sebagai eksipien.
2. Melakukan proses pemurnian lendir, seperti pemisahan lendir berulang atau metode pemisahan biji, untuk menghilangkan sisa senyawa tanin yang masih terdeteksi.

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