MELIA DUBIA

A GOLD YIELDING PLANTATION IN YOUR FARM LAND PARTICULARLY FOR ABSENTIA FARMERS WITHOUT MUCH EFFORTS.

CULTIVATION OF MELIA DUBIA (TAMIL: MALAI VEMBU, TEL: MALABARU VEPA)

Mar = kuriaput, GuJ = Kadukajar; Tel. = Munnatikaraks; Tam = Malai vembu; Kan = Hebbevtl, Karibvam; Mal = Malavembu; Oriya = Batra.
Name of the Tree: Malabar Neem: Melia Dubia (Telugu: Malabaru Vepa)

1. EARN MILLIONS WITH MELIA DUBIA........

Melia Dubia is the fastest growing tree and the wood from this tree is used in Plywood Industry. 400 trees can be planted in an acre that fetch 15-20 lakhs in 6-7 years. Synonym: Melia composita willd. Family: Miliaceae. A large tree, attaining a height of 20 m. with a spreading crown and a cylindrical straight bole of 9 m. length X 1.2-1.5 m. girth found in Sikkim Himalayas, North Bengal. Upper Assam, Khasi Hills, hills of Orissa, N. Circas, Deccan and Western Ghats at altitudes of
1500 – 1800 m. It grows rapidly and is used for reforestation purposes. (Troup, I 186: Burkill, II 1443: Bor, 253) and yields a useful timber.

SITE-FACTORS

In its natural habitat the absolute maximum shade temperature varies from 37.5–47.5 C and the absolute minimum from 0–15 C. It does well in moist regions, with a mean annual rainfall exceeding 1000 mm. The mean relative humidity in July varies from 70–90% and in January from 50–80 %.

TOPOGRAPHY

It is commonly found in the hills at elevations ranging from 600 – 1800m.

CULTIVATION

The rooted saplings are planted onset of the monsoon or during the monsoon. The suggested pit size is 2’ x 2′-0.60m Cube. Espacement of 3.5 m x 3.5 m is recommended. This will give better girth in shorter duration.

2. GROWTHSTATISTICS

The growth is rapid. GAMBLES’s specimens gave 8 – 12 rings/dm of radius (mean annual girth increment 5.3 – 8 cm) for a Tamil Nadu specimen, and 28 rings/dm (mean annual girth increment 2.3 cm) for a specimen from Bengal. North Kanara in Karnataka specimen showed 12-16 rings/dm of radius (TALBOT, 1909) giving a mean annual girth increment of 4 –5.3 cm. Trees grown in the Calcutta Botanical gardens from specimen from Malbar origin are said to have reached in 7 years an average height of 14m and a girth of 112 cm at breast height. This rate of growth is equivalent to 4 rings/ dm of radius. Even in comparatively dry regions with a rainfall of 750 – 1000 mm, a height of 3 – 4.5 m is obtained in plantations, against 6-7.5 m in more favourable locations.

UTILISATION: Physical and Mechanical Properties of the Wood

The sapwood is greyish-white, usually with a yellowish cast; the ‘ heartwood ’ is light pink to light red when first exposed, ageing to pale russet brown, subject to grey stain. It is lustrous and without characteristic odour or taste. It is very light (sp.gr. approximately 0.34, weight at 12 5 moisture content about 336 kg/m3), straight-grained, coarse and somewhat uneven textured. Annual growth rings are distinct but not conspicuous and number 12- 16 / dm of radius.

Seasoning and Preservation behaviour

The timber seasons well if the logs are converted in a green state, though if left long in the log, it is liable to develop end splitting and decoration. Like many other malicious timbers, it contracts very considerably across the grain while drying out. The best method of dealing with the timber is to convert the logs as soon after felling as possible and to open stack the sawn material, preferably undercover to avoid grey stain.

3. Present day uses

The wood is used for packing cases, cigar boxes, ceiling planks, building purposes, agricultural implements, pencils, math boxes, splints and kattamarans. In Srilanka, it is employed for outriggers of boats. It is suitable for musical instruments, tea boxes and the most importantly in making plywood, as the wood is anti-termite by itself.

The details of quality & technical specifications are as follows.
1) The logs had very high moisture contents and were green.

2) All logs were round and good for peeling. Roundness seems to be inherent quality of this tree.

3) Logs peel easily.

4) Outturn is excellent – 70% & better in fresh cut logs.

5) Veneer strong and firm.

6) Two small logs were peeled for faces. Quality obtained was acceptable.

