

PROJECT COMPLETION REPORT

1. **Project No.** (FRC/X05)
2. **Title of the Project** : Reclamation of Iron Ore Minespoils in Karnataka through Afforestation
3. **Principal Investigator & Associates**
Principal Investigator : Dr. A. Ponnambalam, Scientist-C
Associates : Dr. G. R. S. Reddy, Scientist-E
: Dr. Y. Sridhar, Scientist-C
4. **Project Approval Date** : RAG, 2002.
5. **Date of start of the Project** : April, 2003.
6. **Date of Completion of the Project** : 31-3-2009
7. **Total Budget of the Project** : Rs. 1.36 Lakhs
8. **Background of the Project** :

Soil is a dynamic layer of earth's crust which is constantly changing and developing. Soil is the medium that stores water and nutrients and supports anchorage and provides base and plays an important role in the growth and development of vegetation. The differences in habitats are due to variation in the soil texture, fertility status and environmental conditions. Several investigations have reported that nutrients N and P are major limiting growth factors in mine spoils. Lack of mineralizable organic N and lower mineralization rates affect the availability of N to plant in mine spoils (Reeder and Berg, 1977).

A raw substrata of iron ore mine spoil is very poor in physical structure with low clay content and water holding capacity, lack organic matter and very restricted amount of plant nutrients. (Russel and La Roi, 1986; Schafer and Nelsen, 1979 and Rimmer, 1982). Therefore, to elucidate the physico-chemical and biological properties of different age group dumps along with the major nutrients and in order to rehabilitate iron ore mine spoils, the present experiment was taken up.