

## Instruction for full paper writing

# Hydrothermal treatments of rice starch for improvement of rice noodle quality (font size: 17 pt, Bold)

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## Abstract (11 pt, Bold, before 6 pt, after 12 pt)

**First line: 0.25", 10 pt, spacing line 1.1.** The abstract should summarize the content of the paper. Try to keep the abstract 150-200 words. Do not have references or displayed equations in the abstract. A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

*Keywords:* Put 4 to 5 key words (Alphabetical order)

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## 1. Introduction (11 pt, Bold, before 24 pt, after 12 pt)

**The text must be in English. Spacing line: 1.1; font size: 11.** All manuscript pages (including references, tables, figure legends, footnotes) must be 1.1-spaced and in a typeface of 11-point size. Authors whose English language is not their own are certainly requested to have their manuscripts checked (or co-authored) by an English native speaker, for linguistic correctness before submission and in its final version, if changes had been made to the initial version. The submitted typeset scripts of each contribution must be in their final form and of good appearance because they **will be printed directly**. The document you are reading is written in the format that should be used in your paper. This document is set in **11-point Times New Roman**. If absolutely necessary, we suggest the use of condensed line spacing rather than smaller point sizes. Some technical formatting software print mathematical formulas in italic type, with subscripts and superscripts in a slightly smaller font size. This is acceptable.

**Second line: before 6 pt, after 0 pt.** In the introduction, you state the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

For single authors, cite as (name date) in text; citations are not numbered. For citations with two authors, cite as (surname and surname date). For citations with more than two authors, do not list all authors. Cite as (first author's surname et al. date) in text.

Manuscript-text **must** be saved as a MS Word file. Research papers **must** be no longer than 5000 words, including abstract and references, but without tables, figures and the corresponding legends. Abstracts **must** not be longer than 200 words. You **must** include Keywords ( $\leq 5$ ).

**Page set up: paper size A4 (8.27" x 11.69").**

Margins: top & bottom: 1"; left & right: 0.6".

First page margins: top 2"; bottom: 1"; left & right: 0.6".

Paper submission in the repairable MS Word file and PDF file for reference (both types).

## **2. Materials and methods (11 pt, Bold, before 18 pt, after 12 pt)**

Major headings are to be column centered in a bold font without underline. They need be numbered. "2. Headings and Footnotes" at the top of this paragraph is a major heading.

### *2.1. Subheadings (11 pt, Italic, before and after 12 pt)*

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

## **3. Footnotes**

Footnotes should be typed in singled-line spacing at the bottom of the page and column where it is cited. Footnotes should be rare.

## **4. Results and discussion (11 pt, Bold, before 18 pt, after 12 pt)**

### *4.1. Subheadings (11 pt, Italic, before and after 12 pt)*

Results should be the major findings of your experiment. You have to compare the results with previous studies done in same.

## **5. Tables and figures**

Number figures and tables consecutively in accordance with their appearance in the text. Ensure that each illustration and table has a caption. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used in the caption. If analytical data are reported, replicate analyses must have been carried out. Provide the experimental conditions, as far as they are necessary for understanding. The reader should not have to refer to the text in order to understand the tables.

Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

## **6. Conclusions (11 pt, Bold, before 18 pt, after 12 pt)**

Here conclude your finding to with object of your studies.

## **7. Appendix**

Appendixes, if needed, appear before the acknowledgment.

## 8. Acknowledgments

Insert acknowledgment, if any. The preferred spelling of the word “acknowledgment” in American English is without an “e” after the “g.” Use the singular heading even if you have many acknowledgments. Avoid expressions such as “One of us (S.B.A.) would like to thank ... .” Instead, write “F. A. Author thanks ... .” Sponsor and financial support acknowledgments are also placed here.

## 9. Citation in text

Please ensure that every reference cited in the text is also present in the reference list.

