

Bidang Unggulan : Energi Terbarukan
Kode>Nama Rumpun Ilmu : 426/ Arsitektur

**LAPORAN AKHIR
HIBAH DOKTOR NON LEKTOR KEPALA**



**UNJUK KINERJA TAMAN VERTIKAL TERHADAP PENURUNAN
SUHU UDARA PADA LINGKUNGAN TERMAL KAMPUNG KOTA**

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Dibiayai oleh:
Lembaga Penelitian dan Pengabdian kepada Masyarakat
Melalui Dana Penerimaan Negara Bukan Pajak (PNBP) Universitas Brawijaya
Sesuai dengan Daftar Isian Pelaksanaan Anggaran (DIPA) Fakultas Teknik UB
Nomor : 5/UN10.F07/PN/2020

**BADAN PENELITIAN DAN PENGABDIAN KEPADA MASYARAKAT
FAKULTAS TEKNIK
UNIVERSITAS BRAWIJAYA
2020**

HALAMAN PENGESAHAN

Judul : UNJUK KINERJA TAMAN VERTIKAL TERHADAP
PENURUNAN SUHU UDARA PADA LINGKUNGAN
TERMAL KAMPUNG KOTA

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Tahun Pelaksanaan : Tahun ke I dari rencana I tahun

Biaya Tahun Berjalan : Rp 25,000,000.00

Biaya Keseluruhan : Rp 25,000,000.00


Mengetahui,
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RINGKASAN

Strategi pendinginan alami merupakan kriteria utama untuk mencapai lingkungan termal yang sesuai dengan iklim suatu kota. Peningkatan suhu udara di luar bangunan akan meningkatkan penggunaan penghawaan buatan yang pada akhirnya akan meningkatkan kebutuhan energi. Oleh karena itu strategi penambahan lahan hijau di area perkotaan dengan taman vertikal sebagai pencipta iklim mikro bangunan penting untuk dikaji. Kajian ini merupakan pengembangan penelitian sebelumnya terutama tentang taman vertikal oleh Nugroho (2012, 2013, 2019). Penelitian ini akan menilai unjuk kinerja taman vertikal dalam penurunan suhu udara pada lingkungan termal kampung kota di Malang. Penelitian dilakukan dengan teknik pengukuran lapangan dan inovasi taman vertikal yang terbagi dalam dua tahapan utama yaitu pengukuran suhu udara pada area koridor kampung yang telah diterapkan ragam taman vertikal serta rekayasa taman vertikal menggunakan simulasi envimet untuk mengetahui konfigurasi dan jenis tanaman yang tepat dalam menurunkan suhu udara. Studi kasus dilakukan di Kampung Glintung RW 23, Kelurahan Purwantoro, Kecamatan Blimbing, Kota Malang.

Kata kunci : taman vertikal; penurunan suhu udara; lingkungan termal; koridor kampung kota

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