

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

Judul Karya Ilmiah (artikel) : A Biodegradable Film from Jackfruit (*Artocarpus heterophyllus*) and Durian (*Durio zibethinus*) Seed Flours

Jumlah Penulis : 3 orang (Diah S. Retnowati, Ratnawati Ratnawati, Aprilina Purbasari)

Status Pengusul : penulis pertama

Identitas Jurnal Ilmiah :

- a. Nama Jurnal : Scientific Study & Research Chemistry & Chemical Engineering, Biotechnology, Food Industry
- b. Nomor ISSN : 1582-540X
- c. Vol., No., Bln., Thn. : Vol. 16, No. 4, 2015
- d. Penerbit : ALMA MATER Publishing House, University of Bacău, Romania
- e. DOI artikel (jika ada) :
- f. Alamat web Jurnal : <http://pubs.ub.ro/?pg=revues&rev=cscce6&num=201504&vol=4&aid=4345>
- g. Terindeks di : Scopus (Q3) dengan SJR 2014 = 0,151; 2015 = 0,204

Kategori Publikasi Jurnal Ilmiah (beri $\checkmark$ pada kategori yang tepat)

- ☒ Jurnal Ilmiah Internasional/Internasional bereputasi*
- ☐ Jurnal Ilmiah Nasional Terakreditasi
- ☐ Jurnal Ilmiah Nasional/Nasional terindeks di DOAJ, CABI, COPENICUS*

Hasil Penilaian Peer Review :

Komponen yang dinilai	Nilai Reviewer		Nilai rata-rata
	Reviewer 1	Reviewer 2	
a. Kelengkapan unsur isi artikel (10%)	4,0	4,0	4,0
b. Ruang lingkup dan kedalaman pembahasan (30%)	11,0	11,5	11,25
c. Kecukupan dan kemutakhiran data /informasi dan metodologi (30%)	10,0	11,5	10,75
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	11,0	11,5	10,25
Total (100%)	36,0	38,5	37,25
Nilai Pengusul ($60\% \times$ total nilai)	21,6	23,1	22,35

Semarang, Agustus 2020

Reviewer 1,



Prof. Dr. Mohamad Djaeni, ST, M.Eng

NIP 197102071995121001

Unit Kerja : Fak. Teknik Universitas Diponegoro

Bidang Ilmu : Teknik Kimia

Reviewer 2



Prof. Dr. Ir. Bakti Jos, DEA

NIP 196005011986031003

Unit Kerja : Fak. Teknik Universitas Diponegoro

Bidang Ilmu : Teknik Kimia

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Judul Jurnal Ilmiah (Artikel) : A Biodegradable Film From Jackfruit (*Artocarpus heterophyllus*) and Durian (*Durio zibethinus*) Seed Flours

Jumlah Penulis : 3 orang (**Diah S Retnowati**, Ratnawati Ratnawati, Aprilina Purbasari)

Status Pengusul : Penulis pertama/~~penulis ke-2~~/~~penulis ketiga~~/penulis korespondensi

Identitas Jurnal Ilmiah :

a. Nama Jurnal : Scientific Study & Research (Q3)

b. Nomor ISSN : 1582-540X

c. Volume, nomor, bulan tahun : vol.16, No.4,2015, hal.395-404

d. Penerbit : ALMA MATER Publishing House,
"VASILE ALECSANDRI "University of
Bacau

e. DOI artikel (jika ada) :

f. Alamat web :
rev=csc66&num=201504&vol
=4&aid=4345

g. Terindeks : Scopus, (SJR 2015 = 0,204), Index
Copernicus

Kategori Publikasi Jurnal Ilmiah : ☒ Jurnal Ilmiah Internasional
(beri ✓ pada kategori yang tepat) ☐ Jurnal Ilmiah Nasional Tera kreditasi
☐ Jurnal Ilmiah Nasional Tidak Terakreditasi

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	Internasional ☐	Nasional Terakreditasi ☐	Nasional Tidak Terakreditasi ☐	
a. Kelengkapan unsur isi jurnal (10%)	4,00			4,00
b. Ruang lingkup dan kedalaman pembahasan (30%)	12,00			11,00
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12,00			10,00
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12,00			11,00
Total = (100%)	40,00			36,00
Nilai Pengusul = 0,6 x 36 = 21,6				

Catatan Penilaian artikel oleh Reviewer :

1. Kesesuaian dan kelengkapan unsur isi jurnal:

Artikel cukup lengkap, dimana grafik dan tabel disitasi dan dibahas. Topik dan materi sesuai dengan jurnal yang bersangkutan. Tata penulisan tersaji dengan sangat baik dan konsisten.

