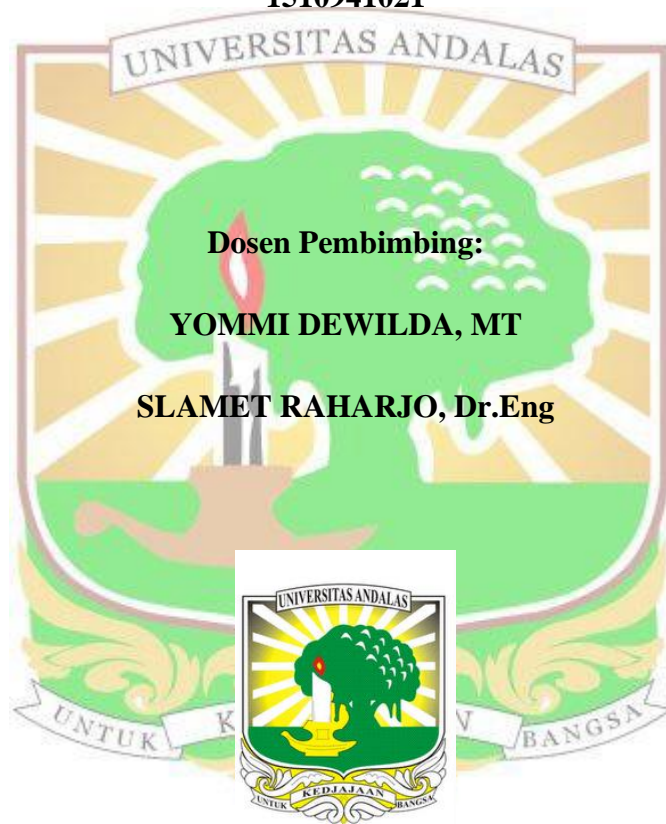


**STUDI TIMBULAN, KOMPOSISI, KARAKTERISTIK, DAN  
POTENSI DAUR ULANG SAMPAH DOMESTIK  
KOTA PADANG**

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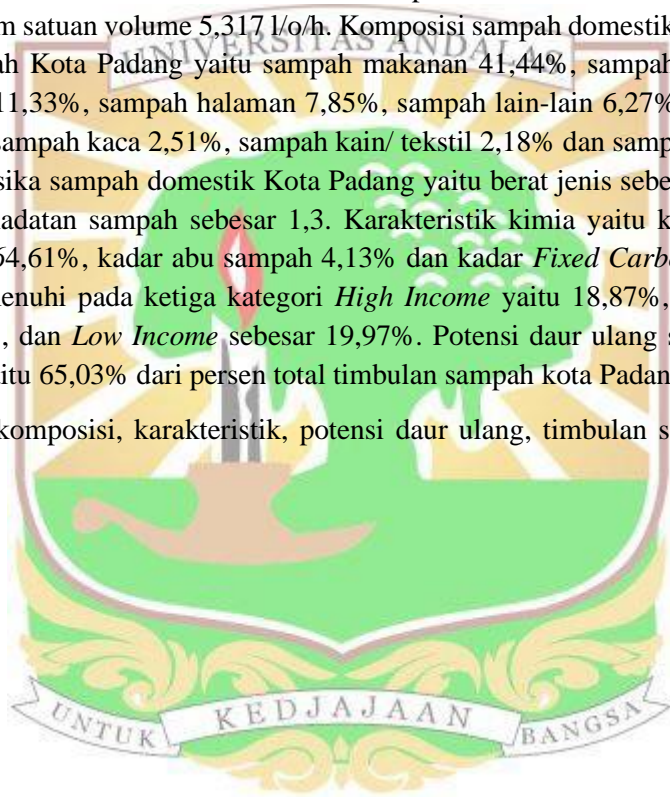
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## ABSTRAK

Studi Timbulan, Komposisi, Karakteristik, Dan Potensi Daur Ulang Sampah Domestik di Kota Padang dilakukan untuk memperbaharui data timbulan, komposisi, karakteristik, dan potensi daur ulang sampah domestik di Kota Padang yang dapat digunakan sebagai acuan dalam evaluasi dan pengembangan sistem pengelolaan sampah Kota Padang. Penelitian ini bertujuan untuk menganalisis timbulan, komposisi, karakteristik dan potensi daur ulang sampah yang berguna bagi perencanaan dan pengelolaan sampah di Kota Padang. Sampling timbulan dan jumlah sampling berdasarkan pada SNI 19-3964-1994 dan kegiatan sampling dilakukan selama delapan hari secara berturut-turut. Hasil penelitian timbulan sampah di Kota Padang pada tahun 2022 untuk timbulan sampah domestik dalam satuan berat 0,704 kg/o/h dan dalam satuan volume 5,317 l/o/h. Komposisi sampah domestik yang diukur dari timbulan sampah Kota Padang yaitu sampah makanan 41,44%, sampah plastik 21,56%, sampah kertas 11,33%, sampah halaman 7,85%, sampah lain-lain 6,27%, sampah logam/kaleng 5,46%, sampah kaca 2,51%, sampah kain/tekstil 2,18% dan sampah Covid-19 1%. Karakteristik fisika sampah domestik Kota Padang yaitu berat jenis sebesar 0,132 kg/liter dan faktor pemadatan sampah sebesar 1,3. Karakteristik kimia yaitu kadar air 29,87%, kadar *Volatile* 64,61%, kadar abu sampah 4,13% dan kadar *Fixed Carbon* 1,39%. Rasio C/N yang memenuhi pada ketiga kategori *High Income* yaitu 18,87%, *Medium Income* sebesar 19,73%, dan *Low Income* sebesar 19,97%. Potensi daur ulang sampah domestik Kota Padang yaitu 65,03% dari persen total timbulan sampah kota Padang

**Kata Kunci** : komposisi, karakteristik, potensi daur ulang, timbulan sampah domestik, Kota Padang



## ABSTRACT

*The study of the generation, composition, characteristics, and potential of domestic waste recycling in Padang city was conducted to update the data on the generation, composition, characteristics, and recycling potential of domestic waste Padang city which can be used as a reference in the evaluation and development of the waste management system Padang city. This study aims to analyze the generation, composition, characteristics and potential of waste recycling which are useful for planning and managing waste in Padang city. Sampling of the waste generation and number of sampling were based on SNI 19-3964-1994 and the sampling activity was carried out for eight consecutive days. The results of the research on waste generation in Padang City in 2022 for domestic waste generation in units of weight are 0.704 kg/o/h and 5.317 l/o/h in volume units. The composition of domestic waste measured from the waste generation in Padang City is 41.44% food waste, 21.56% plastic waste, 11.33% paper waste, 7.85% yard waste, 6.27% other waste, 5.46% metal/can waste, 2.51% glass waste, 2.18% cloth/textile waste and 1% Covid-19 waste. The physical characteristics of domestic waste in Padang City 0.132 kg/liter in density and the compaction factor of 1.3. The chemical characteristics are 29.87% water content, 64.61% volatile content, 4.13% waste ash content and 1.39% Fixed Carbon content. The C/N ratio that meets the High Income category is 18.87%, Medium Income is 19.73%, and Low Income is 19.97%. The potential for recycling domestic waste in Padang is 65.03 percent of the total waste generation in Padang*

**Keywords:** *composition, characteristics, recycling potential, domestic waste generation, Padang City*