7) M.R. Grade Plywood pressed with these veneers and in combination with other veneers gave excellent results.

4. Melia Dubia:

Melia dubia originates from the Meliaceae family and is an indigenous species of tree to India, South East Asia and Australia, where it has been cultivated as a source of firewood. Melia dubia is also called as a Maha neem or Forest neem. Which is fastest growing tree species, with in 6-7 years the plantation is ready to harvest.

- The wood is having good demand from ply wood industries.
- Melia Dubia is the fastest growing tree and the wood from this tree is used in Plywood Industry.
- It is commonly found in the hills at elevations ranging from 600 – 1800m.
- It is occasionally planted for ornament and makes a handsome avenue tree and a shade tree in plantations.
- It grows rapidly and is used for afforestation purposes.
- It can be raised either by direct sowing or planting in nursery for raising seedlings or stumps.
- The best seed treatment is treating the seeds with cow dung solution for one day.
- The wood is used for packing cases, cigar boxes, ceiling planks, building purposes, agricultural implements, pencils, match boxes, splints and Kattamarams.
- In Ceylon, it is employed for outriggers of boats.
- The fruit of the plant is bitter. It is considered anathematic.
- It gives positive tests with alkaloid reagents.
- M. Dubia occurs in the tropical moist deciduous forests of the Sikkim, Himalayas, North Bengal and upper Assam, the Khasi hills of Orissa, N.Circars, Deccan and the Western Ghats, at altitudes of 1,500-1,800 meters.
- It is known to yield useful timber.
- M. Dubia grows on a variety of soils; however, it grows well in deep, fertile and sandy loam soils.
- M. Dubia can be propagated by seed, cuttings and by tissue culture.
- In the indigenous system of medicine, the leaves of Melina azedarach Linn. (Family - Meliaceae) are reported to be useful in the treatment of urinary stones.
- The wood can be sold for match and veneer industry.
- With the development of new cloned propagation of Melia Dubia plantation (Malabar neem tree- a very fast growing tree, with high calorific value) which can be used as fire wood for power generation has opened new opportunities for small and medium bio-mass power generation projects.
- Melia Dubia has the unique feature of growing to 40 feet within two years from planting and can be mechanically pruned and harvested.
- As the demand for Melia wood is quite high from the plywood industry, minimum profit of about Rs. 1, 00,000 per year from an acre can be ensured for the farmers even in worst Conditions.
- Melia Dubia has been tested positive for pulpwood and recorded a pulp yield of 50.3% along with
Kappa number of 19.60.

The various parts of Melia Dubia (Meliaceae) plant was observed to be used by the local tribes of Nilagiris for various infections.

Literature reveals that fruits of Melia Dubia are considered to be important in colic and skin diseases and also as anathematic.

Leaves and seeds of this plant were reported to possess two tetranotriterpenoids, composition and compositolide.

The tree with the minimum size of 16 inches girth is saleable at the minimum rate of Rs 2000 per tonne for match industry and for veneer industry, the market rate is little higher.

General Information:

- Melia Dubia Cav.
- Malunggaian
- Melia Dubia Cav. - Meliaceae
- Information for Melia Dubia
- A tree species reference and selection guide - Melia azedarach.

Cultivation

- Cultivation of Melia Dubia (Tamil: Malai Vembu)
- A Book of Melia Dubia (Malai Vembu)
- Cultivation and Management of Melia Dubia
- Melia Dubia Cultivation
- Cultivation & Management - Melia Dubia

6. Plantation & Seeds

- Plantation technology for selected indigenous trees in the Indian peninsula
- Seed Leaflet - Melia azedarach L.
- Fatty Acid Composition of Seed Oils of the Meliaceae, Including One Genus Rich in cis- Vaccenic Acid
- Melia azedarach seeds - 10 fresh seeds - Neem substitute

Process

- Ovicidal activity of crude extracts of few traditional plants against Helicoverpa armigera (Hubner) (Noctuidae: Lepidoptera)
- Bio efficacy of toosendanin from Melia Dubia (syn. M. azedarach) against gram pod-borer, Helicoverpa armigera (Hübner)
- Evaluation of hypoglycaemic and ant diabetic effect of Melia Dubai CAV fruits in mice
- Extractives of seeds of the meliceae

Economics of Cultivation:

- Fastest Growing Timber
Melia Dubia tree holds promise of good returns for ryots
Melia dubia plantation usage
Integrating Melia dubia in agroforestry farms as an alternate pulpwood species.

