



**SDI Review Form 1.6**

Journal Name:	<a href="#">Asian Journal of Research in Agriculture and Forestry</a>
Manuscript Number:	Ms_AJRAF_42370
Title of the Manuscript:	EFFECT OF PRESOWING TREATMENT ON SEED GERMINATION AND SEEDLINGS GROWTH CHARACTERISTICS OF ALBIZIA PROCERA
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>The objective of this study was to identify the most suitable pretreatment method that will increase germination of <i>Albizia procera</i>. I suggest re-writing the Ms. I did some re-writing as follow. ABSTRACT The present study examined the characteristics of <i>Albizia procera</i> after pre sowing treatment on seed germination and seedling growth. The collected seeds were from five provenances namely Bilaspur, Bastar, Korba, Raigarh and Sarguja of Chhattisgarh, India. Then, seeds germination were in cold water, hot water, and hormonal, employed to record their effects on seed germination and seedling growth response in the seeds. The results show significant differences in germination attributes, vegetative growth, survival percent and vigor index enhanced in all treatments over control. Except cold water treatment all the other treatment show in root length, shoot length, number of leaves and average leaf area enhancement as compared to control of each provenance.</p> <p>Seeds pre-treated with cold water had optimum germination than those pre-treated with hot water and hormonal treatment. Seeds pre-treated with hormone IAA had average highest germination rate among all the provenances. From higher to lower percentage of germination were 90.5 % for Bilaspur provenance, 84.3 % for Bastar provenance, and 67.2 % for Korba provenance with a lowest germination value.</p> <p>The effect of various pretreatment on germination value and germination Energy index (Table 1). The highest enhancement in germination energy index and germination value where for Bastar provenance after hormonal treatment and lowest for Korba provenance when exposed to cold-water treatment. When the exposed seeds to hot water and hormonal treatments, enhanced the speed of germination across all the provenances. In addition, the cold-water treatment had no-effect in germination speed over control. It observed that pre seed treatment with hormones stimulated germination of <i>Albizia procera</i> for each variety as concentration increases.</p> <p>The influence of different pre-seed treatments, the hormonal and hot water treatments stimulated different seedling growth attributes thus enhanced the shoot length, root length, number of leaves and leaf area than the control of each provenances. While cold-water treatment did not significantly changed these growth parameters.</p>	



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	<p>Different methods of pre-sowing treatments used for seed germination in order to break dormancy and enhances the rate and speed of germination process, the findings of the present study shows that seed germination of <i>A. procera</i> under different pretreatment methods significantly increased (<math>p&gt;0.05</math>) over the control. Among the three pretreatments, immersion in cold water, hot water and hormonal treatments showed higher germination success.</p> <p>The pre-treatment methods by affecting germination also influenced the seedling growth the highest root and shoot length (27.8 &amp; 11.6) recorded with seeds treated with hormone and followed by hot water, and cold water.</p> <p>According to our studies the best treatments for <i>A. procera</i> is the hormonal treatment and hot water treatments.</p> <p>The phrase "The pre-sowing treatments influence the germination percentage of <i>A. procera</i> seeds. The seed problems related to seed dormancy affect the use of species in nurseries for the production of seedlings, it is because seed dormancy can vary from species to species so the pretreatments should be given to that particular species" change with "The pre-sowing treatments influence the germination percentage of <i>A. procera</i> seeds. The seed dormancy affect the use of dormant species in nurseries for the production of seedlings. Its known that seed dormancy vary from species to species, thus the pretreatments given should be particular for each specie"</p>	
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with 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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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