

## CULTIVATION GUIDE OF OTHER COMMERCIALY IMPORTANT CROPS

<i>Scientific name</i>	Growth habit	Part used	Spacing	Seed rate (per acre)	Crop duration	Yield (per acre)
<b><i>Acacia catechu</i></b> Karingali	Moderate sized deciduous tree	Bark, heart wood	3.5x3.5 m	320 Seedlings	10-12 yrs	60-80 kg wood/tree
<b><i>Acorus calamus</i></b> Vayambu	Semi-aquatic rhizomatous perennial herb	Rhizome	30x30 cm	150 kg/acre fresh rhizome bits	1 year	1.5 – 2.00 dry rhizome/acre
<b><i>Aegle marmelos</i></b> Koovalam	Perennial tree	Root	3.5x3.5 m	320 Seedlings	10 -15 years	30 kg roots /tree
<b><i>Aloe vera</i></b> Kattarvazha	Annual herb	Leaves	45x45 cm	20000 suckers	1 year	3-4 t fresh herb/ acre
<b><i>Alpinia galanga</i></b> Aratha	Perennial zingiberaceous herb	Rhizome	45x45 cm	400 kg/acre rhizome	36- 42 months	2-2.5 t/acre dry rhizome
<b><i>Andrographis paniculata</i></b> Kiriyaathu	Seasonal herb	Whole plant	30x15 cm	200 g	1 year	1-1.5 t/acre dry herb
<b><i>Asparagus racemosus</i></b> Satavari	Perennial climber	Tuber	60x60 cm	10,000 seedlings	Annual	10-15 t/ha fresh tuber
<b><i>Azadirachta indica</i></b> Aryavep	Perennial	Leaves & bark	5mx5m	160 seedlings	7 Years	50 -80 kg dry bark/acre/ yr
<b><i>Bacopa monnieri</i></b> Brahmi	Annual herb	Whole plant	20x20 cm	30 kg vine /acre	Annual. 1 harvest - 3 months after planting Subsequent harvest – 60 -80 days interval	10-12 t/acre herb
<b><i>Baliospermum solanifolium</i></b> Nagadanti	Perennial shrub	Roots, leaves, seeds	1.5x1.5 m	3-4 noded stem cuttings	Two years	3 t/acre dry root
<b><i>Boerhaavia diffusa</i></b> Thazhuthama	Perennial creeping herb	Root	45x45 cm	Stem cuttings	Two years	800 kg/acre dry root
<b><i>Caesalpinia sappan</i></b> Chappangam	Perennial tree	Heart wood	3mx3m	500 seedlings	8-10 years	50 kg wood/tree

<b><i>Cinnamomum verum</i></b> Karuva	Perennial tree	Seed & oil	3m x 3m	500 seedlings	7 <sup>th</sup> year onwards	75-100 kg/acre bark /harvest (once in 3 years)
<b><i>Clitoria ternatea</i></b> Sankhupushpam	Perennial climber	Root	60x100 cm	6000 seedlings	1 year	1.0 – 1.5 t roots/acre
<b><i>Desmodium gangeticum</i></b> Orila	Under shrub	Roots	45x45 cm	200 g	8-9 months	200-300 kg roots/acre
<b><i>Emblica officinalis</i></b> Nelli	Medium sized tree	Fruits	5x5 m	160 seedlings / grafts	10 years for seedlings; 3-4 years for grafts	30-50 kg fruits/tree /year
<b><i>Garcinia gummi-gutta</i></b> Kudampuli	Medium sized evergreen tree	Fruits	4x4 m	250 grafts	4-5 years	20-25 kg dry fruit rind/ tree/year
<b><i>Gmelina arborea</i></b> Kumizhu	Medium sized deciduous tree	Root bark	3x3 m	400 seedlings	10 years	25-30 kg roots /tree
<b><i>Gymnema sylvestre</i></b> Chakkarakolli	Perennial climber	Leaf	60x100 cm	6000 seedlings	10-12 years	2-3 kg fresh leaves/plant/ harvest
<b><i>Hemidesmus indicus</i></b> Naruneendi	Perennial creeper	tuberous root	10 cm x 10 cm	Root bits	8 months	200-300 kg dried roots/acre
<b><i>Holarrhena pubescens</i></b> Kudakappala	Small deciduous tree	Bark, leaves, seeds	3x3 m	500 seedlings	Stem bark collected from 12 <sup>th</sup> year	30-40 kg dry bark/acre/ yr
<b><i>Holostemma adakodien</i></b> Adapathiyam	Perennial climber	Root tuber	30x30	500 g seeds per acre	biennial	200-300 kg dried roots/acre
<b><i>Maranta arundinacea</i></b> Kochikoova	Rhizomatous herb	Rhizome	30 x 30 cm	200 kg rhizome	8-9 months	2-3 t/acre (fresh rhizome)
<b><i>Mucuna pruriens</i></b> Naikurana	Seasonal twining herb	Root, leaves, seed	60x60 cm	20-30 kg	3.5-4 months	600-700 kg seeds/acre
<b><i>Ocimum spp.</i></b> Thulasi	Annual herb	Leaves	40 x 30 cm	200 g seeds per acre	7-8 months	4-5 tons shoots per acre (collected periodically at flowering stage)
<b><i>Oroxylum indicum</i></b> Palakappayyani	Medium sized deciduous tree	Roots	2.5m x 2.5 m	700 seedlings	10 years	20-25 kg roots /tree
<b><i>Oryza sativa cv Njavara</i></b> Navara nellu	Seasonal grass	Fruits, roots	15x10 cm	80-100 kg/ha	72 to 128 days	800 kg seeds/acre
<b><i>Pogostemon patchouli</i></b>	Annual herb	Leaf	60-90 cm x 60-	8000 cuttings per	3-4 years	2.5-3 tons/acre fresh leaves/year

