

**BAB V**  
**KESIMPULAN**

1. Pelarut etanol yang menghasilkan kadar produk tanin yang paling tinggi adalah etanol 75% dengan kadar tanin sebesar 1,63% .
2. Waktu dan jumlah siklus ekstraksi yang menghasilkan kadar produk tanin paling tinggi adalah pada waktu 60 detik dan jumlah siklus ekstraksi 5 kali dengan kadar tanin sebesar 1,63%.
3. Rasio massa adsorben:volume limbah (b/v) yang memberikan persen penurunan kadar ion Cr(VI) paling tinggi adalah 0,03 gram:25 mL.
4. Persamaan kinetika adsorpsi yang cocok untuk adsorpsi ion Cr(VI) dalam limbah sintesis menggunakan *Tannin Based Adsorbent* (TBA) dari daun jambu biji adalah kinetika adsorpsi orde 2 semu dengan persamaan:

$$\frac{dq_t}{dt} = 3,775 \cdot (50,25 - q_t)^2 \text{ dengan } R^2 \text{ sebesar } 0,9557.$$

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