7. Tamil Nadu Agricultural University NAIP – A Value Chain on Industrial Agro forestry in Tamil Nadu Forest College and Research Institute.

CULTIVATION AND MANAGEMENT OF MELIA DUBIA

Other names
Mar – kuriaput, GuJ – Kadukajar; Tel. – Munnatikaraks; Tam – Malai vembu; Kan - Hebbevtl, Karibvam; Mal – Malavembu; Oriya - Batra.

TRADE – Malabar Neem Wood

General characteristics:
A height of 20. m with a spreading crown and a cylindrical straight bole of 9 m length and 1.2 – 1.5 m girth. The bark is dark brown, exfoliating in thin, narrow strips with broad, shallow, longitudinal cracks. Leaves bi-pinnate or occasionally tri-pinnate. Leaflets ovate – Lanceolate to ovate round, entire or crenulate; flowers greenish white, fragrant, intense panicles; fruit an ovoid or ellipsoid drupe with 5 or less seeds.

Distribution:
It occurs in tropical moist deciduous forests, and yields a useful timber. It occurs in Sikkim Himalayas, North Bengal and upper Assam, Khasi hills of Orissa, N.Circars, Deccan and Western Ghats at altitudes of 1,500 – 1,800 m. It is occasionally planted for ornament and makes a handsome avenue tree and a shade tree in plantations. It grows rapidly and is used for afforestation purposes.

Environmental requirements:
It grows on variety of soils. However deep fertile sandy loam soils shows optimum growth, while shallow gravelly soils shows stunt growth. The tree is a light demander, the seedling are up pressed under shade. Seedlings tolerate some frost but severe frost kills them. It is susceptible to damage by fires and sapling suffers from browsing.

Silvicultural characteristics:

Natural propagation:
Natural propagation is mostly through seeds and the germ inability is less. It coppices well and produce root suckers when the roots are injured. It pollards well and clusters of new shoots are thrown out from dormant buds on stems and branches.
Artificial propagation:

It can be raised either by direct sowing or planting in nursery for raising seedlings or stumps. Direct sowing is recorded to give poorer results than planting of samplings or stumps; the latter is considered the best.

Seed treatment:

Seeds are collected from ripened fruits (Jan – Feb) by rubbing, washing and drying and are stored in sealed tins. The germinability of the seed is less than 25%. In nursery, the seeds are sown in raised nursery beds. The best seed treatment is treating the seeds with cow dung solution for one day. Then the treated seeds are sown over the raised nursery bed. It takes one or two months for the seeds to germinate. Irrigation should be done regularly. The seedling takes 6 months to complete its nursery stage.

Espacement:

Six to nine months old seedlings can be planted at an escapement of 3 X 3m or 3 X 4m. Annual pruning is done to get the straight cylindrical boles.

Irrigation:

The tree responds well to irrigation at once in every 10 – 15 days during non rainy season.

Fertilizer Requirements:

Application of N, P, K mixture of 25 -50 g per tree, two times in a year help to augment the growth. The fertilizer requirements can be scheduled on need basis depending on the growth and development of the tree.

Insects and Pest:

Defoliators, leaf miners and sap suckers are recorded along with several wood borers. Ganoderma lucidum causes root rot in high rainfall areas and Corticium salmonicolor causes stem and twig canker.

Wood characteristics:

The sapwood is greyish white; heartwood light pink to light red turning pale russet brown on ageing. It is lustrous with dry feel, very light (spl gr- 0.33; wt - 21 lb. /cu ft.) straight grained and coarse and somewhat uneven – textured. The timber is not durable in exposed positions but moderately so under cover. It is not so strong and durable as neem. It seasons well if logs are converted in a green state. If left long, the log is liable to develop end – splitting and discolouration. The best method of dealing with the timber is to convert the logs immediately after felling and to open – stack sawn material, preferably under cover, to avoid grey stain.

Uses:

The wood is used for packing cases, cigar boxes, ceiling planks, building purposes, agricultural implements, pencils, match boxes, splints and Kattamarams. In Ceylon, it is employed for outriggers of boats. It is suitable for musical instruments, tea boxes and plyboard. It is a good fuel wood. (Calorific value, 5.043 - 5,176 cal.) The fruit of the plant is bitter. It is considered anathematic. It gives positive tests with alkaloid reagents.
10. Market and Trade:

The wood can be sold for match and veneer industry. The tree with the minimum size of 16 inches girth is saleable at the minimum rate of Rs 2000 per tonne for match industry and for veneer Industry, the market rate is little higher.

