

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING

Judul Karya Ilmiah (Prosiding) : Ion wind generation and its application to drying of wild Ginger slices (*Curcuma Xanthorrhiza*)

Nama/ Jumlah Penulis : 3 Orang

Status Pengusul : ~~Penulis pertama~~ / Penulis ke 2 / ~~Penulis Korespondensi~~ **

Identitas Prosiding :

- a. Judul Prosiding : 7th International Seminar on New Paradigm and Innovation on Natural Science and Its Applications
- b. ISBN/ISSN : 1742-6588, eISSN : 1742-6596
- c. Thn Terbit, Tempat Pelaks. : 2018, 17 Oktober 2017 di Semarang
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 (beri ✓ pada kategori yang tepat) ☐ *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir rata-rata Yang Diperoleh
a. Kelengkapan unsur isi prosiding (10%)	3	3	3
b. Ruang lingkup dan kedalaman pembahasan (30%)	8,8	8,9	8,85
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	8,8	8,8	8,8
d. Kelengkapan unsur dan kualitas terbitan /prosiding (30%)	8,6	8,5	8,55
Total = (100%)	29,2	29,2	29,2
Nilai Pengusul = (40% x 29,2) / 2 = 5,84			

Reviewer 1

Prof. Dr. Kusworo Adi, S.Si., M.T.
 NIP. 197203171998021001
 Unit Kerja : Fakultas Sains dan Matematika
 Bidang Ilmu: Fisika

Semarang, 10 Mei 2023
 Reviewer 2

Prof. Dr. Heri Sutanto, S.Si., M.Si.
 NIP. 197502151998021001
 Unit Kerja : Fakultas Sains dan Matematika
 Bidang Ilmu: Fisika

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	Internasional ☒	Nasional ☐	
a. Kelengkapan unsur isi prosiding (10%)	3		3
b. Ruang lingkup dan kedalaman pembahasan (30%)	9		8,8
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9		8,8
d. Kelengkapan unsur dan kualitas terbitan /prosiding (30%)	9		8,6
Total = (100%)	30		29,2
Nilai Pengusul = (40% x 29,2) / 2 = 5,84			

Catatan Penilaian Paper oleh Reviewer :

- Kesesuaian dan kelengkapan unsur isi prosiding:**
Artikel telah ditulis sesuai dengan format IOP Science. Latar belakang sangat singkat dan kebaruan dikemukakan secara eksplisit. Unsur-unsur artikel lengkap.
- Ruang lingkup dan kedalaman pembahasan:**
Substansi artikel sesuai dengan ruang lingkup jurnal pada Seminar on New Paradigm and Innovation on Natural Science and Its Applications. Pembahasan masih kurang dibandingkan dengan peneliti lain..
- Kecukupan dan kemutakhiran data/informasi dan metodologi:**
Data-data hasil penelitian sesuai dengan metodologi yang diungkapkan. Informasi yang diberikan cukup baik.
- Kelengkapan unsur dan kualitas terbitan/ prosiding:**
Kualitas penerbitan cukup baik. Paper berasal dari konferensi dimuat di IOP Science, terindeks Scopus, Q3. Nilai maximum 30.

Semarang, 5 Mei 2023

Reviewer 1



Prof. Dr. Kusworo Adi, S.Si., M.T.

NIP. 197203171998021001

Unit Kerja : Fakultas Sains dan Matematika
Bidang Ilmu: Fisika

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a. Kelengkapan unsur isi prosiding (10%)	3		3
b. Ruang lingkup dan kedalaman pembahasan (30%)	9		8,9
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9		8,8
d. Kelengkapan unsur dan kualitas terbitan /prosiding (30%)	9		8,5
Total = (100%)	30		29,2
Nilai Pengusul = (40% x 29,2) / 2 = 5,84			

Catatan Penilaian Paper oleh Reviewer : Kesesuaian dan kelengkapan unsur isi prosiding: Artikel telah ditulis lengkap sesuai dengan format IOP Science. Topik artikel masuk dalam lingkup. Ruang lingkup dan kedalaman pembahasan: Lingkup artikel dibidang aplikasi fisika yaitu pembangkitan angin ion untuk pengeringan temulawak. Pembahasan masih minim dibandingkan dengan hasil peneliti lain. Kecukupan dan kemutakhiran data/informasi dan metodologi: Data-data hasil penelitian cukup mutakhir dan sesuai dengan metodologi penelitian yang diungkapkan. Data hasil riset diungkapkan dalam 4 grafik. Referensi yang digunakan kategori cukup. Kelengkapan unsur dan kualitas terbitan/ prosiding: Kualitas penerbitan cukup baik.. Terdapat penulisan referensi yang tidak konsisten, beberapa kata menempel dan ref [7] kosong karena masih rangkaian ref [6]. Paper berasal dari konferensi dimuat di IOP Science, terindeks Scopus, Q3. Nilai maximum 30.			
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Semarang, 5 Mei 2023

Reviewer 2

Prof/Dr. Heri Sutanto, S.Si., M.Si.

