Digitization of KFRI Research Reports 251-300

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Library and Information

PROJECT PROPOSAL

1. Project No.   KFRI 583/2009

2. Title   Digitization of KFRI Research Reports 251-300

3. Objectives   Digitize KFRI Research Reports 251- 300 and
    bring out a searchable CD

4. Project Period   July 2009 to December 2009

5. Investigators   K. F. George and N. Sarojam

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ACKNOWLEDGEMENTS

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INTRODUCTION

Kerala Forest Research Institute, Peechi has been conducting multifarious research on all aspects of forestry including wildlife and wood science and technology from the inception of the Institute in 1975. Basic studies or advanced problem solving forestry issues are being taken up for research with specific objectives on a time bound basis with internal or external funding. On completion of each project, a report is published. Each such report is assigned a serial Research Report number. Every report invariably contains the concepts, objectives of the study, methodology, data generated, analysis and the results of the study. These reports contain a lot of information generated during the course of the study, which will be useful for field application or for conducting similar type of studies.

Copies of these reports is kept in the library for further distribution. When number of these publications increased considerably, it has become difficult to locate research reports on a specific subject or specific author. Database maintained in the library for the proper documentation of these reports using CDS/ISIS is updated periodically. The database is searchable by author, title, subject and year.

Digital technology gives libraries an excellent opportunity to improve their services. It provides new ways of preservation and dissemination of library collections. Library is a growing organism and must be willing to adopt new conditions.

Digitisation work of these reports was started in the year 2000 and a CD of the reports 1-200 was published in the year 2001. As a continuation of the digitisation work of the first 200 reports, digitisation of the remaining reports is continued.

Purpose of Digitisation

There are number of reasons for considering digitisation as an alternative to traditional library activities. The term digital library in a broad sense is a computerized system that allows obtaining a coherent means of access to an organized, electronically stored repository of information and data. With the information explosion, libraries are facing space and monetary constraints. Every document published is to be acquired and stored under one roof and so evolve the concept of resource sharing and network. Automation

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has helped libraries in improving library activities and has accelerated their working. It saves the effort, time and manpower of libraries. In an automated system the information can be altered and updated without the repetitive work involved in the manual system. With the development of computer, any information can be turned into sequences. So, any user can access into the sequence without any trouble and delay. It saves the time of the users and staff and increases overall productivity and reliability.

MATERIALS AND METHODS

Target of the work was to digitize Research Reports 251 to 300 (see Appendix I) and to bring out a searchable CD. Each report was scanned using a scanner and saved as PDF. The reports were saved in PDF format in a folder htdocs/links. A web based mechanism was used for searching and retrieving reports. This has the added advantage that the reports can be published in internet at a later time. A local server mechanism provided by free software, Server2go was used for the CD implementation. This acted as a virtual server. The search engine was a php program, which reads list of documents, checks for existence of keywords and lists matching records.

The following Research Reports was not included as it was not published

Jayaraman K.; Induchudan N C. 2004. Testing an alternative thinning schedule for teak plantations based on a simulation model . KFRI Research Report 257

RESULTS AND DISCUSSION

SOFTWARES USED

CDS/ISIS and WINISIS

CDS/ISIS is a software package for generalised *Information Storage and Retrieval Systems* developed, maintained and disseminated by UNESCO. It was first released in 1985. CDS/ISIS is an acronym which stands for Computerised Documentation Service/ Integrated Set of Information Systems. CDS/ISIS is a menu-driven generalized information storage and retrieval system designed specifically for the computerized management of structured non-numerical databases. One of the major advantage of CDS/ISIS is that it is able to manipulate an unlimited number of databases each of which

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may consist of completely different data elements. It is also possible to handle variable length records, fields, sub fields and repeatable fields, thus saving disk space and making it possible to store greater amounts of information.

CDS ISIS has been modified to suit MS Windows, known as WINISIS. The development of the Windows version was the result of strategic development policy decision aiming at maintaining the leading role CDS/ISIS has played and is still playing on the international scene. WINISIS is used for creating the database. The database created using CDS/ISIS serves as the master database. This can be added to previous database of reports. A text file is generated from the database to serve as list for searching.

A sample of Field Definition Table, Worksheet used for data entry and the Home page are added.

