BAB 5
KESIMPULAN DAN SARAN

5.1. Kesimpulan

Berdasarkan penelitian yang sudah dilakukan, diperoleh hasil sebagai berikut:

1. Jenis zat warna berpengaruh terhadap persentase *removal* pada proses biosorpsi zat warna sintetik menggunakan *Chlorella pyrenoidosa*. Semakin banyak gugus azo maka semakin kecil persentase *removal* biosorpsinya.
2. Derajat keasaman atau pH berpengaruh terhadap persentase *removal* pada proses biosorpsi zat warna sintetik menggunakan *Chlorella pyrenoidosa*. Pada zat warna merah persentase *removal* tertinggi terjadi pada pH 9 yaitu sebesar 23,7%, pada zat warna biru pada pH 5 yaitu sebesar 35,98%, dan pada zat warna kuning pada pH 5 yaitu sebesar 41,34%.

5.2. Saran

Untuk penelitian ini, beberapa saran yang dapat diberikan yaitu:

1. Medium pertumbuhan mikroalga walne diberikan vitamin atau diganti dengan medium lainnya yang lebih baik (seperti Bold Basal, BG-11, atau F/2 Guilard) untuk pertumbuhan *Chlorella pyrenoidosa* agar mikroalga dapat bertumbuh pesat.
2. Untuk penelitian selanjutnya dapat ditingkatkan jumlah mikroalga yang digunakan (lebih besar dari 1.200.000 sel/ml) untuk mempercepat proses biosorpsi dan meningkatkan persentase *removal*.
3. Untuk penelitian selanjutnya proses biosorpsi dapat dilakukan lebih dari 96 jam karena jumlah mikroalga dan persentase removal meningkat. sehingga dapat memperoleh persentase *removal* maksimum dan waktu optimum untuk proses biosorpsi zat warna sintetik.

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