SEEDS DEPULPED SEEDS SEEDLINGS PLANTATION

11. Melia Dubia tree holds promise of good returns for Ryots (Farmers):
The Hindu REMUNERATIVE: G. Kumaravelu with some high yielding tree varieties. Photo: M.J. Prabu about Rs.2 lakhs per acre/year can be expected from sixth year of planting one of the main problems that farmers face today is decreasing income from an acre per year against sudden increase in the value of agricultural lands due to newly formed rural roads, mushrooming of Industries, and concrete dwellings. This forces several small farmers to sell their lands and settle in urban concrete jungles.

12. LOW INCOME

Diminishing income from an acre against increasing land value, forces many farmers to sell their lands. A family of 4 members need a monthly income of Rs.40,000 from an acre if they have to survive. But today from an acre one gets anything between Rs.10,000 to Rs.12,000. “How is this enough? Naturally he prefers to sell his lands than continue farming. If we are keen that farming lands should not be sold then we must ensure income generation of at least Rs.20,000 to Rs.30,000 from an acre a year,” explains Dr. G. Kumaravelu, Member, Tamil Nadu Planning Commission and former Chief Conservator of Forests, Tamil Nadu.

EASY METHOD:

The easiest way to increase income from an acre is by planting certain tree varieties such Melia Dubia (Malai Vembu in Tamil) which fetch a handsome price in the market, assured buyback, and require low maintenance expenditure. In addition, the trees also aid the planet by preventing temperature rise and checking gas emission into the atmosphere as the trees are naturally endowed to absorb maximum CO2.

MONEY SPINNER

Melia is a money spinning tree of short duration. Even if planted as a single row along the field bunds, about 60 trees can be planted per acre, which will fetch an income of about Rs.2 lakhs in the sixth year of planting. “Since there is a total mismatch between demand and supply for wood and veneer, block planting of 300 to 400 trees per acre can ensure a minimum profit of rupees one lakh per year from an acre. Under good maintenance and controlled irrigation from sixth year onwards, depending on the soil depth and quality trees of 80 to 100 cm gdh with a clear bole of 5 Mtrs. height can fetch Rs.4,000 at today’s price (7 per cent escalation can be added per year for the sale price). Inter-cultivation can be done with annual crops in the first three years and then spices such as pepper can be grown.

13. SINGLE ROW PLANTING

Even if planted in a single row along the field bunds, about 60 trees can be planted at six feet spacing which will fetch an income of about Rs.2 lakhs in the sixth year. Under high density planting with 1,000 to 1,500 trees in an acre, a yield of 40 to 50 tonnes is possible from the second and third year of planting. “As the demand for Melia wood is quite high, minimum profit of about Rs.40,000 per year from an acre can be ensured for the farmers today,” says, Dr. Kumaravelu.

PEST INFESTATIONS:

Regarding pest infestations affecting this tree Dr. Kumaravelu says, “the variety is susceptible to root rot. Only optimum irrigation is required. While planting the seedlings application of 2-3 kgs of vermicompost, 40 gms of Phosphobacteria, Azospirillum and Trichoderma Viride each in addition to 10-20 gms of Pseudomonas and 100 grams of VAM (vesicular arbuscular mycoriza) helps in promoting good growth.
BUYBACK:

“Interested farmers who want to buy the seedlings can contact our office and we are willing to guide them right from purchasing the seedlings to buy back,” assures GOOD Returns: Further Details Contact: MANNE.SN, B.ComLLB. 09133498366.

14. Fastest Growing Timber Tree in the WORLD:

Photo after 8 Months after Plantation:

15. MONEY SPINNING TREE MELIA DUBIA:

Melia Dubia (Malai Vembu/Konda Vepa) and kumil (gmelina arborea) are the fast growing species among timber varieties in the universe. Melia Dubia originates from the Meliaceae family and is an indigenous species of tree to India, South East Asia and Australia, where it has been cultivated as a source of firewood. The tree can be cultivated in all types of soil and requiring a low supply of water on a daily basis. If you have a plot of land, which you consider is degraded land you can use it for growing Melia Dubia. Melia Dubia has the unique feature of growing to 40 feet within two years from planting and can be mechanically pruned and harvested. As an energy crop, Melia Dubia has the potential of yielding in excess 40 tonnes of biomass on average per acre per annum over a 10 year period (before replanting is required). Its high calorific value makes it a viable source of feedstock for biomass power plants. The minimum cultivation period is six years onwards. The age of the tree is nine years. In addition, the trees also aid the planet by preventing temperature rise and checking gas emission into the atmosphere as the trees are naturally endowed to absorb maximum {CO2}. Melia is a money spinning tree of short duration. Block planting of 300 to 400 trees per acre can ensure a minimum profit of Rs one lakh per year from an acre. Intercultivation can be done with annual crops in the first three years and then spices such as pepper can be grown. Even if planted in a single row along the field bunds, about 60 trees can be planted at six feet spacing which will fetch an income of about Rs.2 lakhs in the sixth year. Under high density planting with 1,000 to 1,500 trees in an acre, a yield of 40 to 50 tonnes is possible from the second and third year of planting. As the demand for Melia wood is quite high from the plywood industry, minimum profit of about Rs.40,000
per year from an acre can be ensured for the farmers. Regarding pest infestations affecting this variety is susceptible to root rot. Only optimum irrigation is required. While planting the seedlings application of 2-3 kgs of vermicompost, 40 gms of Phosphobacteria, Azospirillum and Trichoderma Viride each in addition to 10-20 gms of Pseudomonas and 100 grams of VAM (vesicular arbuscular mycoriza) helps in promoting good growth.

16. In keeping Farmers Reaching for High:

INNOVATIVE Farming Solutions: Melia Dubia (Malai Vembu):

One of the major problem in today's agriculture is reducing income year by year. The land values are increased and income from agriculture is reduced due to increased cost for labors, increase in cost of cultivation and increase in transportation cost. Because of that farmers are selling land and looking for other business. So we need to think of good income from agriculture by reducing labors and increasing yield. In today's picture, the middle men are earning the good income from agriculture products, and the farmer who produces getting less from what he produced. Since the many short term crops need more labors, transportation and inventory cost, the final gain for the farmers are very less. To make good revenues as per acre, we need to cultivate medium to long term crops keeping the cost to minimal and also good revenue in future. Melia Dubia is one of the fast growing tree and give good returns. It can be used in match or biomass or plywood industries. After 3 years, 30-40 tons of biomass/acre can be harvested upto 10 years. The price of wood per ton is rs 2000-4000. so one can get minimum revenue of 2000*30 = rs 60000/acre every year. 30% of the trees we leave without cutting for 8 years means it can be used in plywood industries which will fetch rs 6000-10000 per tree( 6000*300 = Rs.18,00000).

17. Plantation/Cultivation:

Once we decide to cultivate the tree means first go with good seedling collection from Forest Departments. When direct sowing the seed without treatment, the germination percentage is less(20%). So we do alternate soaking and drying in cold water, the period of germination is 20 days and 75% germination is expected. Those having difficulty in germination, can get the seedlings(sapling) from the plant nurseries. Then we start planting in beginning of the rainy season, so irrigation is minimal or can use drip irrigation for 2 years. The suggested Pit size is 2 feet x 2 feet. 10x10 feet spacing is needed for better girth. Procedure of planting:
1) Dig the pit and keep it open for 1-2 weeks.
2) Then close the pit with the soil available with digging.
3) After 2 days, open the pit slightly 1/2 feet, put organic manure(Vermicompost) of 0.5 kg for each pit and plant the seedling. If seedling height is more, can use support pole for each pit to avoid breaking of seedling
4) And irrigate in same day. Melia dubia has 90% less side branches, so less labors are needed to maintain. Upto 5 years, ground nut, chilli, turmeric, blackgram as inter crops can be cultivated. Timely weeding and pruning is needed and also practice IPM and IDM.

Profitable Fast Growing Trees:

Gmelina arborea, Melia Dubia, Bamboo, Casuarina With thousands of tree species growing worldwide, only a small number are considered valuable to the commercial timber industry.
19. Fast Growing Timber Trees:

1. Gmelina arborea (Kumil, Kumula maram in Tamil): Gmelina arborea is a fast growing tree. It is used in constructions, furniture, carriages, sports, musical instruments and artificial limbs. It can grow moderate to large height up to 30 m with girth of 1.2 to 4. It can be harvested in 8-10 years. 

Melia dubia - (Malai Vembu in Tamil): Melia Dubia is fast growing tree and it can be cultivated in all types of soil and requiring a low supply of water. Melia dubia has the unique feature of growing to 40 feet within 2 years from planting and can be mechanically pruned and harvested. It is used in plywood, match industries. 