SEARCH STRATEGY in CD

The search can be done by giving the title, name of the author, keywords and year. We can do search by single word or multiple words. For example, for searching teak propagation just type "teak propagation". Single author search and combination of authors also can be searched. It is also possible to know how many articles are there by an author. One has to click to PDF shown at the bottom of each search output to go to full text.

SYSTEM REQUIREMENTS

- Operating System: Windows XP or above
- Internet Explorer 6.0 or above

HOW TO USE CD

Insert the CDROM in the CD Drive. If auto run is enabled, the title and search box would appear. Otherwise one will have to run the program KFRI-Server.exe. Contents of CD can be copied to hard disk and run from there. Enter the keywords to be searched in the search box and click on SEARCH, then result will be displayed
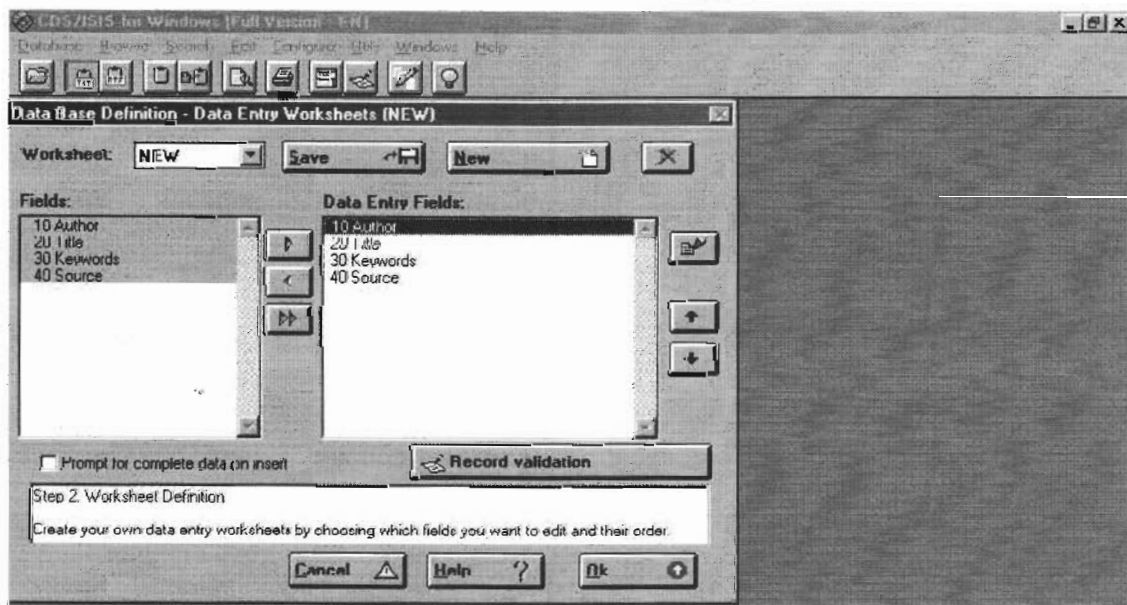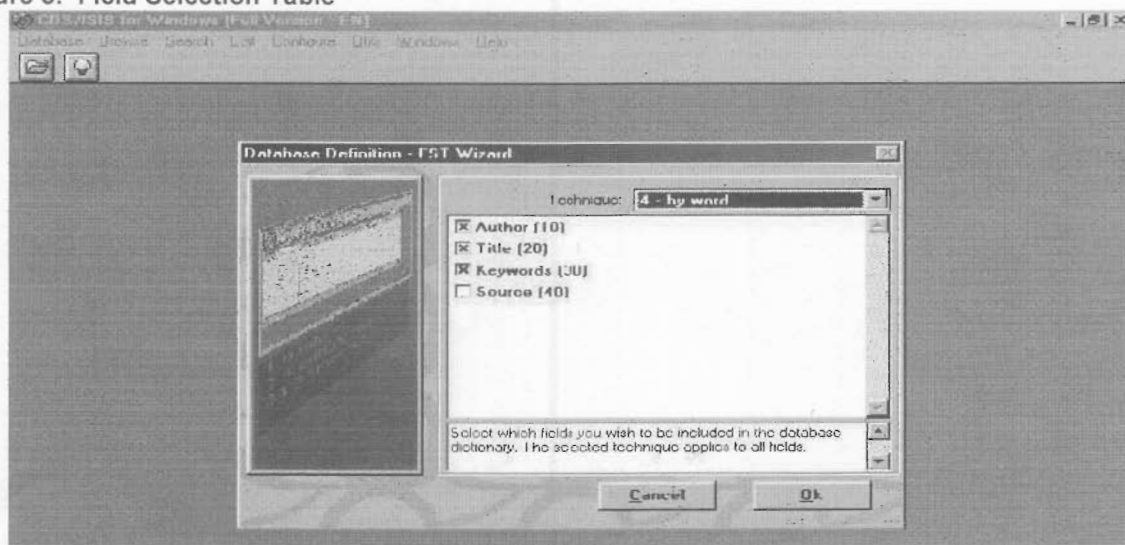
Figure 1. Field Definition Table
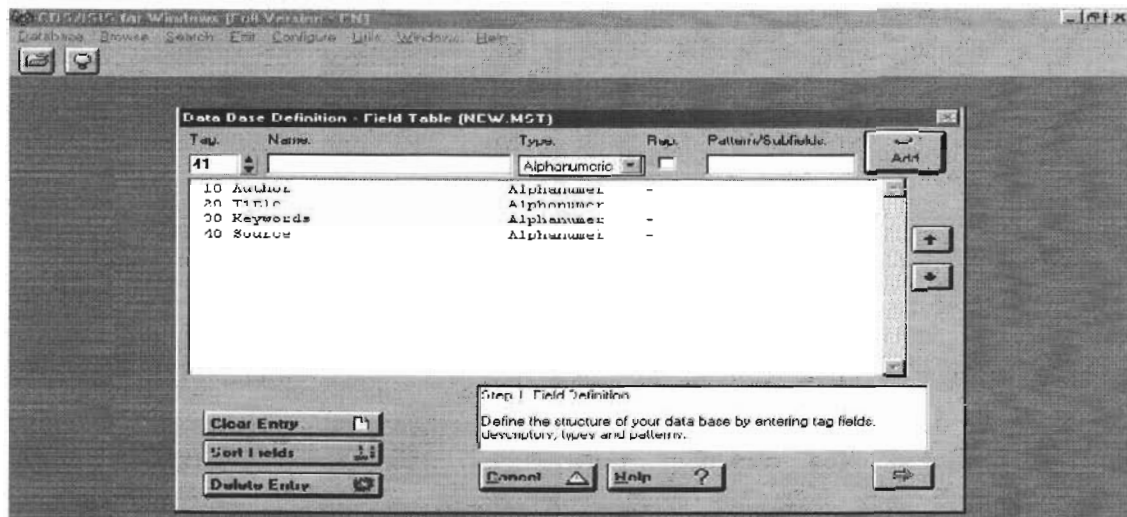
Then choose the fields that need to appear in the data entry worksheet by selecting the Field Name on the right pane and then clicking the side arrow key as in Figure 2.