NIP. 197502151998021001

Unit Kerja : Fakultas Sains dan Matematika

Bidang Ilmu: Fisika

Ion wind generation and its application to drying of wild Ginger slices (*Curcuma Xanthorrhiza*)

Sumariyah^a  ; Khuriati, Ainie^a; Fachriyah, Enny^b
 Save all to author list

^a Physics Department, Mathematics and Sciences Faculty, Diponegoro University, Indonesia

^b Chemistry Department, Mathematics and Sciences Faculty, Diponegoro University, Indonesia

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Abstract

Temulawak or wild ginger is a herbal medicinal derived from Indonesia original. Wild ginger contains include an active compound as curcuminoid and antioxidant oleoresin components having a special quality to take care of health from various diseases. Drying is the important process to produce wild ginger (*Curcuma xanthorrhiza*) simplicia as raw material herbal medicine. In this study, has been dried of wild ginger using ion wind which yielded from corona discharge utilizing pin-multi ring concentred electrodes. Corona discharge was generated by using the fixed DC high voltage of 4,3 kV and drying was done at the distance between the fixed electrodes of 4 mm. Shaped of the five temulawak slices is a circle with a thickness of 2 mm and the diameter of 10 mm - 30 mm with 5 mm diameter interval. The sliced temulawak is placed just below the concentric multi-ring electrode and is 2 mm in distance. The wild ginger slices were dried with time varied 5 - 65 minutes with time interval 5 minutes. The researched result of drying of wild ginger slices obtained drying rate and shrinkage is inversely proportional to drying time. © Published under licence by IOP Publishing Ltd.

Author keywords

corona discharge; drying rate; Ion wind; shrinkage; wild ginger

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 doi: 10.1016/j.jfoodeng.2015.07.043
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Ion wind generation and its application to drying of wild Ginger slices (*Curcuma Xanthorrhiza*)

Sumariyah¹, Ainie Khuriati¹ and Enny Fachriyah²

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[Journal of Physics: Conference Series, Volume 1025, The 7th International Seminar on New Paradigm and Innovation on Natural Science and Its Application 17 October 2017, Semarang, Indonesia](#)

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PREFACE

The 7th International Seminar on New Paradigm and Innovation on Natural Sciences and Its Application (ISNPINSA-7) is annual conferences organized by Faculty of Sciences and Mathematics (FSM) Diponegoro University and has been successfully conducted since 2011. The aims of ISNPINSA are to facilitate brain storming and state of the art information in field of sciences and mathematics; to increase innovation of technology that can be applied in industries; to contribute in formulating strategy to increase the role of science for community; and to stimulate collaboration between industries, researchers and government to increase community welfare. The theme of 7th ISNPINSA in 2017 is “*Science and Data Science for Sustainable Development Goals*”.

The scope of the field of participants comes from various fields including biology, physics, chemistry, statistics, mathematics, informatics, environment, public health, and relevant fields that contribute to sustainable development. The conference was held in Semarang, Indonesia on October, 17th, 2017. There were three keynote speakers and three invited speaker who came from Japan, Italy, Malaysia, Philipines and Indonesia. The number of participants of this seminar were more than 200 consist of researchers, lecturers, postgraduate and undergraduate students from various universities and after the selection process there are 132 articles selected to be published in the present conference proceeding.

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Prof. Dr. Masahiko Tani	University of Fukui, Japan
Prof. Dr. Norsarahaida Saidina Amin	Universiti Teknologi Malaysia
Mario Rosario Guarracino, PhD.	Instituto di Calcolo e Reti ad Alte Prestazioni- National Research Council (ICAR-CNR), Italy
Dr. dr. Budi Wiweko, Sp. OG-KFER.	University of Indonesia, Jakarta

Invited Speaker:

Prof. Elmer S. Estacio, PhD.	National Institute of Physics, University of the Philippines, Manila,
Ismiyarto, S.Si., M.Si., PhD.	Diponegoro University, Semarang, Indonesia
Dr. Eng. Adi Wibowo, S.Si., M.Kom.	Diponegoro University, Semarang, Indonesia

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Ion wind generation and its application to drying of wild Ginger slices (*Curcuma Xanthorrhiza*)

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References ▼

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Abstract

Temulawak or wild ginger is a herbal medicinal derived from Indonesia original. Wild ginger contains include an active compound as curcuminoid and antioxidant oleoresin components having a special quality to take care of health from various diseases. Drying is the important process to produce wild ginger (*Curcuma xanthorrhiza*) simplicia as raw material herbal medicine. In this study, has been dried of wild ginger using ion wind which yielded from corona discharge utilizing pin-multi ring concentred electrodes. Corona discharge was generated by using the fixed DC high voltage of 4,3 kV and drying was done at the distance between the fixed electrodes of 4 mm. Shaped of the five temulawak slices is a circle with a thickness of 2 mm and the diameter of 10 mm - 30 mm with 5 mm diameter interval. The sliced temulawak is placed just below the concentric multi-ring electrode and is 2 mm in distance. The wild ginger slices were dried with time varied 5-65 minutes with time interval 5 minutes. The researched result of drying of wild qinger slices obtained drying rate and shrinkage is inversely proportional to drying time.
