ABSTRAK

Penelitian ini bertujuan untuk mengetahui Fungsi *Vacuum Dryer* apakah masih bekerja dengan maksimal dilihat dari penurunan kadar air, dengan menggunakan Metode Paired Sample T-test, model penelitian sebelum dan sesudah ditandai adanya perbedaan rata-rata sebelum dan rata-rata sesudah di berikan perlakuan. Dari hasil analisa fungsi *vacuum dryer* sendiri masi bekerja dengan sangat baik dan efisien dalam menurunkan kadar air dari CPO (*crude palm oil*), dengan nilai kadar air dari setiap percobaan mendominasi dibawah 0,20% yang tidak melewati ambang batas kadar air yang diterima. Disamping itu pula adanya perbedaan rata-rata antara persentase kadar air sebelum dan setelah melalui alat *vacuum dryer,* jika dilihat dari nilai t hitung diperoleh sebesar 22,318, dimana nilai t tabel dapat dilihat dari df bernilai 11 maka, t tabel sebesar 2,20099. Sehingga dapat disimpulkan t hitung > t tabel yang berarti Ha diterima. Jumlah sampel yang digunakan sama banyak saat sebelum dan sesudah masuk kedalam alat.

Kata Kunci: *Vacuum Dryer,* Paired Sample T-test, kadar air, fungsi

ABSTRACT

This research aims to determine whether the fungction of the Vacuum Dryer is still working optimally as seen from the decrease in water content, using the Paired Sample T-test method, the before and after research model is characterized by differences in the average before and the average after being given treatment. From the fungtion analysis results, the vacuum dryer itself still works very well and efficiently in reducing the water content of CPO (crude palm oil), with the water content value from each experiment dominating below 0.20% which does not exceed the accepted water content threshold. Apart from that, there is also an average difference between the percentage of water content before and after going through the vacuum dryer, if seen from the calculated t value it is obtained at 22.318, where the t table value can be seen from df which is 11, so the t table is 2.20099. So it can be concluded that t count > t table which means Ha is accepted. The same number of samples used before and after entering the tool.

***Keywords**: Vacuum Dryer, Paired Sample T-test, water content, fungction*