Figure 2. Data Entry Worksheet

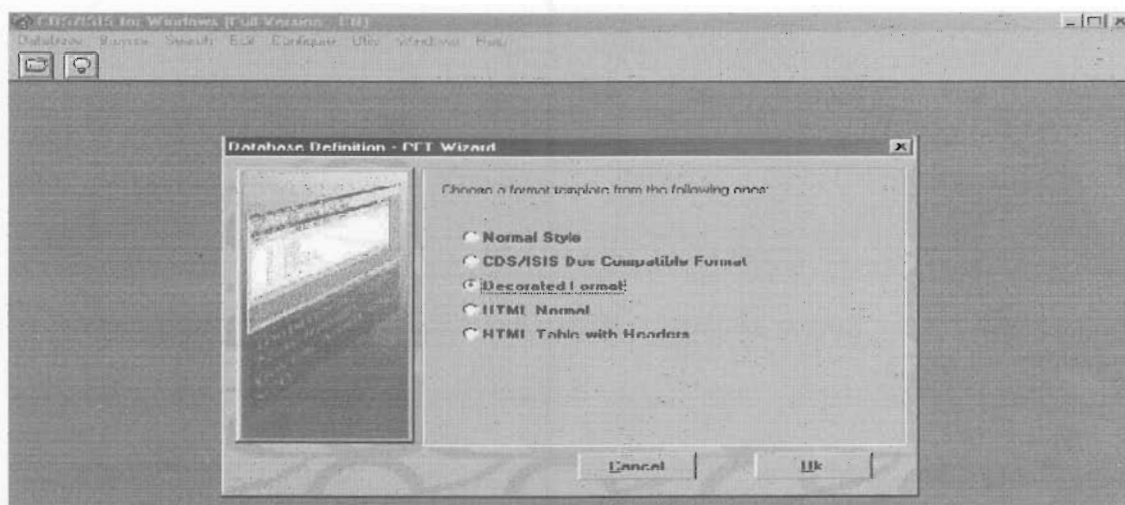Then click ok button and you may choose the indexing technique in the Field Selection Table as Figure 3.
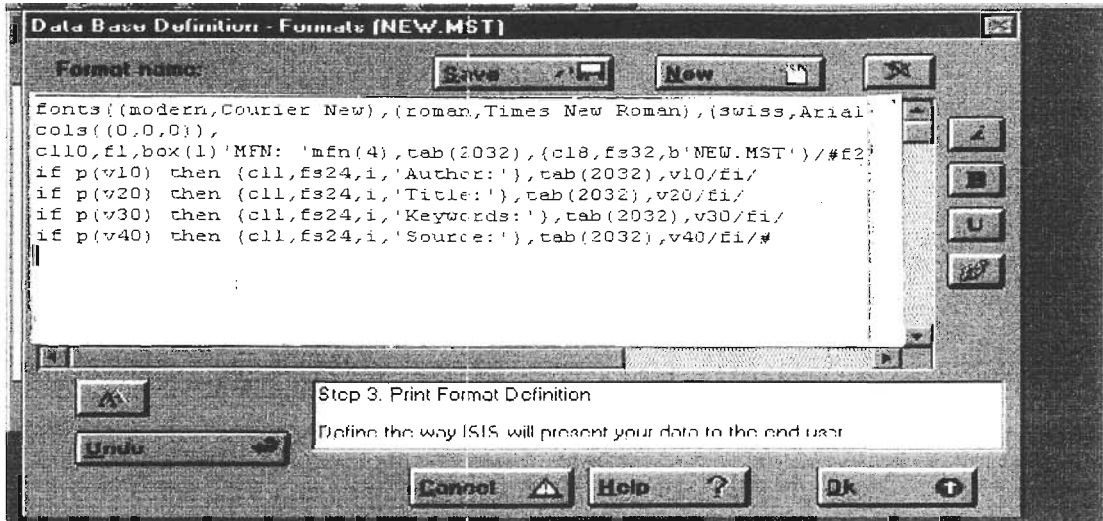
Figure 3. Field Selection Table

Then click **OK** button and launch Print Format Assistant and then again click **OK** button, to get the following print format choices.

Figure 4. Print Format Choices

Then select the appropriate print format and click **OK** button to get the print format screen as in Fig 5.

Figure 5. Print Format

In the print format lines, you may add the following formatting line inorder to create a hypertext link with the words **Click Here** that will be connected to the full path, provided in the tag 40.

Link (('Click here'), ' OEPNFILE ', v40)

Ensure that there must be a space between the OPENFILE command and the single quote, and the command should be written in upper case as shown above. The command means that, when you click on the 'Display full text' link, the click will automatically result in opening the file denoted in the field v40, in a new window

The resultant print format would appear as in Figure 6.

Figure 6. Print Format
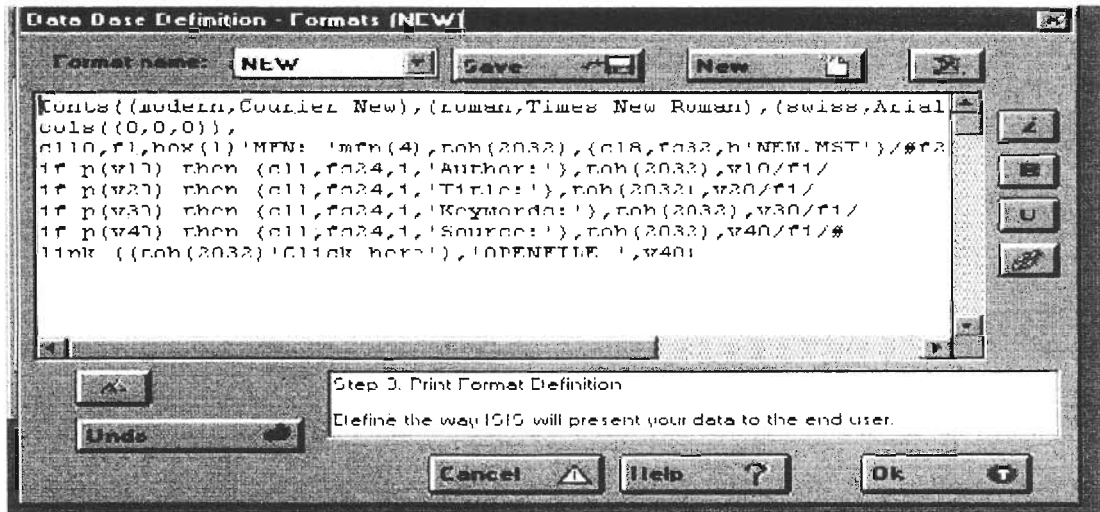
The print format of the above database is as follows

