

DAFTAR PUSTAKA

- Ahmad Wisnu Prasetyo, Widayat, M. S. K. T. S. U. (2024). Analisis Efisiensi Eksergi Water Tube Boiler Pada Unit Penyediaan Steam di Salah Satu Plant Gas Processing Aceh , Indonesia Exergy Efficiency Analysis of Water Tube Boiler in the Steam Supply Unit at a Plant Gas Processing in Aceh , Indonesia. 21(3), 209–219.
- Aisah, S., Mursalim, M., & Samsuar, S. (2021). The Effect of Thickness and Reversal Frequency of Seaweed *Gracilaria* sp Drying. *Jurnal Agritechno*, 14(01), 42–50. <https://doi.org/10.20956/at.v14i1.389>
- Aksoy, A., Karasu, S., Akcicek, A., & Kayacan, S. (2019). Effects of different drying methods on drying kinetics, microstructure, color, and the rehydration ratio of minced meat. *Foods*, 8(6). <https://doi.org/10.3390/foods8060216>
- Ampah, J., Dzisi, K. A., Addo, A., & Bart-Plange, A. (2022). Drying Kinetics and Chemical Properties of Mango. *International Journal of Food Science*, 2022. <https://doi.org/10.1155/2022/6243228>
- Anwar, C., Kemalawaty, M., Pengerangan, S., & Jalar, V. U. (2019). MENGENAL JENIS VARIETAS DAN SUHU PENGERINGAN Physicochemical Properties of Sweet Potato Starches by Studying Their Varieties and Drying Temperatures. 20(1), 33–44.
- Auliyaa Raaf, Farid Mulana, Yanna Syamsuddin, Nanda Suriaini, M. D. S. (2024). Pemodelan kinetika pengeringan buah amla (Indian gooseberry). *Agrointek : Jurnal Teknologi Industri Pertanian*, 18(4), 861–870. <https://doi.org/10.21107/agrointek.v18i4.19802>
- Aysel Arslan, Yurtsever Soysal, M. K. (2020). Mathematical Modeling , Moisture Diffusion and Color Quality in Intermittent Microwave Drying of Organic and Conventional Sweet Red Peppers. in 2018, 393–407.

- Bambang Sigit Amanto, Godras jati Manuhara, R. R. P. (2015). KINETIKA PENGERINGAN CHIPS SUKUN (*Artocarpus communis*) DALAM PEMBUATAN TEPUNG SUKUN TERMODIFIKASI DENGAN ASAM LAKTAT MENGGUNAKAN CABINET DRYER. *Jurnal Teknolohi Hasil Pertanian*, VIII(1).
- Basso, A. N. S., Erdem, T., & Öztekin, S. (2025). Analysis of Drying Kinetics and Mathematical Modelling of Peanut Pods using Sunlight, Hot Air, and Microwaves Drying Processes. *Turkish Journal of Agriculture - Food Science and Technology*, 13(2), 368–375. <https://doi.org/10.24925/turjaf.v13i2.368-375.7192>
- Beigi, M. (2017). Mathematical modelling and determination of mass transfer characteristics of celeriac slices under vacuum drying. *Periodica Polytechnica Chemical Engineering*, 61(2), 109–116. <https://doi.org/10.3311/PPch.9271>
- Caroko, N. (2025). KAJI EKSPERIMENTAL PENGERINGAN PADI (*Oryza sativa*) MENGGUNAKAN OVEN MICROWAVE PADA TEMPERATUR 60°C, 70°C, 80°C, 90°C, 100°C. *Inovasi Teknik Kimia*, 10(2), 80–85.
- Chaniago, R., Lamusu, D., & Samaduri, L. (2019). KOMBINASI TEPUNG TERIGU DAN TEPUNG TAPIOKA TERHADAP DAYA KEMBANG DAN SIFAT ORGANOLEPTIK KERUPUK TERUBUK (*Saccharum edule Hasskarl*). *Jurnal Pengolahan Pangan*, 4(1), 1–8. <https://doi.org/10.31970/pangan.v4i1.20>
- Chengjie Li, Bin Li, J. H. and C. L. (2020). applied sciences Energy and Exergy Analyses of a Combined Infrared. <https://doi.org/https://doi.org/10.3390/app10186289>
- Darvishi, H., Zarein, M., & Farhudi, Z. (2016). Energetic and exergetic performance analysis and modeling of drying kinetics of kiwi slices. *Journal of Food Science and Technology*, 53(5), 2317–2333. <https://doi.org/10.1007/s13197-016-2199-7>
- Desta Dugassa Fufa, Tilahun Bekele, Aynadis Tamene, G. B. (2025). Drying

kinetic models, thermodynamics, physicochemical qualities, and bioactive compounds of avocado (*Persea americana* Mill. Hass variety) seeds dried using various drying methods. *Heliyon*, 11(1), e41058. <https://doi.org/10.1016/j.heliyon.2024.e41058>

