

## INTISARI

Penelitian yang berjudul Aplikasi Kombinasi Limbah Cair Industri Tempe Dan Urea Pada Pertumbuhan Dan Hasil selada (*Lactuca Sativa*). Telah dilakukan di lahan penelitian UMY pada bulan Agustus 2016 hingga September 2016. Tujuan penelitian ini, yaitu untuk mengetahui pengaruh penggunaan limbah cair industri tempe terhadap pertumbuhan tanaman selada (*lactuca sativa*) dan mendapatkan dosis yang tepat limbah cair rebusan kedelai untuk tanaman selada (*lactuca sativa*).

Penelitian ini dilakukan dengan metode eksperimental yang disusun dalam Rancangan Acak Lengkap (RAL) faktor tunggal, adapun perlakuannya terdiri dari ; N1 = ( 100 % N-urea + 0 % N- limbah cair tempe ), N2 = ( 75 % N- urea + 25 % N- limbah cair tempe ), N3 = ( 25 % N-urea + 75 % N- limbah cair tempe ), N4 = ( 0% N-urea + 100 % N-limbah cair tempe ). Terdapat 4 perlakuan, setiap perlakuan diulang 3 kali sehingga terdapat 12 unit percobaan. Parameter yang diamati meliputi pengamatan pertumbuhan vegetatif tanaman (tinggi tanaman dan jumlah daun ) dan pertumbuhan generatif ( bobot segar tajuk, bobot kering tajuk, bobot segar akar, bobot kering akar, panjang akar dan hasil tanaman ).

Hasil penelitian ini menunjukkan bahwa Aplikasi limbah cair industri tempe dan Urea memberikan pengaruh yang sama pada budidaya selada sehingga limbah cair industri tempe dapat menggantikan pupuk Urea pada budidaya selada dan Aplikasi kombinasi limbah cair industri tempe dan Urea dapat menyediakan kebutuhan N bagi budidaya selada.

**Kata kunci** : limbah cair tempe , Urea dan selada.

## **ABSTRACT**

*This research is entitled *The Application of Tempe Industrial Liquid Waste and Urea on the Lettuce (Lactuca Sativ) Growth and Results*. The research was done in UMY research field on August 2016 to September 2016. The research objective is to find out the influence of tempe industrial liquid waste toward Lettuce (Lactuca Sativ) Growth and to get the appropriate dose of the boiled soy liquid waste for lettuce (Lactuca Sativ).*

*This research was done using the experimental method arranged in Completely Randomized Design (RAL). The research was done using single factor design of the tempe industrial liquid waste concentration on lettuce. The treatments given are; N1= (100% N-urea+0%N – Tempe liquid waste), N2= (75%N – urea + 25% N - tempe liquid waste), N3= (25% N –urea + 75% N – tempe liquid waste), N4= (0% N –urea + 100% N – tempe liquid waste). There are 4 treatments. Each treatment was repeated three times that there were 12 experimental units. Each treatment consisting of 5 plants poly bags that there were 60 lettuce experimental units from 4 treatments.*

*The parameter observed covers the observation of plants vegetative growth (the plants height and leaves number) and the generative growth (fresh weight crown, dry weight crown, root dry weight, root length, and yield ).*

*The research results showed that *The Application of Tempe Industrial Liquid Waste and Urea* gives the same influence on the lettuce cultivation that tempe industrial liquid waste can replace urea in lettuce cultivation. Meanwhile, the application of combined tempe industrial liquid waste and urea can provide the need of N in lettuce cultivation.*

*Keywords: Tempe liquid waste, Urea, and lettuce*