2. Ruang lingkup dan kedalaman pembahasan:

Artikel ini berisi tentang pembuatan biofilm dari tepung biji durian dan nangka. Lingkup pembahasan terdiri dari eksperimen pembuatan biofilm (Formulasi tepung nangka dan durian dengan tambahan gliserol) dilanjutkan analisa kekuatan fisik dan morfologi. Hasil menunjukkan bahwa biofilm dari tepung nangka dan durian lebih kuat dibandingkan dengan biofilm dari tepung beras. Data yang ditampilkan juga cukup banyak, serta ditunjang beberapa referensi dalam pembahasannya.

3. Kecukupan dan kemutakhiran data/informasi dan metodologi:

Kebaruan informasi cukup baik, dimana ada 38 referensi yang digunakan dalam artikel tersebut (24 di antaranya adalah baru (dalam 10 tahun terakhir)). Metode sangat sederhana, dan deskripsikan cukup jelas. Beberapa data juga dilengkapi dengan analisis instrumen terutama SEM untuk menjelaskan morfologi lapisan film yang dihasilkan

4. Kelengkapan unsur dan kualitas terbitan:

Jurnal ini diterbitkan oleh ALMA MATER Publishing House, Rumania dan masuk dalam kategori Jurnal Terindeks Scopus engan SJR (2015): 0,204. Pada saat ini nilai SJR jurnal tersebut menurun (SJR 2018: 0,15). Secara umum kualitas terbitan masih cukup baik.

Semarang, Januari 2020

Reviewer 1

Prof Dr. Mohamad Djacri, ST, M,Eng

NIP. 197102071995121001

Unit kerja :Teknik Kimia F Teknik UNDIP

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KARYA ILMIAH: JURNAL ILMIAH

Judul Karya Ilmiah (Artikel) : A Biodegradable Film From Jackfruit (Artocarpus heterophyllus) and Durian (Durio zibethinus) Seed Flours

Jumlah Penulis : 3 orang

Penulis Jurnal Ilmiah : **Diah S Retnowati**, Ratnawati Ratnawati, Aprilina Purbasari

Status Pengusul : Penulis pertama/~~penulis ke-2~~/~~penulis ketiga~~/penulis korespondensi

Identitas Jurnal Ilmiah :

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b. Nomor ISSN : ISSN 1582-540X

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d. Penerbit : ALMA MATER Publishing House, "VASILE ALECSANDRI" University of Bacau

e. DOI artikel (jika ada) :

f. Alamat web Jurnal : <http://pubs.ub.ro/?pg=revues&rev=cscc6&num=201504&vol=4&aid=4345>

g. Terindeks di : Scopus, (SJR 2015 = 0,204), Index Copernicus

<https://jurnal.ugm.ac.id/jrekpros/article/view/4951/4180>

Kategori Publikasi Jurnal Ilmiah : ☒ Jurnal Ilmiah Internasional/internasional bereputasi
 (Beri ✓ pada kategori yang tepat) ☐ ~~Jurnal Ilmiah Nasional terakreditasi~~/Nasional tidak terakreditasi
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Hasil Penilaian Peer Review

Komponen yang dinilai		Nilai maksimum Jurnal Ilmiah			Nilai Akhir yang diperoleh
		Internasional/International Bereputasi	Nasional Terakreditasi	Nasional Tdk terakreditasi	
		40		10	
a.	Kelengkapan unsur isi Artikel (10%)	4			4,0
b.	Ruang Lingkup dan kedalaman Pembahasan (30%)	12			11,5
c.	Kecukupan dan kemutakhiran data informasi dan metodologi (30%)	12			11,5
d.	Kelengkapan unsur dan kualitas penerbit (30%)	12			11,5
	Total = (100%)	40			38,5
Nilai pengusul = 0,6 x 38,5 = 23,1					

Catatan penilaian artikel oleh Reviewer:

- **Kelengkapan unsur isi artikel:** Sesuai dengan "Instruction for Author", yaitu : Abstrak dan keywords, introduction, material and methods, Result and discussion conclusions, acknowledgment and references. (nilai 4,0)
 - **Ruang Lingkup dan kedalaman pembahasan:** Sesuai dengan ruang lingkup jurnal Chemistry & Chemical Engineering, Biotechnology, Food Industry) serta sesuai dengan kompetensi penulis. Pembahasan cukup baik, dan dibandingkan dengan hasil peneliti lain (nilai 11,5)
 - **Kecukupan dan kemutakhiran data/Informasi dan metodologi :** Kemutakhiran, referensi 10 tahun terakhir dari jurnal, dan buku sebanyak 25 dari 38 daftar pustaka, atau 65,8%. Metode penelitian singkat dan cukup bagus dan jelas. (nilai 11,5)
- Kelengkapan unsur dan kualitas terbitan :**
 Penerbit : Alma Mater Publishing House" Vasile Alecsandri" University of Bacau. Terindeks Scopus dan pada 2015 mempunyai SJR =0,204, Q3, ISSN 1582-540X. Editorial Board terdiri dari 7 negara . Termasuk Jurnal yang bereputasi (nilai 11,5)

Semarang, Desember 2019

Reviewer II

Prof. Dr. Ir. Bakti Jos, DEA

NIP. 19600501 198603 1 003

Unit kerja : Teknik Kimia/Universitas Diponegoro



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Scientific Study and Research: Chemistry and Chemical Engineering, Biotechnology, Food Industry [Open Access](#)
Volume 16, Issue 4, 2015, Pages 395-404

A biodegradable film from jackfruit (*Artocarpus heterophyllus*) and durian (*Durio zibethinus*) seed flours (Article)

Retnowati, D.S. ✉, Ratnawati, R., Purbasari, A. 👤

Diponegoro University, Faculty of Engineering, Department of Chemical Engineering, Jl. Prof. H. Soedarto, SH, Semarang, 50275, Indonesia

Abstract

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The jackfruit (*Artocarpus heterophyllus*) and durian (*Durio zibethinus*) seeds contain high portion of amylose, which makes them potential materials for biodegradable films. The objective of this study is to develop biodegradable films composed of jackfruit and durian seed flours and glycerol as plasticizer. The films were prepared by dispersing flours in water, adding glycerol, heating the mixture, casting the solution on an acrylic plate, and drying the films at 50 °C for 20 hours. Glycerol contributes to the flexibility of the film, while reduces the strength of the film. The Young's modulus, tensile strength, and elongation at break increase as the ratio of jackfruit to durian seed flour increases. The films made from jackfruit and durian seed flours in this work are stronger than the film made from rice flour obtained by other researcher. Therefore, jackfruit and durian seed flours are potential raw material for biodegradable films. © 2015 ALMA MATER Publishing House, "VASILE ALECSANDRI" University of Bacău. All rights reserved.

SciVal Topic Prominence ⓘ

Topic: Edible Films | Active Food Packaging | Elongation at Break

Prominence percentile: 99.928 ⓘ

Chemistry database information ⓘ

Substances



Author keywords

Biodegradable films Durian seeds Jackfruit seeds Mechanical properties Morphology

Indexed keywords

Metrics ⓘ View all metrics >

5 Citations in Scopus
50th percentile
0.42 Field-Weighted
Citation Impact



PlumX Metrics ⌵

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Cited by 5 documents

Characterisation of polysaccharide composite incorporated with turmeric oil for application on fresh-cut apples

Sharif, Z.I.M. , Jai, J. , Subuki, I. (2019) *Journal of Physics: Conference Series*

Effect of jackfruit rind-based cellulose (JR-CEL.) on physical and mechanical properties of the biodegradable glycerol/gelatine matrix film

Razak, S.F.A. , Rahman, W.A. , Majid, N.A. (2018) *AIP Conference Proceedings*

The effects of glycerol addition to the mechanical properties of thermoplastic films based on jackfruit seed starch | Kesan penambahan gliserol pada sifat mekanik filem termoplastik berdasarkan kanji biji nangka