Devi Safrina, Prambayu Brenda Herera, E. S. (2021). MODEL KINETIKA PENGERINGAN, KADAR SARI DAN KADAR ABU SIMPLISIA TIMI (*Thymus vulgaris* L.) DENGAN BEBERAPA METODE PENGERINGAN MANUAL DAN OVEN. *Agrointek*, 15(1), 186–195.

Dwi, E., Faridah, A., Teknik, F., Padang, U. N., & Technique, G. (2019). PENGEMBANGAN PRODUK SALA LAUAKDENGAN TEKNIK GELATINISASI. 8(2), 259–267.

Eli Trisnowati, Desika Rosiana Putri, Sabilla Safa Annisa Qurrota, Filda Khoirun Nikmah, & Danysa Mulyaningrum. (2023). Analisis Konsep Termodinamika pada Produksi Kerupuk Sebagai Bentuk Kearifan Lokal di Magelang Jawa Tengah. *JURNAL PENDIDIKAN MIPA*, 13(1), 268–273. <https://doi.org/10.37630/jpm.v13i1.795>

Endang Supraptiah, Aisyah Suci Ningsih, Z. (2019). OPTIMASI TEMPERATUR DAN WAKTU PENGERINGAN MI KERING YANG BERBAHAN BAKU TEPUNG JAGUNG DAN TEPUNG TERIGU TEMPERATURE. 10(02), 42–47.

Fachri Ibrahm Nasution, Arief Fazlul Rahman, Widya Laila, Riri Nasirly, F. A. (2025). Pemodelan karakteristik pengeringan pada proses pengeringan nanas (*ananas comosus*). 8(1), 1371–1377.

Fadhilatunnur, H., Murtadho, Z., Muhandri, T., Pertanian, F. T., Food, S. A., & Science, A. (2022). Pengeringan Cabai Merah (*Capsicum annum* L.) dengan Kombinasi Oven Microwave dan Kipas Angin. 9(1), 26–35. <https://doi.org/10.29244/jmpi.2022.9.1.26>

GhbashloA, M., Kianmehr, M. H., Khani, S., & Ghasemi, M. (2009). Mathematical modelling of thin-layer drying of carrot. 313–317.

- Haryati, H., Hawa, L. C., & Hendrawan, Y. (2025). KINETIKA PENGERINGAN VAKUM DAN KARAKTERISTIK FISIKOKIMIA PADA BERBAGAI JENIS IRISAN MANGGA (*Mangifera indica* L.). *Jurnal Teknologi Pertanian*, 26(3), 239–256. <https://doi.org/10.21776/ub.jtp.2025.026.03.4>
- Hermanuadi, D., Ratna Dwita, D., Ridwan, M., Alam, N., Wijdan, M. A., Pangan, T. R., Pertanian, T., & Jember, P. N. (2023). Pemodelan Matematis Kinetika Pengeringan Lapis Tipis Kunyit Dengan Microwave Pada Berbagai Level Energi Mathematical Modeling of Thin Layer Drying Kinetics of Turmeric with Microwave at Various Energy Levels. *The First National Conference On Innovative Agriculture*, November 2023, 98–109.
- Irfan, A. M., Lestari, N., Arimansyah, A., & Rasyid, A. R. (2021). Kinetika Pengeringan Cabai dengan Perlakuan Blansing Suhu Rendah-Waktu Lama. *AGRITEKNO: Jurnal Teknologi Pertanian*, 10(1), 24–35. <https://doi.org/10.30598/jagritekno.2021.10.1.24>
- İzli, N., & Polat, A. (2020). Intermittent microwave drying of apple slices: Drying kinetics, modeling, rehydration ratio and effective moisture diffusivity. *Tarım Bilimleri Dergisi*, 26(1), 32–41. <https://doi.org/10.15832/ankutbd.464715>
- Joardder, M. U. H., & Karim, M. A. (2025). Toward Uniform Microwave Heating in Food Drying: Principles, Technologies, and Emerging Trends. *Food Engineering Reviews*, 17(4), 946–965. <https://doi.org/10.1007/s12393-025-09426-5>
- Kim, S. H., Tanaka, F., & Tanaka, F. (2021). Drying kinetics and determination of effective moisture diffusivity and activation energy in cucumber pericarp tissues using thin-layer drying models. *Food Science and Technology Research*, 27(2), 181–192. <https://doi.org/10.3136/FSTR.27.181>
- Kipcak, A. S., & Doymaz, I. (2020). Mathematical Modeling and Drying Characteristics Investigation of Black Mulberry Dried by Microwave Method Mathematical Modeling and Drying Characteristics Investigation of Black Mulberry Dried by Microwave Method. *International Journal of Fruit Science*,