All citations in the text should refer to:

- Single author: the author's name (without initials, unless there is ambiguity) and the year of publication (Smith, 2003);
- Two authors: both authors' names and the year of publication (Smith & Jones, 2004);
- Three, four or more authors: all authors names and year of publication (Smith, Jones, & Brown, 2005). For all subsequent citations of this work use et al. (Smith et al., 2005).

## 10. Reference (do not put number, 11 pt, Bold, before 18 pt, after 12 pt)

Van der Geer, J., Hanraads, J. A. J., & Lupton, R. A. (2010). The art of writing a scientific article. *Journal of Scientific Communications*, 163, 51–59. (Reference to a journal publication)

Strunk, W., Jr., & White, E. B. (2000). *The elements of style*. (4th ed.). New York: Longman, (Chapter 4). (Reference to a book)

Mettam, G. R., & Adams, L. B. (2009). How to prepare an electronic version of your article. In B. S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281–304). New York: E-Publishing Inc. (Reference to a chapter in an edited book)

Cancer Research UK. Cancer statistics reports for the UK. (2003).

<http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/> Accessed 13.03.03. (Reference to a website)

### Example of Figure: center text

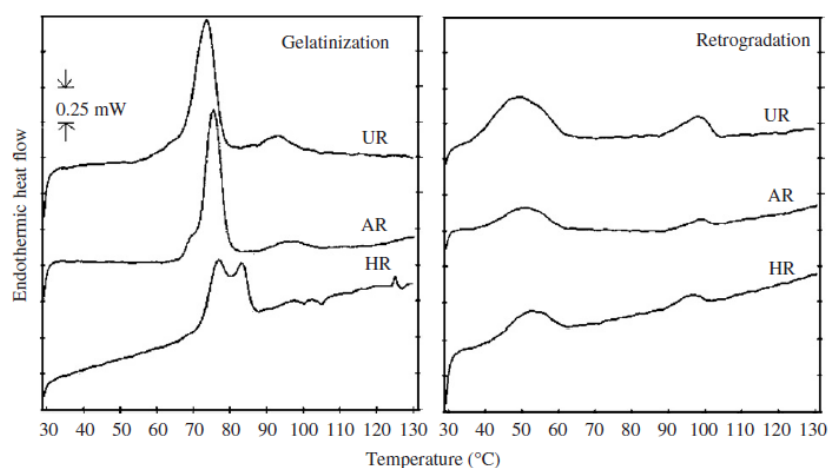


Fig. 1. DSC thermograms of UR (untreated rice starch), AR (annealed rice starch), and HR (heat-moisture treated rice starch).

