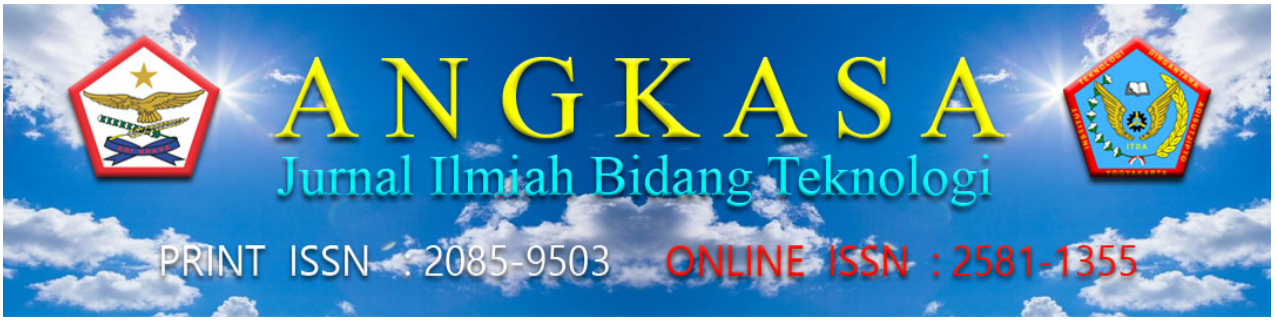

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Kinerja mesin pengering dan pengaruh kipas terhadap lamanya waktu pengeringan Jamur Kuping

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ABSTRAK

Proses pengeringan jamur kuping masih memiliki persoalan terutama di musim hujan. Diperlukan inovasi baru terhadap mesin pengering jamur kuping untuk menggantikan peranan matahari. Penelitian ini selain bertujuan untuk mendapatkan inovasi baru mesin pengering jamur kuping, juga untuk (1) mengetahui besarnya kinerja atau COP mesin pengering jamur kuping dan (2) mengetahui pengaruh adanya kipas di ruang pengering terhadap lamanya waktu pengeringan jamur kuping. Penelitian dilakukan secara eksperimen, dengan mempergunakan massa awal jamur kuping basah sebanyak 12 kg. Variasi penelitian dilakukan terhadap ada dan tidak adanya kipas di dalam ruang pengering. Mesin pengering dibuat dengan melibatkan mesin yang bekerja dengan siklus kompresi-uap. Total energi listrik yang diperlukan sebesar 806 watt. Selain diperolehnya teknologi tepat guna berupa mesin pengering jamur kuping, penelitian ini memberikan hasil: (1) mesin pengering memiliki COP sebesar 12,21 (2) bila ada satu kipas di dalam ruang pengering, waktu yang dibutuhkan untuk mengeringkan jamur kuping selama 715 menit (11 jam 55 menit), dan bila tidak ada kipas, selama 955 menit (15 jam 55 menit).

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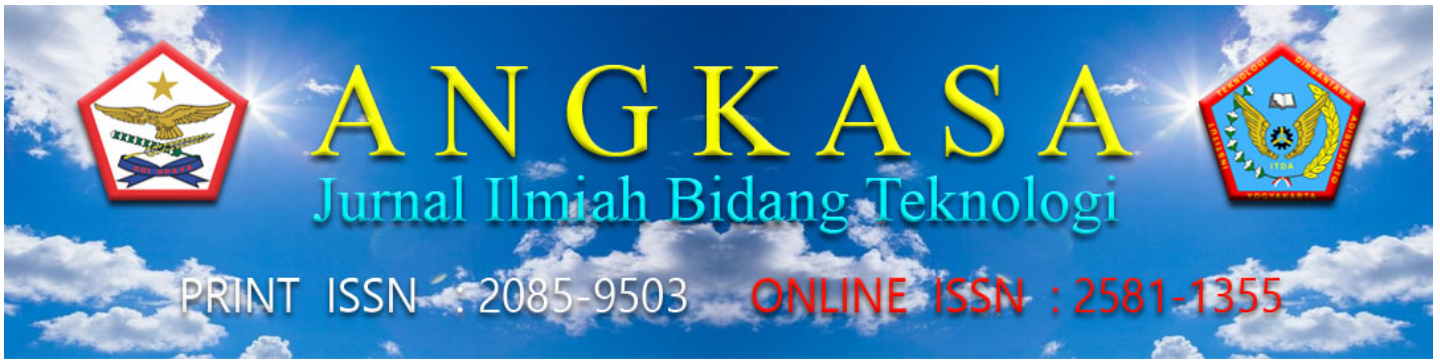
1. PENGANTAR

Berdasarkan data dari *United States Department of Agriculture*, jamur kuping memiliki beberapa kandungan vitamin dan mineral. Macam vitamin yang terkandung dalam jamur kuping antara lain, vitamin B_1, B_2, B_3, B_6, B_{12}, B_9 atau asam folat, dan vitamin C, sedangkan mineral yang terkandung dalam jamur kuping antara lain seperti kalsium, zat besi, magnesium, fosfor, kalium, sodium, dan *zinc* [1]. Jamur kuping merupakan bahan makanan yang dapat diolah menjadi berbagai masakan yang menyehatkan. Jamur kuping mempunyai banyak manfaat untuk kesehatan, seperti yang diungkapkan oleh Mutia Isni Rahayu, untuk (a) melancarkan pencernaan (b) meringankan gejala wasir (c) menurunkan berat badan (d) mencegah anemia (d) melancarkan sirkulasi darah (e) konsumsi penderita diabetes (f) menurunkan kadar kolesterol dan menurunkan risiko penyakit kardiovaskular [1].

Salah satu tujuan utama proses pengeringan adalah untuk mengawetkan bahan makanan, demikian juga tujuan pengeringan untuk jamur kuping. Jamur kuping akan rusak, jika jamur kuping tidak dikeringkan. Kadar air di dalam jamur kuping sangat tinggi, sekitar 89,1%. Tingginya kadar-air ini memungkinkan terjadinya reaksi-reaksi kimia dan aktivitas mikroorganisme sehingga mudah mengalami kerusakan. Tujuan pengeringan jamur, selain untuk mengawetkan jamur, mempertahankan mutu jamur, juga untuk menaikkan harga jamur. Dengan melalui proses pengeringan nilai jual jamur meningkat beberapa kali.

Proses pengeringan jamur kuping di masyarakat petani jamur kuping pada musim hujan masih merupakan masalah. Selama ini, pengeringan jamur kuping dilakukan secara konvensional dengan



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