



**PENENTUAN KADAR AIR KESETIMBANGAN (EMC) PADA
DAUN NILAM DENGAN MENGGUNAKAN MODEL
PERSAMAAN OSWIN, SMITH, DAN LINIER ISOTHERM**

SKRIPSI

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ABSTRACT

The research on **Equilibrium Moisture Content (EMC) Determination of the Nilan leaves by using Oswin, Smith, and Linear Isotherm Equation Model** was aimed at knowing The Equilibrium Moisture Content of the Nilam Leaves in the condition of certain humidity with various room temperature using the Oswin, Smith, and Linear Isotherm equation model. In principle, the water content of agricultural products will be balance due to air humidity around it when it is placed in open environment. The Equilibrium Moisture Content was really needed in drying and storage planning. This will be useful to estimate the increasing or reducing the water content condition and certain relative humidity. The measurement method of balance water content of nilam leaves using static model was obtained from the system, surrounding material and air which was static. Based on the research carried out, it was known that The Equilibrium Moisture Content was the content of available water when the vapour pressure of product was equal to its environmental vapour pressure, which depend on the temperature, relative humidity (RH), air pressure, material type, and the equation method that were used. Results of the research and Validity Test showed that Oswin, Smith, and Linear Isotherm equation model can be used in the Equilibrium Moisture Content of the Nilam leaves in various temperature and humidity.

DAFTAR ISI

	Halaman
HALAMAN JUDUL	ii
HALAMAN PERSEMBAHAN	iii
HALAMAN MOTTO	v
HALAMAN PERNYATAAN	vi
HALAMAN PEMBIMBING	vii
HALAMAN PENGESAHAN	viii
RINGKASAN	ix
PRAKATA	x
DAFTAR ISI	xii
DAFTAR TABEL	xiv
DAFTAR GAMBAR	xv
DAFTAR LAMPIRAN	xvii
BAB 1. PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Tujuan Penelitian	3
1.3 Manfaat Penelitian	3
BAB 2. TINJAUAN PUSTAKA	4
2.1 Tanaman Nilam Sebagai Penghasil Minyak Atsiri	4
2.2 Asal-Usul Tanaman Nilam	4
2.3 Taksonomi dan Morfologi Tanaman Nilam	5
2.4 Jenis Nilam	6
2.5 Teknik Budidaya Tanaman Nilam	7
2.5.1 Pembibitan	7
2.5.2 Cara Tanam	8
2.5.3 Pemeliharaan Tanaman	8
2.5.4 Pemupukan	9
2.6 Minyak Nilam	9

2.7	Mutu Minyak Nilam	10
2.8	Pengeringan	11
2.9	Kandungan Air Bahan	12
2.10	Kadar Air Keseimbangan	13
2.11	Kurva Isoterme Sorpsi Lembab	15
BAB 3.	METODOLOGI PENELITIAN	17
3.1	Tempat dan Waktu Penelitian	17
3.2	Bahan dan Alat Penelitian	17
3.2.1	Bahan	17
3.2.2	Alat	17
3.3	Pendekatan Teori	17
3.4	Pelaksanaan Penelitian	19
3.5	Analisis Data	19
3.6	Uji Validitas Model	21
BAB 4.	HASIL DAN PEMBAHASAN	22
4.1	Kadar Air Setimbang Observasi	22
4.2	Isotherm Sorpsi Lembab	23
4.3	Estimasi Konstanta A dan B	25
4.4	Pemodelan Karakteristik Pengeringan Daun Nilam ...	35
4.5	Kadar Air Keseimbangan Prediksi	36
4.6	Validasi Model	40
BAB 5.	KESIMPULAN DAN SARAN	43
5.1	Kesimpulan	43
5.2	Saran	44
	DAFTAR PUSTAKA	45
	LAMPIRAN	46