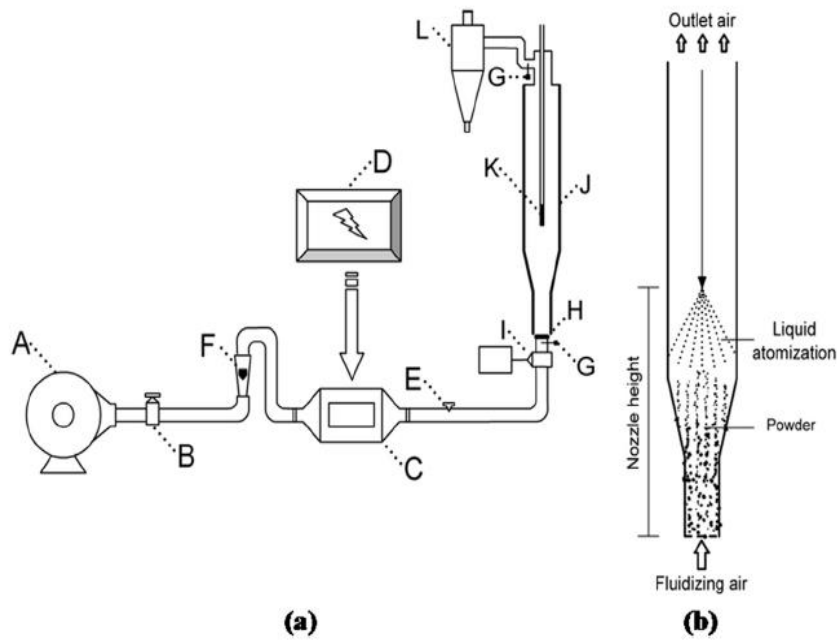


Fig. 1. Scheme of the pulsed fluidized bed used for green banana flour agglomeration: (a) Blower (A), Valve (B), Heater (C), PID controller (D), Air deflector (E), Rotameter (F), Temperature sensor (G), Air distributor (H), Rotating spherical valve (I), Bed chamber (J), Nozzle (K), Cyclone (L); (b) the agglomeration process in detail (adapted from Dacanal & Menegalli, 2010).

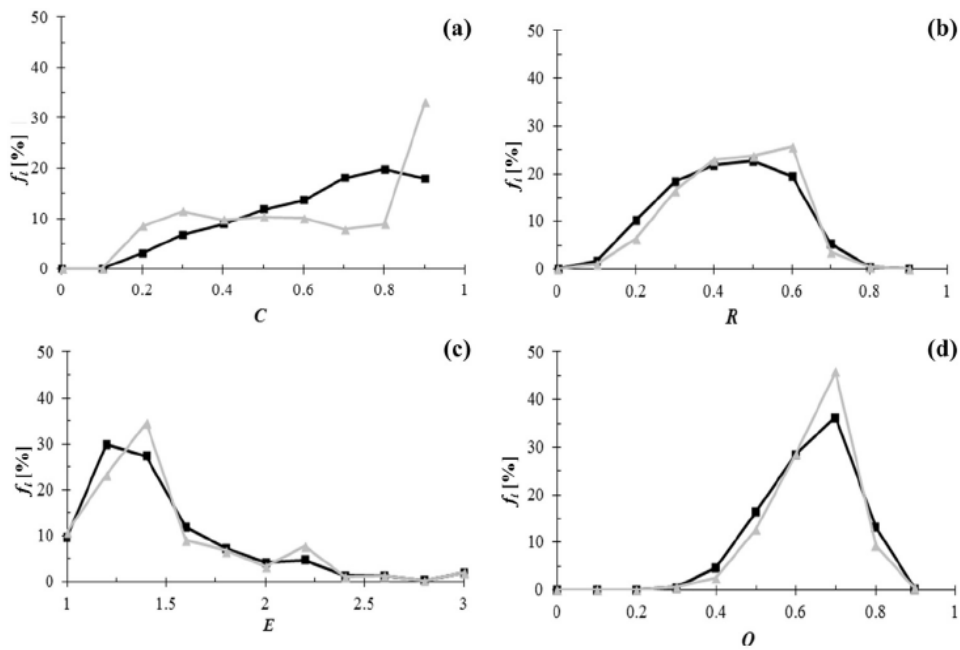


Fig. 4. Distributions of shape factors of green banana flour (GBF) before (■) and after (▲) agglomeration process at air pulsation frequency of 10 Hz: (a) Circularity ( $C$ ); (b) Roundness ( $R$ ); (c) Elongation ( $E$ ); (d) Compactness ( $O$ ); as a function of number-based fraction ( $f_i$ ).