00(00), 1–12. <https://doi.org/10.1080/15538362.2020.1782805>

- Koswara Sutrisno. (2009). Pengolahan aneka kerupuk. Ebookpangan.Com, 1–31.
- Krisna Evania, M., Ananingsih, V. K., & Soedarini, B. (2024). Kajian Pustaka Optimasi Kondisi Proses Berbagai Metode Pengeringan Pada Rimpang (Jahe, Kunyit, dan Temulawak). *Innovative: Journal Of Social Science Research*, 4(1), 5483–5496. <https://doi.org/10.31004/innovative.v4i1.8474>
- Kusumaningrum, A., Prasetyo, D. J., & Novita, E. R. (2019). Modelling the drying characteristics of the traditional Indonesian crackers " kerupuk ". *Research in Agricultural Engineering*, 65(4), 137–144. <https://doi.org/10.17221/27/2019-RAE>
- Leviana, W. (2017). Pengaruh Suhu Terhadap Kadar Air Dan Aktivitas Air Dalam Bahan Pada Kunyit (Curcuma Longa) Dengan Alat Pengering Electrical Oven. 13(2), 37–44.
- Manalu, L. P., & Tambunan, A. H. (2016). Analisis eksergi pengeringan irisan temulawak. 36(1), 96–103.
- Maskan, M. (2001). Drying, shrinkage and rehydration characteristics of kiwifruits during hot air and microwave drying. *Journal of Food Engineering*, 48(2), 177–182. [https://doi.org/10.1016/S0260-8774\(00\)00155-2](https://doi.org/10.1016/S0260-8774(00)00155-2)
- Minaei, S., Motevali, A., Najafi, G., & Seyedi, S. R. M. (2011). Influence of drying methods on activation energy, effective moisture diffusion and drying rate of pomegranate arils (*Punica Granatum*). *Australian Journal of Crop Science*, 6(4), 584–591.
- Nurfitriyani, A., , Meilya Suzan Triyastuti^{1*}, L. M. S., Wahidi, B. R., & Iman Mukhaimin. (2024). Perhitungan Kadar Air, Rendemen dan Uji Organoleptik pada Ikan Asin. *Media Teknologi Hasil Perikanan*, 45–55. <https://doi.org/10.35800/mthp.12.1.2024.53300>
- Nurmuliana, E., Jamaluddin, & Mustarin, A. (2022). Mathematical Model of Thin Layer Drying The Fruit Mahkota Dewa (*Phaleria macrocarpa*). *Jurnal*

Pendidikan Teknologi Pertanian, 8(1), 57–70.

Omolola, A. O., Jideani, A. I. O., & Kapila, P. F. (2014). Modeling microwave drying kinetics and moisture diffusivity of Mabonde banana variety. 7(6). <https://doi.org/10.3965/j.ijabe.20140706.013>

P, .Jamaluddin. (2018). Pengolahan Aneka Kerupuk dan Keripik Bahan Pangan.

Rauf, R. F. (2021). Pemodelan Kinetika Pengeringan Rumput Laut *Eucheuma cottonii* Menggunakan Pengering Surya Efek Rumah Kaca. Jurnal Pendidikan Teknologi Pertanian, 7(1), 139. <https://doi.org/10.26858/jptp.v7i1.19312>

Rifai Ahmad, Viktor, Naubnome, A. (2022). Analisis Laju Kerusakan Eksergi Dan Efisiensi Eksergi Pada Pembangkit Listrik Tenaga Uap. Media Bina Ilmiah, 17(2), 263–270.

Rizkia Marisa, Bambang Sukarno Putra, R. K. (2021). Analisis Pengaruh Tingkat Daya Pada Pengeringan Dengan Oven Microwave Terhadap Kualitas Gaplek Uwi Ungu. Jurnal Ilmiah Mahasiswa Pertanian, 6(November), 568–577.

