HIT JOURNAL OF BIOTECHNOLOGY

An International Peer Reviewed Journal of Biotechnology

About the journal

The Harare Institute of Technology (HIT) Journal of Biotechnology is a bi-annual print peer-reviewed journal that publishes high quality original research papers, short communications, case studies and review articles on biotechnology and related issues. The journal focuses on all aspects of traditional and modern biotechnology with the objective of contributing to solutions which address global challenges.

Subject Coverage

The HIT Journal of Biotechnology is dedicated to publishing high quality manuscripts that exhibit scientific excellence, significance and innovativeness. It covers the following areas of Biotechnology:

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2. Marine
3. Industrial
4. Agricultural
5. Environmental
6. Commercialisation and marketing of Biotechnology derived products and services
7. Innovation in Biotechnology

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Prospective authors please take note of the following important dates;

Deadline for submission of manuscripts for the first issue: 31 January, 2018

Notification to authors: 15 February, 2018

Journal publication: 30 March, 2018

Deadline for submission of manuscripts for the second issue: 27 July, 2018

Notification to authors: 15 August, 2018

Journal publication: 28 September, 2018

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Language
The journal's language is English – either British English or American English are acceptable. However authors please note that the spelling, and terminology used must be consistent throughout the article.

Manuscript Presentation
Manuscript should contain appropriate titles:
1. Abstract with five to seven key words
2. Introduction
3. Materials and Methods
4. Results and Discussion
5. Recommendations or Conclusion
6. Acknowledgements

7. References.

Manuscripts should be typed in Times New Roman of 12 pt., 1.5 spacing, with justified margins. The length of paper including text, tables and figures should not exceed 15 pages. Tables and figures may not be placed within the text. A template has been attached at the end of this section for guidance.

1. Title

The title phrase should be brief. Under the title, a list containing the following must be included;

1. Authors’ full names (first-name, middle-name, and last-name)
2. Affiliations of authors
3. and emails and phone numbers of the corresponding author.

2. Abstract

Authors are required to provide a short abstract of 250 to 300 words. The abstract should not contain any undefined abbreviations or references.

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Please provide five to seven key words. However these key words may not include words appearing in the title of the manuscript.

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Words with abbreviations must be written in full on first mention and may only be used for terms that are either unusually long or non-standard.

5. Introduction

The introduction must be clear and concise and should capture the statement of the problem in simple and unambiguous terms. In this section authors should also clearly state the objectives of the work being presented.

6. Materials and methods

Materials and methods should be clearly presented to allow the reproduction of the experiments accurately.
7. Results and discussion

Results and discussion may be combined into a single section or separately when necessary. This section must be comprehensively written.

8. Recommendations and or Conclusions

Recommendations and Conclusions may also be combined into one section or written separately when appropriate. The section presents the authors’ own scientific recommendations and conclusions to the work presented.

9. Acknowledgments

Any acknowledgements of people who contributed to the work other than the authors and sources of funding etc. are stated in this section but must be brief.

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The following applies to tables and figures;

1. They must be numbered consecutively
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3. Should be kept to a minimum.
4. Should have a short descriptive title.
5. The units of measurement used should be clearly stated.
6. Should be organized in Microsoft Word
7. Figures/Graphics should be prepared in GIF, TIFF, JPEG or PowerPoint.

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The HIT Journal of Biotechnology shall use the Harvard System of Referencing. Authors please visit any appropriate website for guidance.
Identification and Selection of Superior Phenotypes of *Uapaca Kirkiana* Muell Arg. (Euphorbiaceae), A Priority Indigenous Fruit Tree of Zimbabwe [Times New Roman, size 12, Bold]

Patient D. Dhliwayo-Chiunzi¹, Ignatious Matimati² and Barbara Kachigunda³

[Times New Roman, Size 12, Bold]

¹Harare Institute of Technology, Department of Biotechnology, P. O Box BE 277 Belvedere, Harare, Zimbabwe.

²Department of Horticulture, Faculty of Natural Resources Management and Agriculture, Midlands State University, P. Bag 9055, Gweru.

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Address for correspondence [Times New Roman, Size 12, Bold]

Harare Institute of Technology, Department of Biotechnology, P. O Box BE 277 Belvedere, Harare, Zimbabwe.

pdhliway@yahoo.com

Abstract [Times New Roman, Size 12, Bold, 1.5 spacing]
The International Centre for Research in Agroforestry (ICRAF now known as the World Agroforestry Centre) initiated research and development work on at least 20 priority indigenous fruit trees in 5 countries in Southern Africa including Zimbabwe. The long term objective of this work was to improve food security and income generating capacities of local communities through domestication, marketing and commercialisation of indigenous fruit trees. Country specific priority species were identified based on consultations with a wide range of users.

**Introduction**

*Uapaca kirkiana* Muell Arg. (Euphorbiaceae) is one of the most important fruit trees native to the Miombo ecological zone of Southern Africa (Ngulube, et al., 1995). The tree is reported as a priority species in Zimbabwe, Zambia, Malawi and Tanzania. *U. kirkiana* is a small to medium sized tree of up to 5 – 12m height. It has a characteristic rounded crown and mainly occurs at medium altitudes in open woodland. It is dominant on gravelly soils. The stem bears short and thick branches with simple alternating leaves arranged in clusters. *U. kirkiana* is a dioecious that bears male and female flowers on separate plants. The male and female flowers are yellow green in colour and globose in shape (Ramadhani, 2002; Ngulube, et al., 1997). The fruits of *U. kirkiana* known as mazhanje or mashuku in Shona are spherical in shape with a rather hard skin surrounding an edible pulp. Flowers and fruits are set during the rainy season, and fruits mature from September to December (FAO, 1986). Fruits are collected for utilisation around the month of October to around February.

**Methodology**

**Identification of *U. kirkiana* growing areas**

In order to identify major *U. kirkiana* natural stands, consultations were held with extension workers, Forestry Commission, farmer key informants, school children, vendors and traders. Information about source areas and desirable traits for fresh consumption and for processing into various products were collected from workshop participants using a checklist and a structured survey questionnaire administered during village workshops and interviews held in the respective areas.
### References

The Harvard system of referencing shall be used.

### Table 5. Characteristics of the trees selected for multiple criteria

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<th>District</th>
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<th>Pulp content (%)</th>
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<td>10.399</td>
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Figure 3: Dendrogram of the cluster analysis of superior phenotypes. [Times New Roman, Size 12, 1.5 spacing]
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3. Manuscript number
4. Title of manuscript
5. Authors
6. Date sent to reviewer
7. Date expected from reviewer

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**Comments on the Manuscript**

1. Abstract
2. Introduction / Background
3. Methodology
4. Results
5. Discussion
6. Recommendations
7. Conclusion
8. References
9. Tables, figures, graphs
10. Others
11. Decision / Overall Comment
Part C

Give your recommendations on the following issues

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<td>Does the manuscript require further proofreading and correction of</td>
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Part D

Give your ratings of the following

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Part E

Recommendations

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Part F

Additional comments / suggestions

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