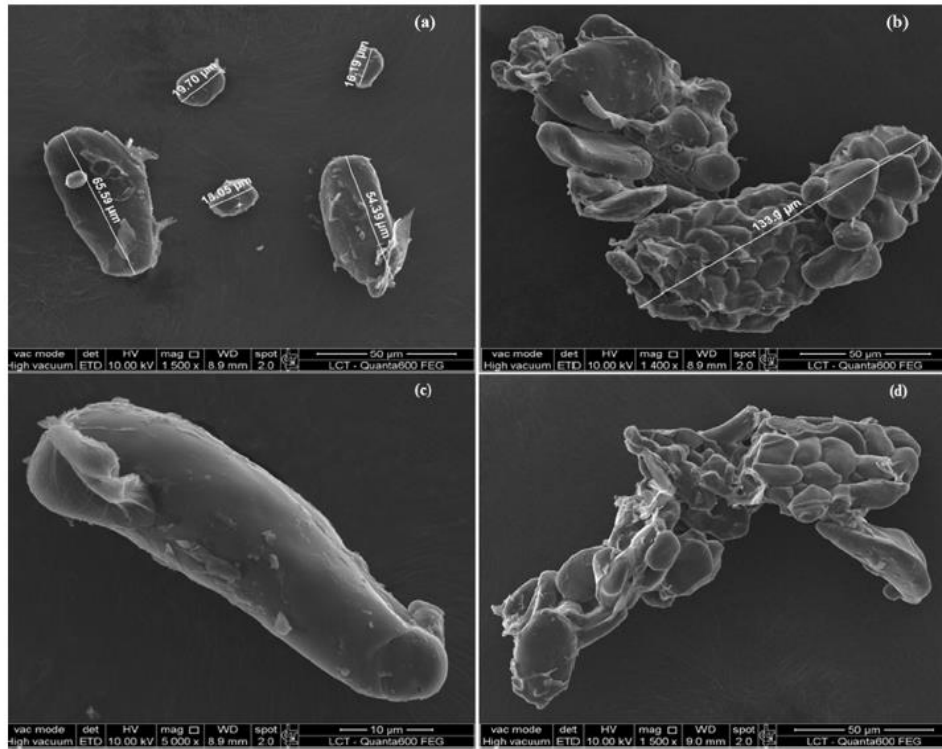


Fig. 5. SEM micrographs of green banana flour (GBF) before (a and c) at magnification (1500× and 5000×) and after agglomeration process at air pulsation frequency of 10 Hz (b and d) at magnification (1400× and 1500×).

Example of Figure: left or right text

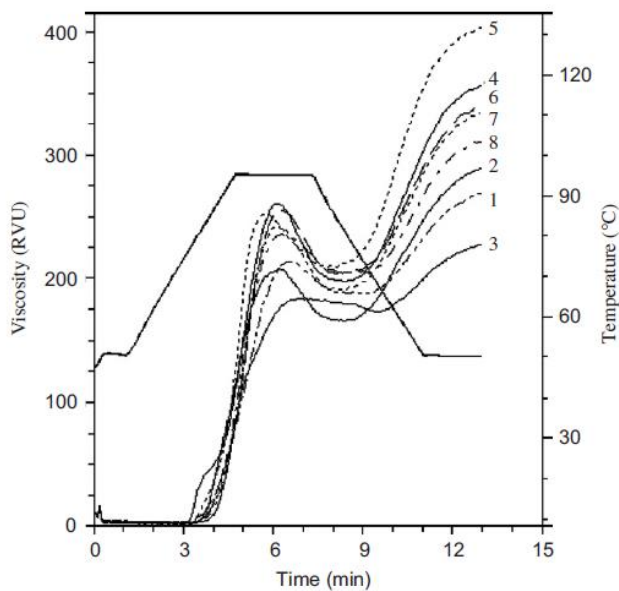


Fig. 2. RVA pasting profiles of rice starches and flours. Samples are indicated as: 1 (UR); 2 (AR); 3 (HR); 4 (fresh flour); 5 (aged flour); 6 (flour + 50 g/100 g UR); 7 (flour + 50 g/100 g AR); and 8 (flour + 50 g/100 g HR).

