



RESEARCH ARTICLE

SURVEY AND ECONOMIC IMPORTANCE OF SOME FICUS TREE OF BOKARO DISTRICT (Vol.- 1)

Avinash kumar, Sarita kumari and Devi Prasad Mukherjee.

Department of Botany, Vinoba Bhave University, Hazaribag-825301, Jharkhand India.

Manuscript Info

Abstract

Manuscript History

Received: 25 December 2017

Final Accepted: 27 January 2018

Published: February 2018

Copy Right, IJAR, 2018,. All rights reserved.

Introduction:-

Bokaro is a district of Jharkhand state of India. The literal meaning of Jharkhand is “The region of forest and shrubs”. As this area was under dense forest cover with high biodiversity, it attracted a number of workers of different part of the world for the study of flora and fauna. Till date more than 1000 angiospermic plant have been reported from Jharkhand. Flora of Jharkhand has been studied time and again.

The first collection and studies of plants of Jharkhand can be traced back to the year 1848-1851 when J.D. Hooker and T. Thomson collected a large number of plants from different parts of India. The outcome of their work was published as “Flora indica”(1855) which was later elaborated and revised in the name of “The flora of British India”(1972-1897) in seven volumes by J.D. Hooker. Thompson(1951), Bressers (1955), Sanyal(1957), Ara(1960), Jha(1965), Paul(1967), Ghosh(1971), Majumdar and Biswas(1971), Mehr Homji(1971), Mishra(1972), Jain(1973), Verma(1988), Das(1996), Srivastava(2002), Ray (2007) have also contributed towards different aspects of flora of Jharkhand. Bentham & Hooker(1862-1883) system of plant classification has been followed as regard the sequence of families. However, at place Hutchinson(1968) and cornquist classification have been followed for further splitting up of the families. In accordance with the classification of Botanical regions of India(Puri 1960), the area investigated comes under the tropical moist deciduous forest type. In two year of survey I have identified some Ficus trees of Bokaro District:



Ficus krishnae:-

A medium sized tree with folded leaves joined at the base which appear like containers of ice- cream (kulphis) .

Field notes : It is grow in public parks and gardens. The legend is that krishna used to store butter in the leaves.

Local name: Makban katori



Ficus bengalensis Linn:-

A large, evergreen trees extending laterally by sending down aerial roots from the branches. Bark grey. Leaves entire, glabrous and shining above, minutely pubescent beneath, young leaves reddish. Hypanthodium, sessile, germinate, axillary, globose.

Field notes:- One of the largest trees found in the district. The foliage is a good fodder for goats and elephants.

Local name:- Bar, Bargad.

Flowers and fruits:- April-July and again Nov to Feb

**Ficus religiosa Linn:-**

Large tree, usually epiphytic when young. Bark grey and smooth when young, rough and darker when old. Branches without aerial roots. Leaves entire, glabrous. Stipules caducous, enclosing the bud. Hypanthodium sessile paired, dark purple and fleshy when ripe.

Field notes:-

Young plants usually grow on old building or on other trees. The leaves, bark and fruits are used medicinally. The branches and leaves, a good fodder for elephants and goats. The ripe hypanthodium are eaten by children.

Local name: Pipal

Flowers and Fruits: April - September



Ficus benzammina:-

It is large evergreen tree reaching 28 metres. Leaves glossy, simple alternate, glabrous, and acuminate. Stems have milky sap. Fruits are small, oval.

Field notes:

It is grow around road side, park and garden. It is shade provided tree. Fruits are eat by birds. It is edible. Bark of the root is used for medicine. The wood is low quality.