Saydam, D. D. (2025). Convective Drying Behavior and Mass Diffusivity Modeling of Persimmon Fruit Leather with Comparative Computer Methodologies. 23(1), 28–36. <https://doi.org/10.24323/akademik-gida.1697190>

Sianoun, N., Pongyeela, P., Chairerk, N., & Chungsiriporn, J. (2023). Thin Layer Drying Kinetics and Mathematical Modeling of Moisture Diffusivity in Cocoa Pod Husk (CPH). Engineering Journal, 27(8), 1–12. <https://doi.org/10.4186/ej.2023.27.8.1>

Simanjuntak, M. E., & Widyawati, P. S. (2022a). Model matematika pengeringan daun bunga kecombrang (*Etlingera elatior* jack) pada pengering rotary skala laboratorium. 16(1), 104–112. <https://doi.org/10.21107/agrointek.v16i1.10625>

Simanjuntak, M. E., & Widyawati, P. S. (2022b). Pengeringan Ampas Tebu Pada Microwave: Kinetika Pengeringan, Diffusi Efektif Dan Aspek Energi. Jurnal

- Teknologi Hasil Pertanian, 15(1), 62.
<https://doi.org/10.20961/jthp.v15i1.51495>
- Suherman, S., & Trisnaningtyas, R. (2016). Analisa Energi Dan Eksergi Pada Pengeringan Tepung Tapioka Menggunakan Pengering Kontinyu Unggun Fluidisasi Getar. *Reaktor*, 16(1), 24. <https://doi.org/10.14710/reaktor.16.1.24-31>
- Syah, H. (2023). Analisis eksergi pengering tipe bak untuk pengeringan simplisia herbal. *Teknologi Industri Pertanian*, 17(1), 114–122. <https://doi.org/10.21107/agrointek.v17i1.13438>
- Syah, H., Tambunan, A. H., Hartulistiyoso, E., & Manalu, L. P. (2021). Kinetika Pengeringan Lapisan Tipis Daun Jati Belanda (Thin Layer Drying Kinetics of *Guazuma Ulmifolia* Leaves). *Jurnal Keteknikan Pertanian*, 8(2), 53–62. <https://doi.org/10.19028/jtep.08.2.53-62>
- Syahbanu, F., Napitupulu, F. I., Septiana, S., & Aliyah, N. F. (2023). Struktur pati beras (*Oryza sativa* L.) dan mekanisme perubahannya pada fenomena gelatinisasi dan retrogradasi. 17(4), 755–767. <https://doi.org/10.21107/agrointek.v17i4.15315>
- Taufan, A., Karim, M. A., Putra, S. A., Pramono, E. K., & Hanifah, U. (2020). Studi eksperimental dan model matematika pengeringan daun kelor (*moringa oleifera*) dengan empat tipe pengeringan experimental study and mathematical model of *moringa oleifera* leaves drying with four drying types. 14(2), 341–352.
- Ulfa, G. M., Nopriyani, I., Fathuroya, V., Putri, W. D. R., Fibrianto, K., & Widjanarko, S. B. (2022). Temperature Influence on Swelling Power, Solubility, and Water Binding Capacity of Ultrasound-treated Sweet Potato Starch. *Jurnal Teknologi Pertanian*, 23(3), 193–202.
- Yosika, N. I. W., Purbasari, D., Taruna, I., Sutarsi, S., & ... (2025). Pemodelan Matematis Kinetika Pengeringan Bubuk Bawang Putih Menggunakan Oven Konveksi dengan Pendekatan Model Lapis Tipis. *NEI Journal*, 1(1), 22–26.

<https://nrri-journal.com/index.php/nei-j/article/view/6%0Ahttps://nrri-journal.com/index.php/nei-j/article/download/6/7>

Zanirah, S., Sutini, S., & Pribadi, D. U. (2023). The Effect of Growmore and BAP (Benzyl Amino Purine) Concentrations on The Growth of *Dendrobium bigiante* agrihorti Orchid In-Vitro. *Jurnal Teknik Pertanian Lampung (Journal of Agricultural Engineering)*, 12(3), 710. <https://doi.org/10.23960/jtep-l.v12i3.710-720>

Zeng, Z., Han, C., Wang, Q., Yuan, H., Zhang, X., & Li, B. (2024). Analysis of drying characteristic, effective moisture diffusivity and energy, exergy and environment performance indicators during thin layer drying of tea in a convective-hot air dryer. *Frontiers in Sustainable Food Systems*, 8(April), 1–13. <https://doi.org/10.3389/fsufs.2024.1371696>