## Example of Table: center text

Table 3  
Cooking and texture quality of rice noodles

Noodles	Cooking quality			Texture quality			
	Cooking loss (%)	Rehydration (%)	Hardness (g)	Adhesiveness (g s)	Chewiness (g mm)	Tensile strength (g)	Extensibility (mm)
<i>Starches</i>							
UR	0.44b ± 0.20	196.23ab ± 7.05	4598.66c ± 169.54	112.28b ± 32.49	128.53ab ± 26.81	20.63c ± 2.39	37.20e ± 2.33
AR	0.76cd ± 0.13	181.02a ± 10.50	5132.67d ± 124.85	76.02a ± 19.34	91.89a ± 31.62	13.87ab ± 3.17	29.45d ± 3.65
HR	0.29a ± 0.08	188.28a ± 14.86	5304.55d ± 112.32	72.51a ± 27.62	64.13a ± 36.17	31.54d ± 3.98	34.78e ± 4.26
<i>Flours</i>							
Fresh flour	0.75cd ± 0.04	271.32cd ± 15.02	2831.27a ± 187.10	130.79b ± 36.48	132.18ab ± 32.86	10.26a ± 1.19	9.81a ± 1.70
Aged flour	0.35a ± 0.04	194.15ab ± 12.67	3904.84b ± 171.97	109.76ab ± 36.57	184.99b ± 34.73	12.53a ± 1.13	10.21a ± 2.70
Flour + 50 g/100 g UR	0.61bc ± 0.03	289.70d ± 18.14	4010.87b ± 145.72	186.43c ± 34.83	241.54c ± 31.88	19.54c ± 2.94	15.79b ± 2.88
Flour + 50 g/100 g AR	0.86d ± 0.02	246.57c ± 16.77	4390.31bc ± 245.19	99.17ab ± 29.62	78.73a ± 29.88	15.76b ± 2.82	14.66b ± 3.73
Flour + 50 g/100 g HR	0.32a ± 0.02	247.78c ± 12.29	4464.02c ± 169.62	148.53b ± 34.88	120.53ab ± 39.63	23.58cd ± 4.10	18.12c ± 3.63
<i>Commercial noodles</i>	0.54b ± 0.10	261.17c ± 10.52	3835.73b ± 293.72	79.85a ± 22.66	82.58a ± 24.24	16.58b ± 1.74	21.44c ± 3.42

UR, untreated rice starch; AR, annealed rice starch at 55 °C 24 h; HR, heat-moisture treated rice starch with 20 g/100 g moisture at 110 °C 1.5 h. Means followed by different letters in a column are significantly different at  $P < 0.05$ .

## Example of Table: left or right text

Table 2

Moisture content ( $X_w$ ), bulk density ( $\rho_b$ ), tapped density ( $\rho_{tap}$ ), particle density ( $\rho_p$ ), total porosity ( $\epsilon_t$ ), Carr index ( $CI$ ), Hausner Ratio ( $HR$ ), flowability by hole size diameter ( $d_{FLODEX}$ ), remaining height ( $h_{FLODEX}$ ), angle of repose by FLODEX ( $\alpha_{FLODEX}$ ), angle of repose by freefall ( $\alpha_{freefall}$ ) and the wetting time ( $t_w$ ) of green banana flour (GBF) before and after the agglomeration process.

Physical properties	GBF	Agglomerated GBF
$X_w$ [g/100 g]	3.97 ± 0.49	2.61 ± 0.66
$\rho_b$ [kg m <sup>-3</sup> ]	514.76 ± 0.01	329.19 ± 0.02
$\rho_{tap}$ [kg m <sup>-3</sup> ]	652.06 ± 0.03	403.07 ± 0.01
$\rho_p$ [kg m <sup>-3</sup> ]	1452.26 ± 0.02	1329.69 ± 0.02
$\epsilon_t$ [dimensionless]	0.70 ± 0.01	0.73 ± 0.03
$CI$ [%]	20.95 ± 4.04	18.3 ± 0.34
$HR$ [dimensionless]	1.27 ± 0.06	1.22 ± 0.01
$d_{FLODEX}$ [mm]	26	9
$h_{FLODEX}$ [mm]	38.20 ± 2.68	32.67 ± 2.50
$\alpha_{FLODEX}$ [°]	68.17 ± 1.46	53.89 ± 2.21
$\alpha_{freefall}$ [°]	36.89 ± 2.67	33.83 ± 3.90
$t_w$ [s]	>747.6	<313.8