Local name: Weeping fig



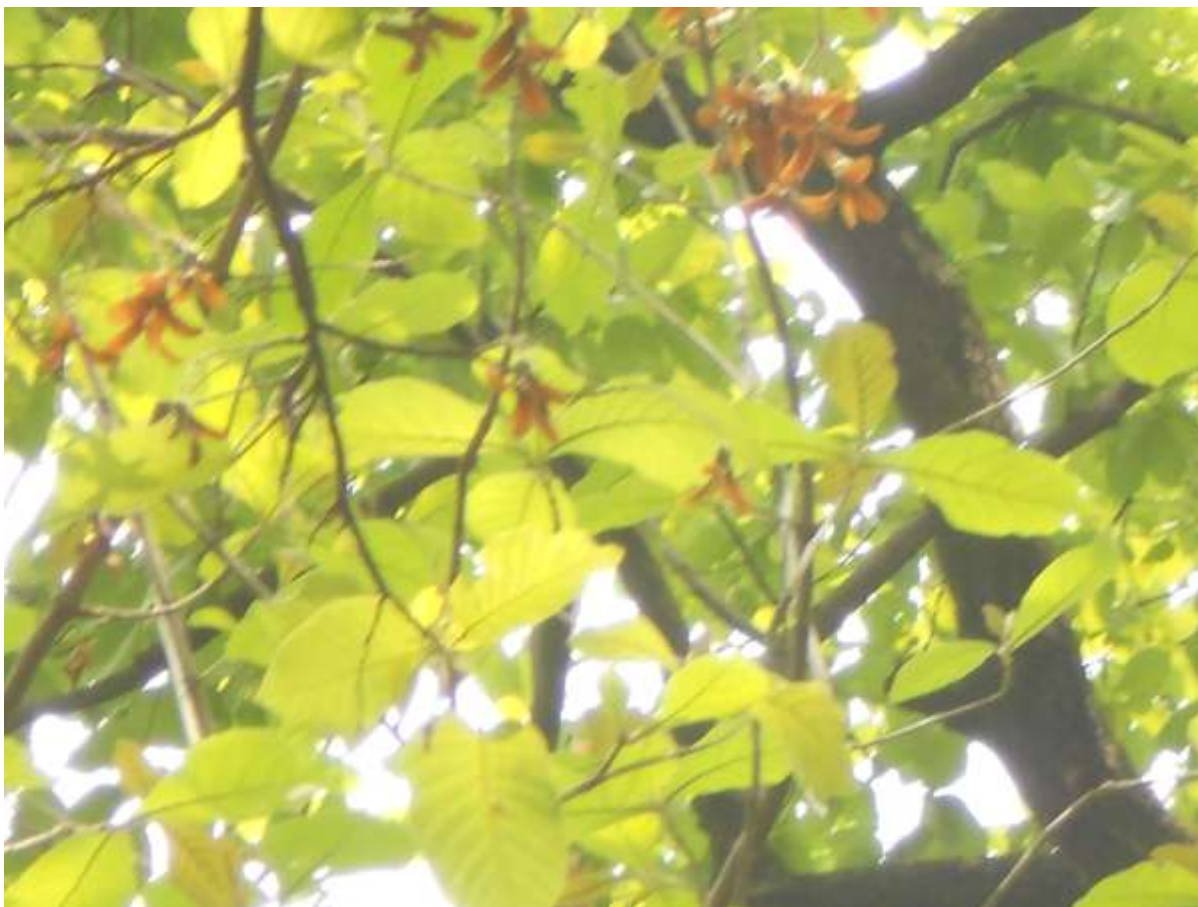
Ficus virens:-

Deciduous trees, often epiphytic in early life and often sending down a few aerial roots from the old trunk or branches. Bark grey smooth. Leaves glabrous, young leaves red. Hypanthodia sessile, axillary, smooth, when ripe white flushed with red.

Field notes: A fast growing tree planted along roadsides spontaneous elsewhere. The plant renews leaves in Feb.-march. The young shoots are eaten in curries and as pickles. The tree is much lopped to supply fodder for cattle.

Local name:- Pakar

Flowers and Fruits:- May- July

**Ficus macrophylla;-**

A handsome low spreading tree with very large broadly elliptic- ovate leaves. Bark is dark brown. Flower brown colour.

Field notes:- It is commonly found in Nehru park of Bokaro. The fruit is eaten. Leaves said to be good fodder.

Local name:- Gara- sosokera.

Flowers:- May – June.

Material And Method:-

The present work is an outcome of one year floristic studies of Bokaro district conducted during different seasons of the year. The work is confined to the dicotyledones trees. Various excursion trip were arranged. In course of the field trip, on-the-spot notes were entered in the field note books as suggested by Davis and Hey wood(1963). The data recorded include field number, locality, habit, habitats, associations and frequency(By visual estimation) as well as colour of flowers and fruits, scent, local name and uses, character of bark and other features which could not be studied from the preserved specimens. On return from excursion all the collection were carefully checked poison in saturated solution of mercuric chloride in rectified spirit and pressed subsequently. Efforts were made to identify the plants from fresh materials with the help of different floras. Those which could not be identified were preserved for future study.