fonts((modern,Courier New),(roman,Times New Roman),(swiss,Arial)),cols((0,0,0)),
cl10,f1,box(1)'MFN: 'mfn(4),tab(2286),{cl8,fs32,b'NEW.MST'}/#f2,cl4,m(2032,
2286),cl4,fs30,
if p(v10) then {cl1,fs24,i,'Author:'},tab(2032),v10/fi/
if p(v20) then {cl1,fs24,i,'Title:'},tab(2032),v20/fi/
if p(v30) then {cl1,fs24,i,'Keywords:'},tab(2032),v30/fi/
if p(v40) then {cl1,fs24,i,'Sourcefile:'},tab(2032),v40/fi/
link ((tab(2032)'Click here'),'OPENFILE ',v40)

The database is created and the data entry is done in winisis. Data entry worksheet is given in Figure 7.

Entering Data in the Database

Figure 7. Data Entry Window
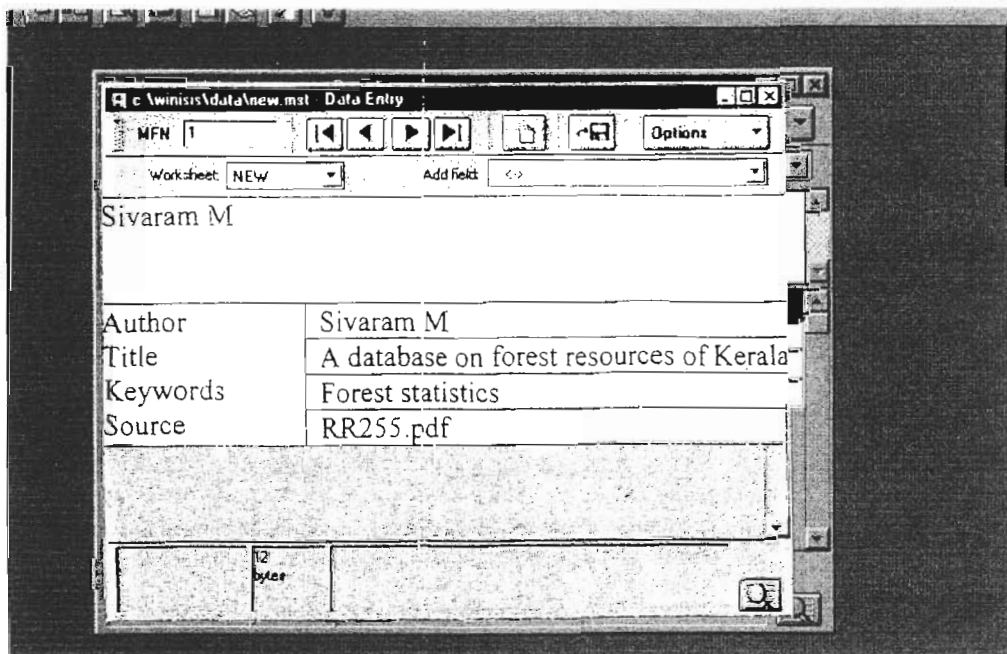
Full data about the digital collection which include name of the document in Figure 8.
Figure 8

