

A. Research Centres:

- (i) **Forest Research Centre, Mandar, Ranchi (Jharkhand)** – It is well equipped with soil testing and biochemistry laboratories (Fig. 1). The modern nursery facilities with mist chambers, composting units is also available in the premise of Mandar Research Centre. The centre has vast experimental area with 24.32 hectares comprising progeny trial of *Melia dubia* and other economically important tree species. Recently, big bamboo nursery (Fig-1a) under the scheme of National Bamboo Mission has been initiated with propagation of clonal planting materials of 9 bamboo species. Besides, bamboo demonstration plantation has been established in 5 ha. area comprising bamboo species under the agro-urban ecosystem. (Fig. 2, 3a, 3b, 3c)
- (ii) **Environmental Research Station, Sukna, Darjeeling (West Bengal)** – The centre is well equipped for different data recording facility in selected watersheds. One Research Plots Udai Singh Jote, Darjeeling, (West Bengal) in 6.42 ha. are being maintained for the purpose of field research, demonstration and extension. The centre has also developed a herbal garden and propagation centre for production 90,000 nos. of Quality Planting Material of Medicinal Plant and Creation of Herbal Garden in Northern West Bengal and creating awareness for end users. (Fig 4) So far following species and no. of plants have been produced under the scheme of NMPB, New Delhi (Fig.5, 6)

Species	No. of Plants	Species	No. of Plants
<i>Rauwolfia Serpentina</i>	7500	<i>Terminalia arjuna</i>	7500
<i>Tinospora cordifolia</i>	7500	<i>Withania somnifera</i>	7500
<i>Asparagus racemosus</i>	7500	<i>Paederia foetida</i>	7500
<i>Acorus calamus</i>	7500	<i>Gymnema sylvestris</i>	7500
<i>Messua ferrea</i>	7500	<i>Terminalia arjuna</i>	7500
<i>Saraca asoca</i>	7500	<i>Asparagus spp</i>	7500
Total	45000		45000

(iii) Forest Research & Extension Centre, Patna -

1. Facilities available at the Centre:- (Fig. 7, 8)
2. Agroforestry Extension cum Training Centre (Fig.9)
3. Bamboo Common Facility Centre (Fig. 10, 11, 12)
4. Vegetative multiplication garden of *D. Sissoo* (Fig. 13)
5. Mist Chamber Facility (4 units) (Fig. 14)
6. Agronet shade house (4 units) (Fig. 15)
7. Clonal bank of *Populus deltoides* etc. (Fig. 16)

iv. Nucleus Brood Lac Farm, Chandwa:-

Rangeeni Farm located at Chandwa, Latehar (Jharkhand) in 17 ha. are being maintained for production of quality broodlac and extension of lac cultivation practices by scientific methods (Fig. 16a).

B. Bambusetum

Bambusetum established at IFP, campus has a total 35no. of species with an area of 1.5 ha. (Fig. 17)

C. Mangrove garden

Sl No	Botanical name	Sl No	Botanical name
1	<i>Aegiceras corniculatum</i>	7	<i>Excoecaria agallocha</i>
2	<i>Aglaia cucullata</i>	8	<i>Heritiera fomes</i>
3	<i>Bruguiera gymnorrhiza</i>	9	<i>Heritiera littoralis</i>
4	<i>Bruguiera sexangula</i>	10	<i>Intsia bijuga</i>
5	<i>Cerbera odollam</i>	11	<i>Pandanus odoratissimus</i>
6	<i>Deris trifoliata</i>	12	<i>Phoenix paludosa</i>

Mangrove garden established at IFP, campus with a total **12 no.** of species. The adaptation trail of mangrove may lead to introduction of such species with some phytohormal remediation's (Fig. 18)

Fig 1: FRC-Mandar



Fig 1a : Big Bamboo Nursery, Mandar



Fig 2: Bamboo Demo Plantation



Fig 3a: Bamboo Demo Plantation



Fig 3b: Bamboo Demo Plantation, Mandar

Fig 3c :Bamboo Demo Plantation,Mandar



Fig 4: Agronet shade house in ERS, Sukna



Fig 5: Seedlings of *hygrophila* sp. raised under NMPB



Fig 6: Seedlings of *Eclipta alba* raised under NMPB



Fig 7: Agroforestry Extension cum Training Centre, Jadua



Fig 8: Bamboo common facility Centre



Fig 9: Agronet shade house Facility



Fig 10: Equipments housed under bamboo common facility centre



Fig 11: Machines under bamboo common facility centre



Fig 12: Incense stick making Unit



Fig 13: VMG of D. sissoo at Jadua

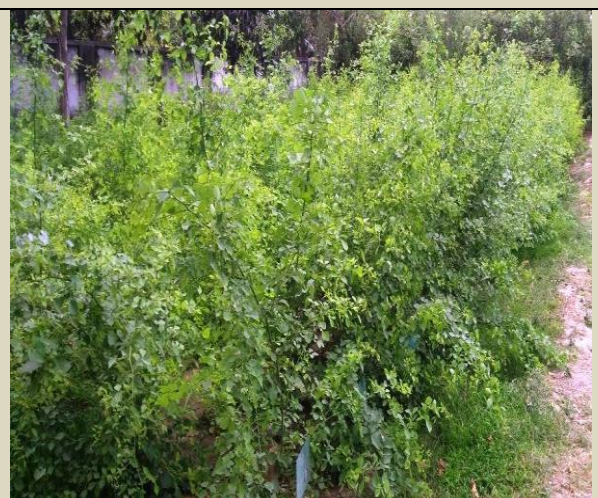


Fig 14: Macropropagation in Mist Chamber



Fig 15: Mist Chamber Facility



Fig 16: Poplar Nursery



Fig 16 a: N.B. Firm Chandwa



Fig 17: Bamboo Nursery



Fig 18: Flowering in Heritiera fomes



Fig 19: Bamboosetum