Result and Discussion:-

Collection of specimens i.e. flower from large trees is a different work. During the last few centuries destruction of plants has been made due to several causes. Hence, conservation of what remain in the flora assume great importance and top priority. One cannot conserve what he does not know. Keeping this dictum in mind, in order to conserve we should know what we have today and what need to be protected. Therefore the present work aim at this object. Bentham & Hooker(1862-1883) system of plant classification has been followed as regard the sequence of

families. In accordance with the classification of Botanical regions of India(Puri 1960),the area investigated comes under the tropical moist deciduous forest type.

References:-

1. **Anderson, T.1863.**On the Flora of Bihar and the mountains of Parasnath with a list of species collected by Messrs Hooker, et. Al. *J. Asiat.Soc. Bengal***32**: 187-218.
2. **Ara Jamal 1960.** A cursory ecological survey of the Flora and Fauna of Hazaribag National park (Bihar). *J.Bombay. Nat. Hist. Soc.* **57**: 326-328 .
3. **Ball, V. 1867.** On the jungle products used as articles of food by the inhabitants of the districts of Manbhum & Hazaribagh. *J. Asiat. Soc. Bengal***36**:73-82.
4. **Ball, V. 1887** Notes on Principal jungle fruits used as articles of food by the natives of district of Maunbhum and Hazaribag. *J. Asiat. Soc.* 11-43.
5. **Campbell, Rev. Dr. A. 1886.***The Descriptive catalogue of economic products of Chutianagpur.*
6. **Das, N. N. 1996.** Floristic and Ethnobotanical studies of Dumka Distt.(Bihar) Ph.D Thesis, T.M. Bhagalpur University, Bhagalpur.
7. **Ghosh, T. K. 1971.** *studies on the Flora of Ranchi District* Part I & II Ph.D. Thesis. Ranchi University, Ranchi.
8. **Haines, H.H. 1910.***Forest Flora of Chotanagpur.* Bisen Singh Mahendra Pal Singh, Debradun Publication (Reprint, 1961)- 634+XXXVII.
9. **Hooker, J.D. and Thompson, T. 1855.** *Flora Indica*, I.Reeve & Co. Ltd. Kant, London.
10. **lain, S .K.(1973).** Medicinal Plants among Adibasis In India. *Bull BA. Stir India* **15 (1&2)**: 85- 91.
11. **Maheshwari, J.K. and Paul, S.R. 1975.** The Exotic flora of Ranchi —*J.Bomb Nat Hist. Soc.* **70 (1)**:438-446
12. **Majurndar, N.C. and Biswas, S.N. 1971.** An account of the vegetation of Chaibasa- Singhbhum District in South Bihar. *Buff Bot. Soc. Bengal.* **25** : 43-51.
13. **Mishra, K.K. 1972.** A contribution to our knowledge of the Angiospermic flora of the Parasnath Hills. *J.Bihar. B.A. Soc.* 1:48-53.
14. **Paul, S.R. 1967** *Floristic and Phytogeography of the Netarhat Plateau, Bihar*: Ph.D. Thesis. Bihar university, Muzaffarpur.
15. **Ray, K. 2007.** Wild life Heritage of Jharkhand. Gautam Printing works, Dhanbad.
16. **SahuS.C. 1986.** *Ethnobotany and Medico- Botanical studies on some important plants of Santhal Pragana and Chotanagpur.* Ph.D. Thesis, RanchiUniversity,Ranchi.
17. **Sanyal, A. 1957.**Additional notes on the Botany of Bihar and Orissa and its supplement by Dr. Herbert Mooney *md. For.* **83** : 230-23 5.
18. **Singh, A.K. 1987.***Studies on the Angiospermnic Flora of Giridih District.* Ph.D. Thesis, M.U. Bodh- Gaya.
19. **Singh, Pushpa 1996-***Studies on the Flora of old Chotanagpur Division.* Ph.D. Thesis Bihar University, Muzaffarpur.
20. **Srivastava, D.K. 1986.***Floristic and Ethnobotanical Studies of Santhal Pragana(Dicotyledon)* Ph.D. Thesis. Vinoba Bhawe University, Hazaribag.
21. **Thompson, 1917.** *Botany of the Hazaribag district-* Published in the gazetteer.
22. **Verma, M. 1988,** *Studies on Angiospermic flora of .Kauleshwari Hills (Hazari bag) and adjoining place* Ph.D. Thesis. Magadh University, Bodh Gaya.