

Multipurpose Use of Mulberry

Mulberry is a multipurpose tree and has high potential economic value other than sericulture, because it has many unique and special features. Apart from being the sole food plant of mulberry silkworm, mulberry can also be exploited for several other biological and industrial purposes. Multipurpose use of mulberry is well documented by different workers. Mulberry can serve several important requirement namely, food fodder, fuel and fibre.

Fodder use :Mulberry is used as a fodder plant. The rich protein and carbohydrate content of mulberry leaves serves as a good green fodder like other fodder to livestock. The unused leaf after feeding to the silkworm is used as fodder to increase the milk of livestock. It is calculated that one ha mulberry garden sustains 3 - 4 milch animals, which adds additional income of Rs.8, 000 – 10,000 to a family. CSGRC, Hosur



has identified some mulberry accessions suitable for fodder (ME-0066, 0065, MI-0012, 0014, 0162, 0173, 0178, 0310, 0383 and 0387).

Fuel use :Mulberry is fast growing plant and sustain repeated pruning to produce huge biomass. The twigs and leaf are used as fuel for cooking. It is estimated that from one ha of mulberry garden about 10 –12 ton of stems and twigs are available per year which can meet the annual requirement of a family of 6 – 8 members. More than, 5 kg biological yield /plant was obtained from 142 mulberry accessions which are suitable for fuel use.



Basket mulberry :The mulberry variety used for making baskets is popularly known as basket mulberry. The characteristic features of the mulberry variety is that the stem is resilient, flexible, fast growing, more number of branch/plant, small leaf, shoot



weight is higher than leaf (biological yield) and the twigs easily bend for preparation of basket. In Sujampur, Pathankote, and Dhar villages of Punjab, Haridwar in Uttaranchal and Jammu & Kashmir, the mulberry twigs are used for basket and handle of agricultural implements. The farmers usually plant mulberry in their backyard, roadside, bund areas and other fallow land to get sufficient twigs of mulberry and used them for additional income as well as part time job for family members. The basket is used to carry various household purpose, transportation of manures, vegetables, cereals etc. and other works. The accessions suitable for this purpose are identified (MI- 0026, 0059, 0205, 0529, 0531 and ME-0259).

Fruit use :Mulberry provides delicious and nutritious fruits which are very popular in North and South India. *M. laevigata* varieties have long fruits which are seedless and sweet. Therefore, it has commercial value. *M. alba* produces white fruits, which are very sweet to taste. Fruits are sold from March –May at Mahabaleshwar,



Delhi, Dehradun, Rajasthan, Almora and other adjacent areas. Mulberry fruits contain high carbohydrate besides vitamins and minerals and they are used for jam, jelly, juices and other products. Mulberry fruit juice helps to prevent high fever, dyspepsia and melancholia. The mulberry may be exploited as minor fruits. CSGRC, Hosur has identified a good number of fruit yielding mulberry accession (MI- 0118, 0171, 0172, 0249, 0300, 0362, 0380, 0497, 0501, 0505, 0507, 0512, 0516 and 0673).

Aforestation :Mulberry is a fast growing species, available in forest and cultivated form. *M.serrata* and *M.lavigata* are found drought tolerant and therefore good for afforestation. In nature, it grows at high altitude, hill areas, arid, semi- arid, saline and other areas. A good number of *M. lavigata* (100 acc.) and *M. serrata* (50 acc.) collected and maintained at CSGRC, Hosur are suitable for afforestation.



Medicinal use of mulberry : Mulberry is called “Kalpavruksha”. The fruit extract is good

laxative. The leaf extract is used to cure throat inflammation; the bark is used as purgative and vermifuse; the root has antihelmintic and astringent properties. Thus,



the different parts of mulberry i.e. root, stem, leaf, fruits and bark can be used as home medicine. Mulberry leaf cures diabetes, hypertension and diuresis. It has therapeutic value for the treatment of diseases like arthritis, dyspepsia, melancholia, nervous disorders, constipation. It has been reported as a very effective antihelmintic, antipyretic and anti inflammatory agent. Besides this, leaf extracts prevent throat infection, irritation and inflammation of throat. The bark is effective as purgative and vermifuse. The roots contains anthelmintic and cathartic properties (Suryanarayanan, 2002)

Timber value :Mulberry is well known for the manufacture of sports article and toys, turnery items. The hard wood from *M. laevigata*, *M. serrata* and *M. indica* is used for manufacture of tennis-racket, and cricket bats for fine grain and polishing. The fine grains and smoothness

of wood, is extensively used in manufacturing of bobbins, pullies, foot handles, toys etc. *M. laevigata* is reported as termite resistant and used as pole in house building in Andaman and Nicobar islands. Some of the accessions of *M. serrata*, *M. laevigata* and *M. indica* maintained at CSGRC, Hosur are useful for timber purpose.



Religious sanctity :*M.serrata* is confined to North Western Himalayan belt of India at higher altitude.*M. serrata* is worshipped at Joshimath, Pithoragarh, Hanumanchetti, Ranachetti, Pandukeshar, Almora, Nainital and other places. The giant mulberry tree, the oldest in India at Joshimath of Chamoli district where Adi Guru Sri Sankaracharya meditated, gained religious importance. The tree is revered and worshiped by the people. *M. serrata*, wild species of mulberry is available in that area and usually used for religious purpose (MI-0378, 0379, 0408, 0409, 0426, 0435 and 0436).



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MULTIPURPOSE USE



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