

## ABSTRAK

Biji alpukat mempunyai kadar karbohidrat yang cukup tinggi, sehingga dapat diekstrak senyawa patinya untuk bahan dasar bioplastik. Tujuan penelitian ini adalah untuk mengetahui karakteristik bioplastik dengan penambahan sorbitol dan mengetahui hasil uji biodegradasi bioplastik. Bioplastik dari biji alpukat dibuat dengan penambahan *plasticizer* sorbitol dengan konsentrasi 30% b/b pati. Karakteristik bioplastik ditentukan berdasarkan hasil uji tarik. Hasil penelitian menunjukkan bahwa bioplastik yang dihasilkan memiliki ketebalan 0,249 mm, nilai daya regang 28,1357 MPa dan nilai perpanjangan putus 2,9945%. Sedangkan uji biodegradasi dilakukan dengan mengubur film dalam wadah yang berisi tanah dengan waktu penguburan 10 hari. Persen kehilangan berat setelah uji biodegradasi adalah 64,86%.

**Kata kunci:** biji alpukat, bioplastik, pati, sorbitol



## **ABSTRACT**

*Avocado seed have a high enough carbohydrate content, it can be extracted the starch compound as the basic materials of bioplastics. This research's purpose was to know the effect of sorbitol addition toward the characteristics of bioplastic and to know biodegradation test results of bioplastic. Bioplastic film was made by starch from avocado seed in concentration 30% w/w and sorbitol as plasticizer. Bioplastic characteristics are determined based on tensile test results. The result showed that bioplastic has a thickness of 0.249 mm, 28.1357 MPa of tensile strength and 2.9945% of elongation at break. Meanwhile, biodegradation test was done by burying the film in a solid-filled container during 10 days burial time. The percentage of film's weight loss after degradation test was 64.86%.*

**Keywords:** *avocado seed, bioplastic, starch, sorbitol*

