Editorial Open Access

Jamaica Cherry is the Best Tree to Grow on Roadsides: Brought From Tropical America is Naturalized Throughout Southeast Asia

Narayan R Birasal*

KLE Society's G H College, Haveri, India

Jamaica cherry (*Muntingia calabura L–Muntingiaceae*) is a very fast growing tree of slender proportions, reaching 25 to 40 ft in height, with spreading, nearly horizontal branches. M. calabura, the sole species in the genus Muntingia, is a flowering plant native to South Mexico, the Caribbean, Central America, and western South America south to Peru and Bolivia. It is a pioneer species, evergreen, thrives best in open country, acclimatized to poor soil, able to tolerate acidic, alkaline and drought conditions. It is flowering and fruiting throughout the year. It was brought to this part of the world from tropical America in the 19th century and since then it has become naturalized throughout Southeast Asia.

There is increasing recognition of the fact the cities constitute a new type of environment with species composition and habitats peculiar to urban-industrial areas. Tree lined avenues have come to constitute one of the most significant visual features of lung space in urban landscapes, becoming a standard feature in most European cities [1]. The foresight in planning developmental projects is lacking, trees face the axe when developmental projects are executed with little thought given to replenishing these resources. Why can't saplings be planted at the planning stages itself when the tree cutting is inevitable? This would ensure that when the trees are cut some years later, the saplings are on their way up.

Road making is associated with destruction of natural areas. Roads criss-crossing through forests create fragmentation and disturbance to the wildlife. However, road making may be considered as necessary evil for humans. Roadsides are often neglected places used for dumping of wastes and not much care is given for beautification or planting in except in some places.

Of late, in a major bid to increase tree cover along roadside as a means to provide avenue trees for aesthetics and food for the birds, the forest department in Karnataka state is coming up with a new project at an estimated cost of Rs.13 crores. For the next 6 years, the department has plans to cover 65,000 kms of roadsides. Tree plantation includes all national highways, state highways and major roads of all districts.



Figure 1: Luxuriant growth of Muntingia calabura on roadsides.

Already this Jamaica Cherry is found on roadsides of areas in Karnataka (Figure 1), Maharashtra and Andhra Pradesh states. Initially the taxonomists thought that it belongs to Malvaceae. But a new family Muntingiaceae was discovered as dicotyledon family having malvalean affinities [2]. Its floral variation [3] fruiting ecology [4], fate of dispersed seeds [5], effects of Muntingia on Isoproterenol-Induced MI in rats [6] and to discover novel antineoplastic agents of plant origin [7] were reported (Figure 1).

Flowers of Muntingia calabura (Figure 2) are said to possess antiseptic properties. In Mexico, the fruits are sold in the markets. In Brazil, the trees are planted along river banks. In Philippines and Indonesia, fruits are usually eaten by children (Figure 3). The common urban Yellow-vented Bulbul (*Pycnonotus goiavier analis*), Pinknecked Green Pigeon (*Treron vernans*), Lineated Barbet (*Megalaima lineate hodgsoni*), Asian Glossy Starling (*Aplonis panayensis strigata*), Yellow-vented Flowerpecker (*Dicaeum chrysorrheum*), Orange-bellied Flowerpecker (*D. trigonostigma*), Scarlet-backed Flowerpecker (*D. cruentatum*) are documented to squeeze the soft berries between their



Figure 2: Flower of Muntingia calabura having antiseptic property.

*Corresponding author: Narayan Ramappa Birasal, Associate Professor, Zoology Department, KLE Society's Gudleppa Hallikeri College, Haveri-581110, Karnataka, India. Tel: +91 94491 22732; E-mail: nrbirasal@gmail.com

Received December 08, 2013; Accepted December 09, 2013; Published December 14, 2013

Citation: Birasal NR (2013) *Jamaica Cherry* is the Best Tree to Grow on Roadsides: Brought From Tropical America is Naturalized Throughout Southeast Asia. J Biodivers Endanger Species 2: e110. doi:10.4172/2332-2543.1000e110.

Copyright: © 2013 Birasal NR. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.



Figure 3: Fruits of Muntingia calabura liked by birds and children.

mandibles to get at the sweet soft pulp containing hundreds of tiny seeds.

To compensate the tree cover, saplings will come up. Barren roadsides will have the trees in the days to come. But one must understand that the suggestions by community play a vital role in maintaining ecological integrity. Though some taxonomic and plant-flower-root extraction works are published since 1980s, much work

on bird's observations visiting this tree in large numbers remains unpublished. Our journal 'Biodiversity and Endangered species' appeal senior citizens, researchers, readers to send their original research articles, comments, observations, notes and reviews on the birds congregation on these trees in their respective localities.

References

- Nagendra H, Gopal D (2010) Street Trees in Bangalore: Density, Diversity, Composition and Distribution. Urban Forestry and Urban Greening 9: 129-137.
- Bayer C, Chase MW, Fay MF (1998) Muntingiaceae, a New Family of Dicotyledons with Malvalean Affinities. Taxon 47: 37-42.
- Bawa KS, Webb CJ (1983) Floral Variation and Sexual Differentiation in Muntingia Calabura (Elaeocarpaceae), a Species with Hermaphrodite Flowers. Evolution 37: 1271-1282.
- Fleming TH, Williams CF, Bonaccorso FJ, Herbst LH (1985) Phenology, Seed Dispersal, and Colonization in Muntingia Calabura, A Neotropical Pioneer Tree. Amer J Bot 72: 383-391.
- Chapman CA (1989) Primate Seed Dispersal: The Fate of Dispersed Seeds. Biotropica 21: 148-154.
- Nivethetha M, Jayasri J and Brindha P (2009) Effects of Muntingia calabura L on isoproterenol – induced myocardial infarction. Singapore Med J 50: 300-302.
- Kaneda N, Pezzuto JM, Soejarto DD, Kinghorn AD, Farnsworth NR (1991)
 Plant anticancer agents, XLVIII. New cytotoxic flavonoids from Muntingia
 calabura roots. J Nat prod 54: 196-206.