KFRI Research Reports 250-300

Search string: bamboo

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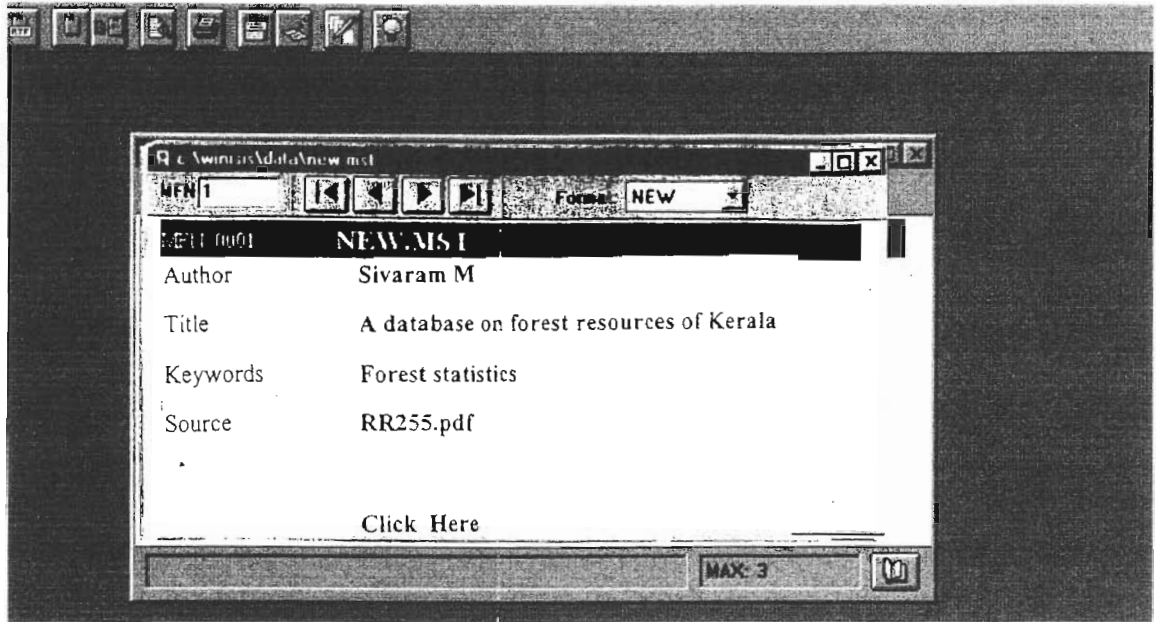**1.** Sharma J K; Seethalakshmi K K; Renuka C; Muktesh Kumar M S; Sarojam N; Pandalai R C; George K F; Muralidharan E M; Mohanan C; Sankar S; Gnanaharan R; Bhat K M; Hussain K H; Sankara Pillai K; Chacko K C; Chandrashekara U M; Induchoodan N C; Damodharan T K; Raveendran V P 2004. Resource enhancement and processing of cane & bamboo species suitable for handicrafts. KFRI Research Report 256 RR256.pdf

2. Bhat, K.V; Varma, R.V. 2006. Optimisation of harvesting and post-harvest technology to economise bamboo resource utilization. KFRI Research Report No. 285: 67p. RR285.pdf

3. Muraleedharan, P.K; Anitha, V; Krishnankutty C.N; Gnanaharan, R; Vijayakumaran Nair, P; Sankar, S; Seethalakshmi, K.K. 2007. Bamboo sector in Kerala: Baseline data generation for developing an action plan. KFRI Research Report No. 291: 109p RR291.pdf

4. Krishnankutty CN. 2008. Estimation of moisture content in bamboo culms for deriving the weight and price conversion factors. KFRI Research Report No. 300 RR300.pdf

Total Matches: 4

CONCLUSION

KFRI Research Reports 251 to 300 have been digitized and brought out in a CD which can be searched by author, title and subjects. It is also possible to prepare CD using GENISIS

Appendix

Research Reports 251 - 300

251   Muraleedharan, P.K; Renuka, C; Seethalakshmi, K.K; Sasidharan, N. 2003. **Developing a model participatory management programme for conservation of biodiversity and sustainable use of non-wood forest products in Kerala.** KFRI Research Report 251: 117p

252   Mohanan C. 2003. **Micorrihizae in forest plantations: Association, diversity and exploitation in planting stock improvement.** KFRI Research Report 252: 133p

253   Vijayakumaran Nair P. 2003. **Baseline mapping of Periyar Tiger Reserve and surrounding areas.** KFRI Research Report 253: 16p