Pacholi			90 cm	acre		yielding 15-18 kg oil
<b>Premna integrifolia</b>	Small tree	Leaves, Root	2mx2m	1000 cuttings per acre	3 years	500 kg dry roots /acre
Munja						
<b>Pseudarthria viscida</b>	Perennial undershrub	Root	40cmx20 cm	500 g seeds per acre	9-10 months	200-280 kg dry roots /acre
Moovila						
<b>Pterocarpus marsupium</b>	Medium sized tree	Heart wood, gum	4mx4m	250 seedlings	Gum collected by tapping bark. Heart wood collected after 10-15 years	500 kg heartwood/tree
Venga						
<b>Pterocarpus santalinus</b>	Medium sized deciduous tree	Heart wood	3.5x3.5 m	320 Seedlings	10-15 years	120-200 kg heartwood/tree
Rektha chandanam						
<b>Rauvolfia serpentina</b>	Perennial shrub	Root	50x30 cm	27000 plants/acre	18 months	2-3 tons dried roots /acre
Sarpagandhi						
<b>Sida rhombifolia ssp. retusa</b>	Annual undershrub	Whole plant	75x50 cm	600-800 g seeds/acre	8 months	400-500 kg dried roots / acre
Kurumthotti						
<b>Solanum melongena var. incanum</b>	Annual herb	Root, berry	60x60 cm	300-350 g seeds / ha	12-18 months	800 -900 kg dried roots / acre
Cheruvazhuthina						
<b>Solanum surattense</b>	Annual herb	Root, berry, leaves	90x75 cm	400-500 g seeds / ha	12-18 months	400-500 kg dried roots / acre
Kantakarichunda						
<b>Solanum violaceum</b>	Annual herb	Root, berry, leaves	60x60 cm	300-350 g seeds / ha	12-18 months	500-600 kg dried roots / acre
Putharichunda						
<b>Stereospermum colais</b>	Large deciduous tree	root	3mx3m	500 seedlings	10-15 years	30-35 kg roots /tree
Pathiri						
<b>Symplocos cochinchinensis</b>	Small evergreen tree	Bark	3mx3m	500 seedlings	15-2 years	50-60 kg dry bark/acre
Pachhotti						
<b>Terminalia arjuna</b>	Large evergreen tree	Bark	4mx4m	250 seedlings	From 10 <sup>th</sup> year onwards bark peeled off from main stem or branches	30-40 kg dry bark/acre/year
Neermarutu						
<b>Terminalia bellirica</b>	Large deciduous tree	Fruits	4mx4m	250 seedlings	15-20 years	6-8 ton seeds/acre/year
Thanni						

<b><i>Terminalia chebula</i></b> Kadukka	Medium sized deciduous tree	Fruits	3mx3m	500 seedlings	12 years	5-7 ton seeds/acre/year
<b><i>Tinospora cordifolia</i></b> Chittamritu	Climbing shrub	Stem, leaves	1x1 m	4000 cuttings	1 Year	2-3 kg fresh stem/plant
<b><i>Trichosanthes cucumerina</i></b> Kattupatavalam	Seasonal twiner	Whole plant	1x1 m	1 kg seed	3-4 months	100-200 kg dry vine/acre
<b><i>Vitex negundo</i></b> Karinochi	Small tree	leaves	2.5m x 2.5 m	700 rooted cuttings	Periodical collection of leaves from 2 <sup>nd</sup> year onwards	1-2 kg leaves/tree/harvest
<b><i>Woodfordia fruticosa</i></b> Thathiri	Branched shrub	Flowers	3mx3m	500 seedlings	From 2 <sup>nd</sup> year onwards	400-500 g dried floues/tree/year
<b><i>Wrightia tinctoria</i></b> Danthappala	Small deciduous tree	Leaves, bark, seed	4mx4m	250 seedlings	From 4 <sup>th</sup> year onwards	3-4 kg leaves/tree/harvest