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| Book Name: | [**Research Perspective on Biological Science**](https://www.bookpi.org/bookstore/product/research-perspective-on-biological-science-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_6262** |
| Title of the Manuscript:  | **Development Potential of The Areca Nut (Areca catechu L.) In Indonesia** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments |
|  | Reviewer’s comment**Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This chapter addresses an under-synthesized topic: the national development potential of areca nut (Areca catechu L.) in Indonesia viewed through area expansion, productivity trends, and germplasm resources. It consolidates scattered governmental statistics and research findings, and it highlights critical gaps in seed systems (availability of superior planting material) that directly affect farm productivity and export performance. The mapping of exploration status and released varieties can guide policy, breeding, and extension priorities in multiple provinces. With tighter statistics, clearer units, and recent references, this work can serve as a useful reference for plantation development and genetic resource management. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | The current title is broadly suitable but a bit generic. Consider:“Development potential of areca nut (Areca catechu L.) in Indonesia: production trends, germplasm diversity, and seed system priorities”This adds focus (trends + germplasm + seed systems) and improves discoverability. |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The abstract is informative but needs:1. **Consistent units and magnitudes.** Example: production figures appear off by orders of magnitude in places (likely “tons” vs “tons × 1,000”). Please cross-check all numbers cited for 2019–2022; one sentence reports **61,785,000 tons** which is implausible for areca nut and probably **61,785 tons**.
2. **One sentence on methods/sources** (e.g., “This review synthesizes Directorate General of Estate Crops statistics (2019–2023) and published studies on germplasm exploration…”).
3. **A concluding implication** (e.g., “Targeted exploration in un-sampled provinces and rapid multiplication of released varieties could close Indonesia’s seed gap and raise national productivity.”).
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| **Is the manuscript scientifically, correct? Please write here.**  |  The chapter is a **narrative review** with national statistics and germplasm tables. The logic is sound, but some numeric statements need correction and **unit harmonization**:* **kg/ha vs kg/tree** inconsistencies: e.g., “productivity averaged 689.0 kg of dry seeds **per tree**” is almost certainly **per ha** (or per planting density basis). Please standardize all productivity numbers to **kg/ha or t/ha**, and if tree-level data are kept, add **tree density** to make them comparable.
* **Comma vs decimal separators**: figures such as **142.192 ha** look like 142,192 ha; use international style (142,192 ha).

 **Tables & figures:*** Table 1 is very valuable but would benefit from **a “Year (data vintage)” column** and a clear source line (“Dir. Gen. Estate Crops, 2022”).
* Table 2 and Table 3 are useful; consider adding **mean ± SD or range** for key traits (bunches year⁻¹, fruits bunch⁻¹) to convey variability among accessions.
* Consider a small **map figure** shading provinces by exploration status and area share (you already discuss this—make it visually explicit).

 **Germplasm section:** Excellent overview of the 25 ex-situ accessions and three released varieties. It would help to state **which traits** (yield, bearing age, fruit size, disease tolerance) distinguish **Betara, Pinang Emas, Pinang Wangi**, and to recommend **candidate provinces** for future exploration (the 16 without prior exploration). **Seed system gap & recommendations:** Expand with a short, practical **action framework**: (i) identify candidate mother palms and certify BPTs; (ii) establish rapid **nursery multiplication** protocols; (iii) link seed supply to **provincial expansion targets**; (iv) encourage **clonal evaluation trials** across rainfall/soil zones.  |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** |  The list is solid but can be **strengthened with 2022–2024 sources** for official stats and trade:* Add the latest **Directorate General of Estate Crops** statistical yearbook (2023 or 2024 edition if available) to align the time series throughout the text.
* Consider **FAOSTAT** (Areca nut production & area), **UN Comtrade** (HS codes for areca nut exports), and a **recent policy brief** from Indonesia’s Ministry of Trade for export demand/price context.
* On health impacts (you cite Warnakulasuriya & Chen, 2022), add a brief **balanced note** acknowledging oral-health risks while keeping the agronomic focus.

 Ensure **APA 7th** compliance (journal names, volume(issue), page ranges, doi where possible).  |  |
| Is the language/English quality of the article suitable for scholarly communications? | Good overall, but please do a **light language edit** to fix recurring issues:* Spelling/typos: “bettel”→**betel**, “arcanut/arecanut”→**areca nut**, “Yelowish”→**Yellowish**.
* Agreement & style: e.g., “The largest species of this plant are found…” → “The largest **diversity** of this plant is found…”.
* Numbers & units as noted above.
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| Optional/General comments |  Add a short **Methods/Scope** paragraph after the Introduction (what years of statistics, which agencies, inclusion criteria for accessions). Where you report **seed production potential** (Table 3 and Table 4), add a brief note on how it was **estimated** (e.g., bunches year⁻¹ × fruits bunch⁻¹ × viable seed%). Consider a **closing box**: “Policy & Research Priorities (2025–2030)” listing (1) exploration in un-sampled provinces, (2) mother-palm certification in existing centers, (3) regional trials of released varieties, (4) extension on postharvest grading to meet export specs. |  |

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| **PART 2:**  |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?**  | *None apparent for a narrative review using public statistics and published literature. Please ensure proper permissions if any photos of varieties are not your own.* |  |

**Reviewer details:**

**Belagrouz Abdenour , Algeria**