

BAB V

KESIMPULAN DAN SARAN



5.1 Kesimpulan

1. Koagulan biji asam jawa (*Tamarindus indica*) dapat berperan sebagai koagulan karena mampu memberikan %penurunan konsentrasi zat warna terhadap air limbah sintetik *drimaren red*.
2. Koagulan biji asam jawa memberikan %penurunan konsentrasi tertinggi pada pH 4,5 dan dosis koagulan 3g/L dengan %penurunan konsentrasi zat warna sebesar 90,04%.
3. Penambahan konsentrasi zat warna memberikan %penurunan konsentrasi yang lebih baik dengan kondisi pH 7 dan dosis zat warna 20 ppm dan 30 ppm memberikan %penurunan secara berurutan 80,32 % dan 81,65 %.
4. Proses koagulasi menggunakan biji asam jawa lepas kulit memberikan hasil yang lebih baik dibandingkan dengan biji asam jawa menggunakan kulit dengan beda selisih %penurunan konsentrasi zat warna sekitar 3,8%.

5.2 Saran

1. Meningkatkan waktu perendaman agar mempermudah pengupasan biji asam jawa.
2. Meningkatkan variasi dosis koagulan agar dapat diketahui dosis yang dapat memberikan hasil yang lebih baik.
3. Menganalisa kembali kemampuan koagulan asam jawa dengan menggunakan kulit untuk mengetahui kemampuan kulit asam jawa dalam %penurunan konsentrasi zat warna.



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