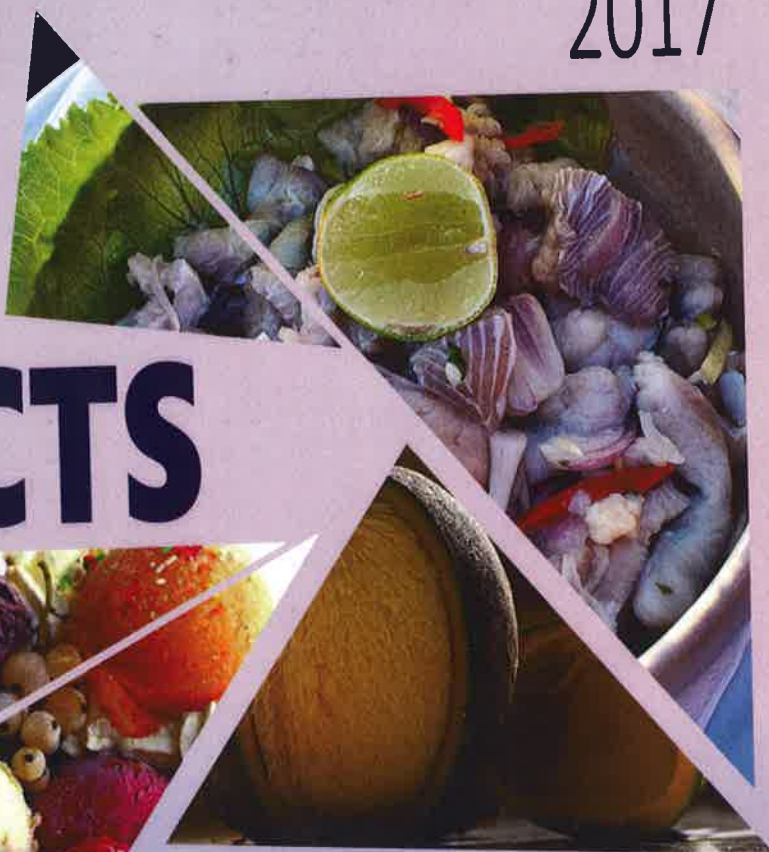




INTERNATIONAL CONFERENCE ON
FOOD SCIENCE AND NUTRITION
2017

Book of **ABSTRACTS**



Exploring Food for the Future: Scientific Discovery and New Trends

The Pacific Sutera Hotel
Kota Kinabalu, Sabah, Malaysia
25 - 26 October 2017



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Electrolyzed (Acidic and Alkaline) Water and Their Antibacterial Activity Performance during Storage

B. Soedarini *, B. Widianarko, and I. Hantoro

Faculty of Agricultural Technology, Soegijapranata Catholic University, Jl. Pawiyatan Luhur IV no.1 Bendan Dhuwur, Semarang, Indonesia, bernadeta@unika.ac.id; widianarko@unika.ac.id; inneke.hantoro@unika.ac.id

Abstract

Electrolysis of water typically produces two forms of altered water which are acidic and alkaline. The acidity or alkalinity level of the water is determined by the presence of anions and cations in raw water. Although both types of electrolyzed water are known to have antimicrobial activity, but information about the effect of storage is not available yet. Considering the issue of anions and cations instability, in this research we examined electrolyzed acidic and alkaline water during five days storage in refrigerator. Their antibacterial activity against *Escherichia coli* and *Salmonella typhi* were analyzed using disc-diffusion (Kirby-Bauer) method. The result showed that pH of both acidic and alkaline water were stable during storage, their values were 3.45 ± 0.25 and 9.25 ± 0.05 respectively. The average Oxidation Reduction Potential (ORP) of acidic water was 902 ± 12 mV, that much higher than alkaline water (168 ± 3 mV). Further, the acidic water evidently showed antibacterial activity against the tested bacteria but none was revealed by the alkaline water. The antibacterial activity appeared as clear zone of the cultured bacteria on Nutrient Agar plate especially surround the paper dish (d=80 mm). The average diameter of the clear zones was 120 ± 10 mm (*E. coli*) and 115 ± 5 mm (*S. typhi*). We conclude that five day refrigerated did not significantly affect the performance of electrolyzed water, while antibacterial activity more likely correspond to the ORP than to pH.

Keywords

Electrolyzed water, antibacterial activity, storage, oxidation reduction potential

* Presenting author

Bernadeta Soedarini

Address: Faculty of Agricultural Technology, Soegijapranata Catholic University, Semarang

50234, Central Java, Indonesia

Tel: +62 24844 1555 (ext. 1213)

Fax: +62 24841 5429

E-mail: bernadeta@unika.ac.id



Dear Dr. Bernadeta Soedarini,

ICFSN 2017-Acceptance Letter: ORAL Presentation

Greetings from the ICFSN 2017 Conference Secretariat.

We are pleased to inform you that the abstract you submitted to the Scientific Committee of the International Conference on Food Science and Nutrition 2017 (ICFSN 2017) entitled "Electrolyzed (Acidic and Alkaline) Water and Their Antibacterial Activity Performance during Storage" has been accepted for ORAL presentation. The "Guidelines for Presenters" is provided on the conference website for your attention. Please adhere to these guidelines to ensure the smooth running of the conference.

Registration is a pre-requisite to present your paper. Please register for the conference via the online registration form at the conference website <http://www.icfsnmalaysia2017.org/> and pay the registration fees before or by 31st August 2017 to confirm your registration. Please make payment before 30th June 2017 to be entitled for the early bird registration fees.

Please do not hesitate to contact us through the conference Online Contact Form should you need any further information or assistance.

We look forward to seeing you at the conference.

Thank you.

Yours sincerely,

Dr. Anezoo Erfanian

ICFSN 2017 Scientific Committee Chair
Faculty of Food Science and Nutrition
Universiti Malaysia Sabah



Dear Participants,

Greetings from the ICFSN 2017 Organizing Committee.

Thank you for your support and contribution to the conference program. You may find the conference program on the conference website.

Please take note of the following points:

- 1- All presentations by Student Participants will be considered/evaluated for the Best Oral Presentation and Best Poster Presentation Awards.
- 2- The Award Winners will be announced during the conference Closing Ceremony on 26 October 2017 (4:15 – 5:00 pm).
- 3- All participants are invited (Free of Charge) to the Conference Dinner on 25 October 2017 (start at 6:45 pm). Please confirm your attendance during the Conference Registration. Dress code is formal.
- 4- Distribution of Certificates will be conducted on the evening of 26 October 2017.
- 5- All Poster presenters must adhere to the given set-up and removal time for their posters (table below)

Poster	25 October 2017	26 October 2017
Set-up time	7:30 – 9:00	7:30 – 8:30
Removal time	17:00 – 18:00	17:00 – 18:00

- 6- All Oral presenters must adhere to the announced upload time for their presentations (table below)

Oral (PowerPoint)	25 October 2017		26 October 2017	
	Morning Session	Afternoon Session	Morning Session	Afternoon Session
Upload time	7:30 – 9:00 10:00 – 10:30	12:00 – 13:00	7:30 – 8:30	12:00 – 13:00

- 7- Early registration can be done on the 24 October 2017 at Function Room 9, Level 3 (2.30 – 6.30 pm). Please note that on-site payment (cash, invoice and LPO) is only accepted on 25 October 2017. All payment must be in Ringgit Malaysia.

For more information please refer to the conference website at
<http://www.icfsnmalaysia2017.org/program.html>

Looking forward to seeing you at ICFSN 2017 in Kota Kinabalu.

Thank you.