254   Renuka C. 2003. **Maintenance of seed stands and species trial plots of rattans- Phase II.** KFRI Research Report 254: 43p

255   Sivaram M. 2004. **A database on forest resources of Kerala.** KFRI Research Report 255: 77p

256   Sharma J K; Seethalakshmi K K; Renuka C; Muktesh Kumar M S; Sarojam N; Pandalai R C; George K F; Muralidharan E M; Mohanan C; Sankar S; Gnanaharan R; Bhat K M; Hussain K H; Sankara Pillai K; Chacko K C; Chandrashekara U M; Induchoodan N C; Damodharan T K; Raveendran V P 2004. **Resource enhancement and processing of cane & bamboo species suitable for handicrafts.** KFRI Research Report 256: 139p

258   Balasundaran M; Muralidharan E M. 2004 **Development of Spike Disease Resistant Sandal Seedlings through Biotechnology Involving ELISA Technique and Tissue Culture.** KFRI Research Report 258: 64p

259   Renuka, C. 2004. **Alternative income generation for farmers in the Western Ghats through introduction and promotion of edible shoot producing rattans.** KFRI Research Report 259: 31p

260   George Mathew 2004. **A study of wood boring beetles in the Kerala part of Nilgiri Biospehere Reserve.** KFRI Research Report 260: 72p

261   Sajeev T V; Varma R V; Sudheendrakumar V V; Mohanadas K. 2004. **Maintenance of permanent plots to demonstrate the effect of protecting teak plantations from the teak defoliator.** KFRI Research Report 261: 9p

262   Bhat K M; Thulasidas P K. 2004. **Timber quality of teak grown in home garden forestry.** KFRI Research Report 262: 22p

263   Chandrasekhara U M 2004. **Assessing vulnerability and climate change impact on the vegetation structure and composition in wet evergreen and Shola forests of Kerala part of Western Ghats.** KFRI Research Report 263: 37p

264   Easa, P.S; Sasidharan, N; Nair, P.V. 2004. **People biodiversity register Pananchery Panchayath, Thrissur.** KFRI Research Report 264: 186p

265 Sankaran K.V. 2004. **Field trials for controlling Mikania infestation in forest plantations and natural forest in Kerala.** KFRI Research Report No. 265: 51p

266 Sarojam, N. 2005. **Annotated bibliography on teak.** KFRI Research Report 266 (KFRI Handbook No. 22): 549p

267 Indira, E.P; Muralidhraran, E.M. 2005. **Genetic improvement of teak.** KFRI Research Report No. 267: 27p

268 Krishnankutty, C.N; Balachandran Thampi, K; Mammen Chundamannil. 2005. **Wood balance study in Kerala and market survey.** KFRI Research Report No. 268: 54p

269 Renuka, C.N. 2005. **Propagation of rattans in the Western Ghats – A species trial.** KFRI Research Report No. 269: 19p

270 Renuka, C. 2005. **Germplasm establishment of rattans.** KFRI Research Report No. 270: 25p.

271 Jayaraman, K; Induchoodan, N.C. 2005. **Testing an alternative thinning schedule for teak plantations based on a simulation model (Phase II).** KFRI Research Report No. 271: 31p

272 Kallarackal, J, et al. 2005. **Rehabilitation of degraded forests through landscape based participatory approach.** KFRI Research Report No. 272: 161p

273 Balasundaran, M. 2005. **Screening sandal provenances for spike disease resistance using molecular markers.** KFRI Research Report No. 273: 24p

274 Menon, A.R.R; Sasidharan, N. 2005. **Biodiversity characterization at landscape level using remote sensing and GIS in Kerala.** KFRI Research Report No. 274: 217p

275 Balasundaran, M; Maria Florence, E.J. 2005. **Genetic diversity and DNA finger printing of Eucalypt and acacia clones.** KFRI Research Report 275: 25p

276 Mohanan, C. 2005. **Productivity improvement of teak through mycorrhizal manipulations.** KFRI Research Report No. 276: 91p

277 Nair, P.V. 2005. **Development of a biodiversity information system.** KFRI Research Report No. 277: 154p

278 Chandrashekara U M. 2006. **Pattern and rate of succession after selective logging in evergreen forests of Kerala.** KFRI Research Report No. 278: 24p

