

COVER LETTER

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[2nd July 2025]

Dear,

I/We wish to submit an original research article entitled “[**Utilization of Teak Wood Powder Waste as Eco-Friendly Filler in HRS-WC Asphalt: A Comparative Analysis of Dry and Wet Marshall Mix Methods**]” for consideration by SINERGI.

We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We promise not to withdraw this article after it has been processed by the Editorial Team. If there is a withdrawal, we are willing to pay a penalty of USD 150 (IDR 2000K) to the SINERGI Editorial Team.

In this paper, I/we report on / show that:

Field	:	Traffic Engineering and Safety
Topic	:	Utilization of Teak Wood Powder Waste as Eco-Friendly Filler in HRS-WC Asphalt: A Comparative Analysis of Dry and Wet Marshall Mix Methods
Brief Background	:	The demand for durable roads has led to the exploration of sustainable materials like Teak Wood Powder Waste (TWPW) as an eco-friendly filler in asphalt. TWPW, a byproduct of the furniture industry, offers a sustainable alternative to conventional fillers, reducing waste and construction costs. This study investigates the effect of TWPW on the performance of Hot Rolled Sheet – Wearing Course (HRS-WC) asphalt, commonly used in tropical climates, comparing dry and wet mixing methods.
Research Problem	:	The study aims to assess how varying TWPW content and the dry versus wet mixing methods affect the performance of HRS-WC asphalt, specifically focusing on stability, flow, and void content. It also explores whether TWPW can improve durability and cost-effectiveness in road construction.
Overview of Method	:	TWPW was added at varying filler contents (0%, 0.3%,

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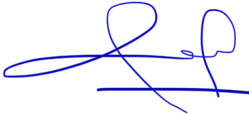
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		0.6%, 0.9%) using both dry and wet mixing methods. The mixtures were heated and compacted, then evaluated for performance using the Marshall stability test, focusing on stability, flow, and void content.
Significant finding	:	Incorporating TWPW improved the stability and durability of the asphalt mixture, with the wet mixing method yielding better compaction and filler distribution. The study suggests that TWPW can enhance asphalt performance while providing an eco-friendly, cost-effective alternative to traditional fillers.

We have no conflicts of interest to disclose.

Thank you for your consideration of this manuscript.

Sincerely,
[Machsus]



AUTHORSHIP STATEMENT

I/We wish to submit an original research article entitled “[*Utilization of Teak Wood Powder Waste as Eco-Friendly Filler in HRS-WC Asphalt: A Comparative Analysis of Dry and Wet Marshall Mix Methods*]” for consideration by SINERGI.

All persons who meet authorship criteria are listed as authors, and all authors certify that they have participated sufficiently in work to take public responsibility for the content, including participation in the concept, design, analysis, writing, or revision of the manuscript.

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POTENTIAL REVIEWERS

Please send 3 (three) prospective reviewers (who are not yet registered in SINERGI) to speed up the review process who are competent for the topic and have a good reputation in the field. Please ensure that **they are willing to review** this paper.

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