

CHAPTER X

CENTRE FOR FORESTRY RESEARCH AND HUMAN RESOURCE DEVELOPMENT CHHINDWARA

Centre for Forestry Research and Human Resource Development (CFRHRD), Chhindwara came in to existence on 30th March, 1995 and declared as Satellite Centre of Tropical Forest Research Institute, Jabalpur under the ICFRE Dehradun on 3rd January, 1996. The mandate of the Centre is to take up the forestry research in the specialized areas like biodiversity conservation, non-wood forest products and forest protection, socio-economics, silviculture and tree improvement. In addition to this the Centre has also been assigned to develop the human resource in forestry sector by imparting vocational training leading to poverty alleviation through self-employment.

PROJECTS COMPLETED DURING THE YEAR 2004-2005

NIL.

PROJECTS CONTINUED DURING THE YEAR 2004-2005

Project 1: Studies on the feasibility of cultivation of medicinal and aromatic plants as intercrop in natural forests and plantations and their photochemical investigations [049/CFRHRD-1(2)/2001-2002]

Status: *Andrographis paniculata* (Kalmegh), *Asparagus racemosus* (Satawar), *Rauwolfia serpentina* (Sarpagandha) and *Costus speciosa* (Keokand) were planted at different spacing and results on productivity were recorded. Performance of Kalmegh, Lemon grass and Ganwarpatha as intercrop in natural forests was observed.

Cultivation technique of *Withania somnifera* (Aswagandha) has been standardized for Satpura plateau region of central India.

Cultivation technique was developed for the cultivation of *Chlorophytum borivillianum* (Safed Musli) in central India. The crop can be cultivated as intercrop with tree species.

Influence of harvesting time on productivity and quality of Kalmegh (*Andrographis paniculata*) was studied. Harvesting time influenced the quality of herb in terms of major active constituent andrographolide.

Project: 2 Studies on the insect pests of *Emblca officinalis* and *Gmelina arborea* in agroforestry and plantation ecosystems [2-050/CFRHRD-2(3)/ 2001-2002]

Status: Fourteen insect pests were recorded on *E. officinalis* and *G. arborea*. New defoliator *Parasa lepida* and *Trypanphora semihylinea* as pest of *G. arborea* and sap sucker, *Secutellers nobilis* on fruits of *E. officinalis* were reported for the first time.



Dying off of *Gmelina arborea* plantation due to insect disease complex



Five varieties of *E. officinalis* were screened against gall forming insects *Betousa stylophora*, Chaikaiya followed by Kanchan varieties was found having more pest.

Different age group plantations of *G. arborea* in western Maharashtra were evaluated for monitoring the status of pests. Possible control measures were also suggested.

Incidence and basis of resistance of different national provenance and seedling-raised plantation (RT,PB,PT and RS) by bark eating caterpillar, *Inderbela quadrilatata* on *G. arborea* were studied.

Project 3: Standardization of nursery techniques and propagation methods of *Buchanania lanzan* spreng. (Achar or Chironji) [051/CFRHRD-3(4)/2001-2002]

Status: Studies of effect of IAA, IBA, and GA₃, on germination and seedling growth of *B. lanzan* has shown significant effect of GA₃ on germination of *B. lanzan*. Experiments has been laid out in the nursery for optimizing the dosages of inorganic fertilizers for raising the seedling of *B. lanzan*.



High input *Buchanania lanzan* Plantation

Project 4: Standardization of the cultivation technique and utilization of *Laccate stipitate* species of *Ganoderma taceae* [056/CFRHRD-2(6)/2003]

Status: Collected fruit bodies of *G. lucidum* on 26 species from several ecological zones of different climatic type of Chhattisgarh, M.P. *G. lucidum* was cultivated artificially on wood chips and wooden logs. Isolated and purified the culture from collected fruit bodies.

Project 5: Standardization of production technology of some important medicinal plants under tropical climate of Madhya Pradesh [055/CFRHRD-5/(MHFW)/2003]

Status: Seedlings of *Emblica officinalis* (Awla), and *Andrographis paniculata* (Kalmegh), cutting of *Gymnema sylvestris* (Gudmar) and *Tinospora cordifolia* (Giloe) seeds of *Rauwolfia serpentina* (Sarp Gandha) were distributed to farmers/tree growers after testing stability and adaptability.

NEW PROJECTS INITIATED DURING THE YEAR 2004-2005

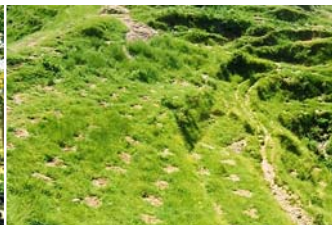
Project 1: Studies on edible potential of some Indian Bamboo shoots

Status: This Project has been started from March, 2005.

EDUCATION AND TRAINING

Training

Six training programmes were organized at CFRHRD, Chhindwara on various subjects ranging from Agroforestry to cultivation of medicinal plants and biofertilizers. Officials of Zila Panchayat, state forest departments and progressive farmers of nearby districts actively participated in the training.



Bulletins Published

1. Meshram, P.B. and Patra, A.K. (2004). आंवले की खेती एवं उससे लाभ 109 ICFRE BL-14/CFRHRD BL.-5, 14 pp.
2. Vijayaraghavan, A. and Patra, A.K. (2004). औषधीय पौधों की खेती-घृतकुमारी (ग्वारपाटा) 108 ICFRE BL-13/CFRHRD BL.-4, 8 pp.
3. Nandeshwar, D.L. and Patra, A.K. (2004). चिरोंजी एक बहुपयोगी पौधा- 110 ICFRE-15/CFRHRD BL.-4, 9 pp.

CONFERENCES/MEETINGS/ WORKSHOPS/SEMINARS/ SYMPOSIA/EXHIBITIONS

Dr. P.B. Meshram, Scientist-D and Shri A. Vijayaraghavan, Scientist-B participated and presented research paper in IUFRO International conference on "Multipurpose Trees in the Tropics: Assessment, Growth and Management" organised by AFRI, Jodhpur from 22nd to 25th November, 2004.