Shahrim, N.A. , Sarifuddin, N. , Zaki, H.H.M. (2018) *Malaysian Journal of Analytical Sciences*

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Engineering main heading: Films

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Comparative study on the properties of flour and starch films of plantain bananas (Musa paradisiaca)

Pelissari, F.M. , Andrade-Mahecha, M.M. , Sobral, P.J.D.A. (2013) *Food Hydrocolloids*

Edible films based on chia flour: Development and characterization

Dick, M. , Henrique Pagno, C. , Haas Costa, T.M. (2016) *Journal of Applied Polymer Science*

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Funding details

Funding sponsor	Funding number	Acronym
Universitas Diponegoro		UNDIP
Faculty of Engineering, Alexandria University		

Funding text

The authors would like to acknowledge the Faculty of Engineering, Diponegoro University, Indonesia for the financial support for this research.

ISSN: 1582540X
Source Type: Journal
Original language: English

Document Type: Article
Publisher: ALMA MATER Publishing House â“ "VASILE ALECSANDRI" UNIVERSITY OF BACAU

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☐ 1

Pelissari, F.M., Andrade-Mahecha, M.M., Sobral, P.J.D.A., Menegalli, F.C.

Comparative study on the properties of flour and starch films of plantain bananas (Musa paradisiaca)

(2013) *Food Hydrocolloids*, 30 (2), pp. 681-690. Cited 116 times.
doi: 10.1016/j.foodhyd.2012.08.007

[View at Publisher](#)

☐ 2

Li, M., Liu, P., Zou, W., Yu, L., Xie, F., Pu, H., Liu, H., (...), Chen, L.

Extrusion processing and characterization of edible starch films with different amylose contents

(2011) *Journal of Food Engineering*, 106 (1), pp. 95-101. Cited 125 times.
doi: 10.1016/j.jfoodeng.2011.04.021

[View at Publisher](#)

☐ 3

Woggum, T., Sirivongpaisal, P., Wittaya, T.

Properties and Characteristics of Dual-modified Rice Starch Based Biodegradable films (2009) *International Journal of Biological Macromolecules*, 34, pp. 431-448.

- 4 Mali, S., Grossmann, M.V.E., Garcia, M.A., Martino, M.N., Zaritzky, N.E.

Microstructural characterization of yam starch films

(2002) *Carbohydrate Polymers*, 50 (4), pp. 379-386. Cited 253 times.
doi: 10.1016/S0144-8617(02)00058-9

[View at Publisher](#)

- 5 Zhang, Y., Han, J.H.

Plasticization of pea starch films with monosaccharides and polyols

(2006) *Journal of Food Science*, 71 (6), pp. E253-E261. Cited 181 times.
doi: 10.1111/j.1750-3841.2006.00075.x

[View at Publisher](#)

- 6 Lu, J., Yan, F., Texter, J.

Advanced applications of ionic liquids in polymer science

(2009) *Progress in Polymer Science (Oxford)*, 34 (5), pp. 431-448. Cited 804 times.
doi: 10.1016/j.progpolymsci.2008.12.001

[View at Publisher](#)

- 7 Janjarasskul, T., Krochta, J.M.

Edible packaging materials

(2010) *Annual Review of Food Science and Technology*, 1 (1), pp. 415-448. Cited 196 times.
doi: 10.1146/annurev.food.080708.100836

[View at Publisher](#)

- 8 Guilbert, S., Cuq, B., Gontard, N.

Recent innovations in edible and/or biodegradable packaging materials

(1997) *Food Additives and Contaminants*, 14 (6-7), pp. 741-751. Cited 140 times.
doi: 10.1080/02652039709374585

[View at Publisher](#)

- 9 Gonzalez-Gutierrez, J., Partal, P., Garcia-Morales, M., Gallegos, C.

Development of highly-transparent protein/starch-based bioplastics

(2010) *Bioresource Technology*, 101 (6), pp. 2007-2013. Cited 66 times.
<http://www.sciencedirect.com>
doi: 10.1016/j.biortech.2009.10.025

[View at Publisher](#)

- 10 Siracusa, V., Rocculi, P., Romani, S., Rosa, M.D.

