



KrishiKosh (कृषिकोश)

(/) An Institutional Repository of Indian National Agricultural Research System



(/)

[Advanced Search \(/advanced-search\)](/advanced-search)

[Krishikosh \(/\)](#) / [Birsa Agricultural University, Ranchi \(/handle/1/93542\)](#) / [Thesis \(/handle/1/93550\)](#)

Please use this identifier to cite or link to this item: <http://krishikosh.egranth.ac.in/handle/1/5810027005>

Authors: KUMAR, ARUN (/browse?type=author&value=KUMAR%2C+ARUN)

Advisor: Siddiqui, M.H. (/browse?type=author&value=Siddiqui%2C+M.H.)

Title: Evaluation of ten seed sources of Shisham (Dalbergia sissoo) saplings of 3 years age at zonal Research Station Chianki, Palamau

Publisher: Birsa Agricultural University, Kanke, Ranchi, Jharkhand

Language: en_US

Type: Thesis

Pages: 46

Agrotags: null

Keywords: Evaluation of ten seed sources of Shisham (Dalbergia sissoo) saplings of 3 years age at zonal Research Station Chianki, Palamau

Abstract: The present experiment was conducted on a provenances/seed source trial of *Dalbergia sissoo* raised in 2005 in the field of Zonal Research Station, Chianki of Birsa Agricultural University, Kanke, Ranchi. Out of ten seed sources, seven seed sources were from Jharkhand and three were from Bihar state. Nursery grown uniform seedlings of approximately 45 cm length from different seed sources were planted in Randomized Block Design (RBD) in the month of July 2005 at a spacing of 2m x 2m in plot size of 6.0 m x 16.0 m. The data on different parameters such as Height (m), Diameter at breast height (cm), Clear Bole (without forking) height (m), Crown width (cm), Branch Angle (degree), Incidence of termite attack, Incidence of flowering, Mortality, Bole Volume (cu. m.) etc. were collected in month of August 2008, i.e. at the age of 3 years for all provenances/seed source using standard method. Comparison of different growth parameter of different seed sources was also made with that local Daltonganj seed sources. Maximum mortality (19.4%) was found for Daltonganj (P2) source and no mortality was found for Jamshedpur (P4) Source. The present finding indicates many variations in height of different seed sources at 3 years age. Maximum height (6.84m) was found for Garhwa, Jharkhand (P1) source. In comparison to Daltonganj seed source, Bhagalpur seed source showed less height, whereas other eight seed sources showed more height. Maximum d.b.h. (6.69 cm) was found for Jamshedpur, Jharkhand (P4) source followed by 6.35 cm for Garhwa, Jharkhand (P1) source, and minimum d.b.h. of 4.80 cm was found for Daltonganj, Jharkhand (P2) source. The percentage increase in Jamshedpur seed source over Daltonganj seed source was found maximum 39.37%. ii The clear bole height of Garhwa (P1) and Sahebganj (P7) seed sources was found maximum (3.51m) and the percentage increase in bole height of Garhwa and Sahebganj seed source in comparison to Daltonganj seed source was 18.98%. In comparison to local Daltonganj seed source five seed sources showed more crown width, whereas other four seed sources showed less crown width. Over Daltonganj seed sources maximum percentage increase in crown width was for Deoghar seed source (20.00%). Out of the total seed sources, maximum average branch angle 55.22° was found for Sahebganj (P7) followed by 55.05° for Deoghar (P5) and minimum average branch angle of 45.17° was found for Katihar (P9) Source. The incidence of termite attack at basal portion was maximally (16.29%) was notice for Katihar (P9) source followed by 15.4% for Bhagalpur (P8) source and minimum occurrence of 9.9% was found for Daltonganj (P2) Source. The Katihar, Bhagalpur and Dumka seed sources showed more flowering occurrence as compared to local Daltonganj seed source. The flowering occurrences for Garhwa and Jamshedpur seed source were 32.45% and 83.42% respectively more than Daltonganj seed source. Maximum bole volume was found for Garhwa and Jamshedpur seed sources From the score matrix, the Jamshedpur seed source was found as best seed source for all the growth parameters followed by Garhwa seed source. However, the Ranchi and Bhagalpur seed sources scored lesser value (34) as compared to other seed source.

Description: Evaluation of ten seed sources of Shisham (*Dalbergia sissoo*) saplings of 3 years age at zonal Research Station Chianki, Palamau

Subject: Forest Business Management

Theme: Evaluation of ten seed sources of Shisham (*Dalbergia sissoo*) saplings of 3 years age at zonal Research Station Chianki, Palamau

These Type: M.Sc


Issue Date: 2009

Appears in Thesis (/handle/1/93550)

Collections:


Files in This Item:

File	Description	Size	Format
1199 Arun Kumar.pdf		2.42 MB	Adobe PDF



[View/Open \(/displaybitstream?handle=1/5810027005\)](/displaybitstream?handle=1/5810027005)

[Show full item record \(/handle/1/5810027005?mode=full\)](/handle/1/5810027005?mode=full)

 [\(/handle/1/5810027005/statistics\)](/handle/1/5810027005/statistics)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.