20. Trees for Industries:
1) Match Industries:

1. Ailanthus excelsa - Indian Tree of Heaven (Perumaram, Pee maram, in Tamil): Indian Tree of Heaven is a large deciduous tree, 18-25 m tall trunk straight. Mainly used in match box industry and also Boat building (general), Boxes and crates, Musical instruments, Plywood, Pulp/Paper products, Tool handles. Need less irrigation and suitable for all soil types.

21. Paper Industries:

1. Casuarina junghuhniana - (savukku in Tamil): Casuarina is a fast growing and adoptable for
any soil types. Mainly used in paper industries. It can be harvested after 3.5 years.

2. Bamboo (Bambusa Nutans, B. Bamboos, B. tulda, B. vulgaris, B. Balcooa)

22. Bamboo is also the fastest growing plant and some species of bamboo can grow up to a foot a day in the right conditions. It can be cultivated in all type of soils with sufficient water irrigation facility. Now bamboo can be cultivated in tissue culture sapling which will give 5 times more density. After the year 4, bamboo can be harvested 20-60 tons/ acres for 60 years. But the Land Cannot be used for any other Plantations/Crops afterwards.

3) Bio mass Industries:

1. Melia dubia - (Malai Vembu in Tamil):

As an energy crop, Melia dubia has the potential of yielding in excess 40 tons of biomass on average per acre per annum over a 10 year period (before replanting is required). It’s high calorific value makes it a viable source of feedstock for biomass power plants. 2. Bamboo (Bambusa nutans, B. Bamboos, B. tulda, B. vulgaris, B. Balcooa): Its high yield makes it usable in biomass industries. The following trees are not comes under fast growing category, but they are having strong timber values. Those trees will take minimum of 30 to 40 years to maturity.

23.

1. Tectona grandis - Teak.
3. Rose wood.
5. Pterocarpus marsupium - (Indian Kino Tree, Vengai in Tamil).
7. Thespesia populnea - (Poovarasu in Tamil).
Points to be considered for cultivation:

Tree cultivation combines both science and care. Here are some points in tree plantation. These are the things to keep in mind before going for tree cultivation. 1. Select trees according to your land type, irrigation facilities, and maintenance (after care).

2. Do Soil Test and water analysis and select trees that suit your soil type and water quality.

3. Spacing of trees.

Trees are prefer to grow in many ways. So our effort would be not only to cover more area for tree plantation but also to plant more trees in a given area. There are two aspects of tree space: above and below the ground. The above ground space is more obvious for ex. Tall trees should not be placed where high tension wires are running overhead. Underground space is also as important and medium-sized trees should be planted at least at a distance of 4 meters from each other and bigger ones at 8 meters from each other and 5 meters away from buildings foundations.

2. Time of planting

The period of planting depends upon the species, region, availability of irrigation facilities, rainfall of the region, etc. Winter is the best time for planting deciduous trees as they are dormant at this period and hence less likely to suffer from damage. For evergreen and semi-deciduous trees, rainy season is the best time for planting. Trees may be planted during the following periods: During spring: That is January and February. At this time all the factors (especially the temperature), required for tree growth are present. Thus, this is a good time for young saplings to be planted. At the onset of Monsoons: For most species and most areas, planting is carried out during monsoons. It is advisable to start planting work immediately.

24. after a good shower and when the ground is well moistened to the depth of planting. Thereafter any delay should be treated as loss of growing season.

3. After care.

The saplings need to be watered regularly, protected from cattle and pests and insects, given manure. Pruning will make trees more increase vigour, health and increase the value of timber.

- Select plant species.
- Inter cropping or mixed cropping.
- Have knowledge of different trees.
- Carbon credit.

Carbon finance facilitates the financial reward through carbon credits for the reduction of greenhouse gas emissions by emitters in developing countries. Activities of the World Bank Carbon Finance Unit (CFU) are part of the larger global effort to combat climate change, and are aligned with the World Bank and its Environment Department’s mission to reduce poverty and improve living standards in the developing world. So we will start our green planet from today ..,
Melia Dubia
(A Gold Harvesting Tree)

25. Melia Dubia originates from the Meliaceae family and is an indigenous species of tree to India, South East Asia and Australia, where it has been cultivated as a source of firewood. The tree can be cultivated in all types of soil and requiring a low supply of water on a daily basis. Melia Dubia has the unique feature of growing to 40 feet within 2 years from planting and can be mechanically pruned and harvested. As an energy crop, Melia Dubia has the potential of yielding in excess 40 tonnes of biomass on average per acre per annum over a 10 year period (before replanting is required). Its high calorific value makes it a viable source of feedstock for biomass power plants.

Interested may please contact for Further Details:-

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