Biodegradable polymers for food packaging: a review

(2008) *Trends in Food Science and Technology*, 19 (12), pp. 634-643. Cited 901 times.
doi: 10.1016/j.tifs.2008.07.003

[View at Publisher](#)

- ☐ 11 Rayas, L.M., Hernandez, R.J., Ng, P.K.W.
Development and characterization of biodegradable/edible wheat protein films
(1997) *Journal of Food Science*, 62 (1), pp. 160-162. Cited 58 times.
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1750-3841](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1750-3841)
doi: 10.1111/j.1365-2621.1997.tb04390.x
[View at Publisher](#)
-
- ☐ 12 Tapia-Blácido, D., Mauri, A.N., Menegalli, F.C., Sobral, P.J.A., Añón, M.C.
Contribution of the starch, protein, and lipid fractions to the physical, thermal, and structural properties of amaranth (*Amaranthus caudatus*) flour films
(2007) *Journal of Food Science*, 72 (5), pp. E293-E300. Cited 76 times.
doi: 10.1111/j.1750-3841.2007.00359.x
[View at Publisher](#)
-
- ☐ 13 Colla, E., Sobral, P.J.D.A., Menegalli, F.C.
Amaranthus cruentus flour edible films: Influence of stearic acid addition, plasticizer concentration, and emulsion stirring speed on water vapor permeability and mechanical properties
(2006) *Journal of Agricultural and Food Chemistry*, 54 (18), pp. 6645-6653. Cited 76 times.
doi: 10.1021/jf0611217
[View at Publisher](#)
-
- ☐ 14 Dias, A.B., Müller, C.M.O., Larotonda, F.D.S., Laurindo, J.B.
Biodegradable films based on rice starch and rice flour
(2010) *Journal of Cereal Science*, 51 (2), pp. 213-219. Cited 141 times.
doi: 10.1016/j.jcs.2009.11.014
[View at Publisher](#)
-
- ☐ 15 Sousa, G.M., Soares Júnior, M.S., Yamashita, F.
Active biodegradable films produced with blends of rice flour and poly(butylene adipate co-terephthalate): Effect of potassium sorbate on film characteristics
(2013) *Materials Science and Engineering C*, 33 (6), pp. 3153-3159. Cited 19 times.
doi: 10.1016/j.msec.2013.03.042
[View at Publisher](#)
-
- ☐ 16 Andrade-Mahecha, M.M., Tapia-Blácido, D.R., Menegalli, F.C.
Development and optimization of biodegradable films based on achira flour
([Open Access](#))
(2012) *Carbohydrate Polymers*, 88 (2), pp. 449-458. Cited 55 times.
doi: 10.1016/j.carbpol.2011.12.024
[View at Publisher](#)
-
- ☐ 17 Pitak, N., Rakshit, S.K.
Physical and antimicrobial properties of banana flour/chitosan biodegradable and self sealing films used for preserving Fresh-cut vegetables
(2011) *LWT - Food Science and Technology*, 44 (10), pp. 2310-2315. Cited 61 times.
doi: 10.1016/j.lwt.2011.05.024
[View at Publisher](#)
-

- ☐ 18 Valderrama Solano, A.C., Rojas de Gante, C.
Development of biodegradable films based on blue corn flour with potential applications in food packaging. Effects of plasticizers on mechanical, thermal, and microstructural properties of flour films
(2014) *Journal of Cereal Science*, 60 (1), pp. 60-66. Cited 28 times.
<http://www.elsevier.com/inca/publications/store/6/2/2/8/5/9/index.htm>
doi: 10.1016/j.jcs.2014.01.015
[View at Publisher](#)
-
- ☐ 19 Amin, A.M., Ahmad, A.S., Yin, Y.Y., Yahya, N., Ibrahim, N.
Extraction, purification and characterization of durian (*Durio zibethinus*) seed gum
(2007) *Food Hydrocolloids*, 21 (2), pp. 273-279. Cited 69 times.
doi: 10.1016/j.foodhyd.2006.04.004
[View at Publisher](#)
-
- ☐ 20 Mukprasirt, A., Sajjaanantakul, K.
Physico-chemical properties of flour and starch from jackfruit seeds (*Artocarpus heterophyllus* Lam.) compared with modified starches
(2004) *International Journal of Food Science and Technology*, 39 (3), pp. 271-276. Cited 54 times.
doi: 10.1111/j.1365-2621.2004.00781.x
[View at Publisher](#)
-
- ☐ 21 Tongdang, T.
Some properties of starch extracted from three thai aromatic fruit seeds
(2008) *Starch/Staerke*, 60 (3-4), pp. 199-207. Cited 42 times.
doi: 10.1002/star.200800641
[View at Publisher](#)
-
- ☐ 22 Polnaya, F.J., Talahatu, J., Haryadi, N., Marseno, D.W.
Properties of Biodegradable Films from Hydroxypropyl Sago Starches
(2012) *Asian Journal of Food Agro-Industry*, 5 (3), pp. 183-192. Cited 10 times.
-
- ☐ 23 (1995) *Official Methods of Analysis of AOAC International*, 2.
TX: Association of Official Analytical Chemistry
-
- ☐ 24 Juliano, B.O.
A Simplified Assay for Milled-Rice Amylase
(1971) *Cereal Science Today*, 16, pp. 334-340. Cited 936 times.
-
- ☐ 25 Tulyathan, V., Tananu Wong, K., Songjinda, P., Jaiboon, N.
Some Physico-Chemical Properties of Jackfruit (*Artocarpus heterophyllus* Lam.) seed Flour and Starch
(2002) *Science Asia*, 28, pp. 37-41. Cited 68 times.
-

