

BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Kesimpulan yang dapat diambil dari penelitian ini adalah:

1. Terdapat 6 isolat fungi endofit yang dapat diisolasi dari daun galing-galing (*Cayratia trifolia*L.) yaitu CI 1, CI 2, CI 3, CI 4, CI 5, dan CI 6.
2. Isolat yang memiliki aktivitas antibakteri terhadap *Staphylococcus aureus* ATCC 6538 adalah CI 1 sampai CI 6 dengan rasio DHP berturut-turut sebesar 1,22; 1,14; 1,42; 1,17; 1,54; dan 0.
3. CI 1 dapat menghasilkan enzim amilase, kasease, gelatinase, dan lipase, memiliki karakteristik berukuran koloni 8,78 cm (usia 5 hari), tipe koloninya koloni filamen, sifat permukaan seperti puyer dan warna permukaan koloni hijau kekuningan karakteristik mikroskopis memiliki konidiofor, konidia, fialid. CI 2 dapat menghasilkan enzim amilase, kasease, gelatinase, dan lipase, memiliki karakteristik berukuran koloni 8,23 cm (usia 5 hari), tipe koloninya koloni filamen, sifat permukaan seperti puyer dan warna permukaan koloni hijau muda, karakteristik mikroskopis memiliki konidiofor, konidia. CI 3 dapat menghasilkan enzim kasease, gelatinase, dan lipase, memiliki karakteristik berukuran koloni 8,75 cm (usia 5 hari), tipe koloninya koloni filamen, sifat permukaan seperti puyer dan warna permukaan koloni hijau tua, karakteristik mikroskopis memiliki sporangia, dan vesicle. CI 4 dapat menghasilkan enzim amilase, kasease, gelatinase, dan lipase, memiliki karakteristik berukuran koloni 7,94 cm (usia 5 hari), tipe koloninya koloni filamen, sifat permukaan seperti puyer dan warna

permukaan koloni abu-abu, karakteristik mikroskopis memiliki konidiofor, konidia, konidiaspora. CI 5 dapat menghasilkan enzim kasease, dan gelatinase, memiliki karakteristik berukuran koloni 8,65 cm (usia 5 hari), tipe koloninya koloni filamen, sifat permukaan seperti kapas tipis dan warna permukaan koloni putih dengan dasar coklat, karakteristik mikroskopis memiliki konidiofor, konidia. CI 6 dapat menghasilkan enzim amilase, memiliki karakteristik berukuran koloni 8,80 cm (usia 5 hari), tipe koloninya koloni filamen, sifat permukaan seperti kapas dan warna permukaan koloni putih dengan dasar hitam, karakteristik mikroskopis memiliki sporangio spora dan sporangiofor.

5.2 Saran

Dilakukan penelitian lebih lanjut pada Isolat fungi endofit yang tidak memiliki aktivitas antibakteri terhadap bakteri uji *Staphylococcus aureus* ATCC 6538 dapat diuji aktivitas antibakterinya dengan menggunakan bakteri lain dan dapat dilakukan skrining apakah menghasilkan senyawa lain selain senyawa antibakteri. Perlu dilakukan fermentasi, fraksinasi, dan skrining untuk mengetahui golongan senyawa yang berkhasiat dari masing-masing isolat fungi endofit tersebut. 59

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