279 Balagopalan M .2007. **Management of soils of teak plantations for sustainable productivity** KFRI Research Report No. 279: 41p

280 Mohanan, C; Yesodharan, K. 2006. **Biodiversity of plant pathogenic fungi in the Kerala part of the Western Ghats.** KFRI Research Report No. 280: 98p

281 Menon, A.R.R; Balasubramanyan, K. 2006. **Evaluation of plant diversity in unlogged and logged stands of varying intensities.** KFRI Research Report No. 281: 126p

282 Sasidharan, N. 2006. **Illustrated manual on tree flora of Kerala supplemented with computer-aided identification.** KFRI Research Report No. 282: 502p

283 Mathew, G; Sharma, J.K; Easa, P.S. 2006. **Monitoring biodiversity in selected landscapes in the Kerala part of Western Ghats.** KFRI Research Report No. 283: 191p

284 Menon, A.R.R. 2006. **Biodiversity characterization at landscape level using satellite remote sensing.** KFRI Research Report No. 284: 30p.

285 Bhat, K.V; Varma, R.V. 2006. **Optimisation of harvesting and post-harvest technology to economise bamboo resource utilization.** KFRI Research Report No. 285: 67p.

286 Mathew, G. 2007. **Development of butterfly farming enterprises vis-a-vis conservation and sustainable utilization of biodiversity.** KFRI Research Report No. 286: 62p

287 SudheendrakuMar VV. **2007. Tracing the origin and spread of teak defoliator outbreaks through a molecular approach.** KFRI Research Report No. 287: 27p

288 Anitha, V; Muraleedharan, P.K. **Economic valuation of ecotourism development of a recreational site in the natural forests of Southern Western Ghats.** KFRI Research Report no. 288: 88p.

289 Rugmini P. 2008. **Modelling the growth of teak in relation to soil conditions in the Kerala part of the Western Ghats.** KFRI Research Report No. 284A.

290 Sudheendrakumar, V.V; Varma, R.V; Sajeev, T.V. 2006. **Demonstration of mass production, formulation and application of a baculovirus for management of the teak defoliator, *hyblaea puera*.** KFRI Research Report No.290:.53 p.

291 Muraleedharan, P.K; Anitha, V; Krishnankutty C.N; Gnanaharan, R; Vijayakumaran Nair, P; Sankar, S; Seethalakshmi, K.K. 2007. **Bamboo sector in Kerala: Baseline data generation for developing an action plan.** KFRI Research Report No. 291: 109p

292 Padmanabhan, P. 2007. **Ethnozoological studies on the tribals of Palakkad and Malappuram Districts of Kerala, South India.** KFRI Research Report No. 292: 152 p.

293 Jayson EA. 2008. **Status, distribution, food and feeding of Malabar Spiny Dormouse (Platacanthomys lasiurus Blyth) in the Western Ghats of Kerala.** KFRI Research Report No. 293: 119p

294 Rajeswari Meenattoor, J; Gireesh, T; Nair, R.B; Jayaraman, K. 2006. **Calibration of volume prediction equations for different clones of rubber based on random parameter models.** KFRI Research Report No.294: 41p.

295 Renuka, C: Rugmini, P. 2007. **Development of conservation strategies for selected endangered rattan species of the Western Ghats.** KFRI Research Report No.295: 46 p.

296 Sasisharan, N. 2007. **Phytochemical Characterization and evaluation of the medicinal plant Moovila for resource enhancement.** KFRI Research Report No.296: 26 p.

297 Varma RV. 2008. **Microbial pathogens associated with forest insects of Kerala part of Western Ghats with reference to host parasite relationship and ex-situ conservation.** KFRI Research Report No.297: 80p

298 Muraleedharan, P. K; Kallarackal, J; Menon, A.R.R; Balagopalan, M; Sasidharan, N; Rugmini, P. 2008. **Land use change and its impact on selected biophysical and socio-economic aspects of Karuvannur River basin in Thrissur District of Kerala.** KFRI Research Report No. 298: 120p

299 Sivaram, M. 2007. **Comparison of Prediction Models developed by Statistical and Neural network Techniques in Applied Forestry Research.** KFRI Research Report No. 299: 80p

300 Krishnankutty CN. 2008. **Estimation of moisture content in bamboo culms for deriving the weight and price conversion factors.** KFRI Research Report No. 300: 21p