- ☐ 26 Azizur Rahman, M., Nahar, N., Jabbar Mian, A., Mosihuzzaman, M.
Variation of carbohydrate composition of two forms of fruit from jack tree (*Artocarpus heterophyllus* L.) with maturity and climatic conditions
(1999) *Food Chemistry*, 65 (1), pp. 91-97. Cited 64 times.
doi: 10.1016/S0308-8146(98)00175-7
[View at Publisher](#)
-
- ☐ 27 Wittaya, T.
Rice Starch-Based Biodegradable Films: Properties Enhancement in: Structure and Function of Food Engineering (Editor: Eissa, A.A
(2012) *Intech*, pp. 103-108. Cited 33 times.
-
- ☐ 28 Alves, V.D., Mali, S., Beléia, A., Grossmann, M.V.E.
Effect of glycerol and amylose enrichment on cassava starch film properties
(2007) *Journal of Food Engineering*, 78 (3), pp. 941-946. Cited 151 times.
<http://www.sciencedirect.com/science/journal/02608774>
doi: 10.1016/j.jfoodeng.2005.12.007
[View at Publisher](#)
-
- ☐ 29 Lourdin, D., Valle, G.D., Colonna, P.
Influence of amylose content on starch films and foams
(1995) *Carbohydrate Polymers*, 27 (4), pp. 261-270. Cited 262 times.
doi: 10.1016/0144-8617(95)00071-2
[View at Publisher](#)
-
- ☐ 30 Rindlav-Westling, A., Stading, M., Hermansson, A.-M., Gatenholm, P.
Structure, mechanical and barrier properties of amylose and amylopectin films
(1998) *Carbohydrate Polymers*, 36 (2-3), pp. 217-224. Cited 281 times.
http://www.elsevier.com/wps/find/journaldescription.cws_home/405871/description#description
doi: 10.1016/S0144-8617(98)00025-3
[View at Publisher](#)
-
- ☐ 31 Cano, A., Jiménez, A., Cháfer, M., González, C., Chiralt, A.
Effect of amylose:amylopectin ratio and rice bran addition on starch films properties
(2014) *Carbohydrate Polymers*, 111, pp. 543-555. Cited 78 times.
http://www.elsevier.com/wps/find/journaldescription.cws_home/405871/description#description
doi: 10.1016/j.carbpol.2014.04.075
[View at Publisher](#)
-
- ☐ 32 Gil, N., Saska, M., Negulescu, I.
Evaluation of the effects of biobased plasticizers on the thermal and mechanical properties of poly(vinyl chloride)
(2006) *Journal of Applied Polymer Science*, 102 (2), pp. 1366-1373. Cited 64 times.
doi: 10.1002/app.24132
[View at Publisher](#)
-

- ☐ 33 Arvanitoyannis, I., Biliaderis, C.G., Ogawa, H., Kawasaki, N.
Biodegradable films made from low-density polyethylene (LDPE), rice starch and potato starch for food packaging applications: Part 1
(1998) *Carbohydrate Polymers*, 36 (2-3), pp. 89-104. Cited 202 times.
http://www.elsevier.com/wps/find/journaldescription.cws_home/405871/description#description
doi: 10.1016/S0144-8617(98)00016-2
[View at Publisher](#)
-

- ☐ 34 Córdoba, A., Cuéllar, N., González, M., Medina, J.
The plasticizing effect of alginate on the thermoplastic starch/glycerin blends
(2008) *Carbohydrate Polymers*, 73 (3), pp. 409-416. Cited 45 times.
doi: 10.1016/j.carbpol.2007.12.007
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- ☐ 35 Nobrega, M.M., Olivato, J.B., Bilck, A.P., Grossmann, M.V.E., Yamashita, F.
Glycerol with different purity grades derived from biodiesel: Effect on the mechanical and viscoelastic properties of biodegradable strands and films
(2012) *Materials Science and Engineering C*, 32 (8), pp. 2220-2222. Cited 10 times.
doi: 10.1016/j.msec.2012.06.005
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-

- ☐ 36 Myllärinen, P., Partanen, R., Seppälä, J., Forsell, P.
Effect of glycerol on behaviour of amylose and amylopectin films
(2002) *Carbohydrate Polymers*, 50 (4), pp. 355-361. Cited 205 times.
doi: 10.1016/S0144-8617(02)00042-5
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-

- ☐ 37 Muscat, D., Adhikari, B., Adhikari, R., Chaudhary, D.S.
Comparative study of film forming behaviour of low and high amylose starches using glycerol and xylitol as plasticizers
(2012) *Journal of Food Engineering*, 109 (2), pp. 189-201. Cited 142 times.
<http://www.sciencedirect.com/science/journal/02608774>
doi: 10.1016/j.jfoodeng.2011.10.019
[View at Publisher](#)
-

- ☐ 38 De Graaf, R.A., Karman, A.P., Janssen, L.P.B.M.
Material properties and glass transition temperatures of different thermoplastic starches after extrusion processing
(2003) *Starch/Stärke*, 55 (2), pp. 80-86. Cited 109 times.
doi: 10.1002/star.200390020
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Scientific Study and Research: Chemistry and Chemical Engineering, Biotechnology, Food Industry

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Publisher: University of Bacau

ISSN: 1582-540X

Subject area: Chemical Engineering: General Chemical Engineering Agricultural and Biological Sciences: Food Science
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[2008-06-04]

Database update: Added SCSCC6 Volume VIII, No. 4

The Scientific Study & Research - Chemistry, Chemical Engineering, Biotechnologies and Food Technologies, Volume VIII (2007) - No. 4 is imported to abstracts database.



[2007-11-12]

Database update: Added SCSCC6 Volume VIII, No. 1

The Scientific Study & Research - Chemistry, Chemical Engineering, Biotechnologies and Food Technologies, Volume VIII (2007) - No. 1 is imported to abstracts database.



[2007-04-30]

Database update: Added SCSCC6 Volume VII, No. 4

The Scientific Study & Research - Chemistry, Chemical Engineering, Biotechnologies and Food Technologies, Volume VII (2006) - No. 4 is imported to abstracts database.



[2007-04-11]

Database update: TSTM Issue no. 11

The database is update with the Issue no. 11 - Volumes I and II (2005) of The Optimum Technologies, Technologic Systems and Materials in the Machines Building Field (TSTM) Review.



[2007-04-02]

Database update: New Review - TSTM

The Optimum Technologies, Technologic Systems and Materials in the Machines Building Field (TSTM) Review has been added to database. Only no. 12, volumes I and II are imported to abstracts database.



[2007-03-20]

Database update: Added SCSCC6 Volumes I-IV

The Scientific Study & Research - Chemistry, Chemical Engineering, Biotechnologies and Food Technologies, Volumes I to IV (2000-2003) are now imported to abstracts database.



[2007-02-19]

International Conference of Fracture Mechanics

Faculty of Engineering - University of Bacau in colaboration with Romanian Technical Science Academy and The Romanian Association of Fracture Mechanics organize The 13th International Conference of Fracture Mechanics, held on 2007, November 1-3 in Bacau.

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-  **TSTM**
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-  **JESR**
41 issues; 439 abstracts
-  **SSRSMI**
22 issues; 322 abstracts
-  **JIPED**
0 issues; 55 abstracts
-  **PLUMEE**
9 issues; 198 abstracts
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0 issues; 0 abstracts
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A BIODEGRADABLE FILM FROM JACKFRUIT (ARTOCARPUS HETEROPHYLLUS) AND DURIAN (DURIO ZIBETHINUS) SEED FLOURS

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Received: October, 03, 2015

Accepted: December, 07, 2015

Abstract: The jackfruit (*Artocarpus heterophyllus*) and durian (*Durio zibethinus*) seeds contain high portion of amylose, which makes them potential materials for biodegradable films. The objective of this study is to develop biodegradable films composed of jackfruit and durian seed flours and glycerol as plasticizer. The films were prepared by dispersing flours in water, adding glycerol, heating the mixture, casting the solution on an acrylic plate, and drying the films at 50 °C for 20 hours. Glycerol contributes to the flexibility of the film, while reduces the strength of the film. The Young's modulus, tensile strength, and elongation at break increase as the ratio of jackfruit to durian seed flour increases. The films made from jackfruit and durian seed flours in this work are stronger than the film made from rice flour obtained by other researcher. Therefore, jackfruit and durian seed flours are potential raw material for biodegradable films.

Keywords: jackfruit seeds, durian seeds, mechanical properties, morphology, biodegradable films

A GREEN APPROACH FOR THE SELECTIVE REDUCTION OF AROMATIC CARBONYL COMPOUNDS USING RANEY Ni-Al ALLOY

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Received: November, 10, 2015

Accepted: December, 18, 2015

Abstract: Given the significant environmental risk associated with the use of organic solvents and catalysts in the classic reduction reaction catalysts, we are interested in adapting the reaction medium and in developing an eco-friendly methodology for the synthesis of corresponding alcohols in reasonably yields. In this study, the reduction of some aromatic carbonyl compounds with Ni-Al alloy in aqueous alkaline medium was carried out in two versions: with 20 wt% aq NaOH and with 1 wt% aq NaOH without organic solvent. The structures of the reaction products are rigorously proven by gas chromatography-mass spectrometry (GC-MS). There was observed an increase of the reduction reaction rate when we used 1 wt% aq NaOH without addition of organic solvent. For a good part of the studied substrates high conversion and selectivity were achieved by employing mild reaction conditions, minimal environmental pollution and simple work up procedure, foreshadowing yields above 90 % and representing candidates for convenient preparative applications.

Keywords: acetophenones, aqueous reduction, GC-MS, substituted benzaldehydes

NEW ADDUCTS BETWEEN N-[FERROCENYLMETHYL] DIMETHYLAMMONIUM AND HALOMETALLATES: SYNTHESIS AND INFRARED STUDY

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Received: July, 01, 2015

Accepted: November, 10, 2015

Abstract: Eight new adducts between N-[ferrocenylmethyl]dimethylammonium and halometallates were obtained in ethanolic media. From an infrared study, the suggested structures are monomeric or dimeric for tin compounds which contain $[\text{SnCl}_4(\text{OH})_2]^{2-}$, $[(\text{SnCl}_5)]^-$ and $[(\text{SnI}_5)]^-$, $[\text{SnCl}_3(\text{OH})_2]^-$ and $[(\text{SnI}_6)]^{2-}$ complex anions, interacting through hydrogen bonds with the cation, the environments around tin (IV) centers being trigonal bipyramidal or octahedral. For hydrated Cu(II) and Cd(II) adducts, we proposed dimeric structures with hydrogen bridges between cation and water H_2O , the environments around Cu(II) being trigonal and trigonal bipyramidal, respective octahedral around Cd(II). One of the compounds may contain the hydrogen bis [N-ferrocenylmethyldimethylamine] captive cation with a hydrogen bond (N-H...N), the cation interacting electrostatically with $[\text{ZnBr}_4]^{2-}$. The crucial role of the cation in all the compounds is outlined. The molecules of cyclopentadiene obtained *in situ* are lattice.

Keywords: polyhalostannic - chlorocuprates - chlorocadmate and bromozincate species, trigonal bipyramidal, tetrahedral, trigonal or octahedral environments