

Category	Crop	Question	Answer
Field crops	Rice	chemical for control of rice bug? whether malathion is banned? what is the substitute for ricebug control	Rice bug control - Follow these methods. 1. Strict vigilance at milky stage of the crop. 2. Keep the field and bunds free of weeds and grasses. 3. Avoid overlapping cultivation in an Ela. 4. When the bug is seen in large numbers apply insecticide Malathion or carbaryl. Application of the insecticide may be done either before 9 a.m. or after 3 p.m.
Field crops	Rice	What is SRI ?	The SRI is an alternative to the traditional way of flooded rice cultivation and is showing promise in addressing the problems of water scarcity, high energy usage and environmental degradation. SRI involves few major components viz., using younger seedlings, square planting, irrigation by alternate wetting and drying, weeding though cono/rotary weeder, LCC based N management.
Field crops	Rice	what control measures can i take against sheath rot of rice? and also brown plant hopper attack is seen.	sheath rot-spary bavistin 2g per litre or tilt 1ml per litre brown plant hopper-confidor 0.5 ml per litre or actara 0.5 ml per litre.
Field crops	Rice	nominee gold application in rice.	apply within 20 days of sowing.concentration 120ml per acre.field should be drained before application.then fill water after 3 days.
Field crops	Rice	Farmer asks about water management in paddy field	Maintain water level at about 1.5 cm during transplanting. Thereafter increase it gradually to about 5 cm until maximum tillering stage. Drain water 13 days before harvest.
Field crops	Cotton	Corynespora leaf disease (Corynespora cassicola) in cotton	Control Shading in nursery reduces incidence. Spraying mancozeb (0.2%) or carbendazim (0.05%) or Bordeaux mixture 1% is recommended. In mature rubber, micronized spraying with oil-dispersible copper oxy chloride dispersed in spray oil (1:5 proportion) at light green stage of leaves is effective.
Field crops	Cotton	How to control sucking pest in Cotton?	Against sucking pests like jassids, aphids and thrips, spray methyl-O-demeton (500 ml/ha) or imidacloprid (100 ml/ha) on 20th day and 40th day. To control whitefly, use neem oil (3.0 l/ha) or phosalone (2.5-3.0 l/ha).
Field crops	Rice	brown spot of rice	Use disease free seeds. Since seed soak / seed treatment with Captan or Thiram at 2.0g /kg of seed Spray Mancozeb (2.0g/lit) or Edifenphos (1ml/lit) - 2 to 3 times at 10 - 15 day intervals. Spray preferably during early hours or afternoon at flowering and post - flowering stages

Field crops	Rice	Liming in Transplanted Rice	For transplanted crop, apply lime @ 600 kg/ha in two split doses, 350 kg/ha as basal dressing and 250 kg/ha as top dressing about one month after transplanting.
Field crops	Rice	Conditions for storage of Rice seed	Thresh the sheaves on the same day of harvest, as seeds of heaped sheaves may not perform well. Dry seeds properly and assure that the moisture content is not more than 13 per cent. Polythene bags of 700 gauge or double gunny bags may be preferred for storing. Spray 2% malathion solution in the godown before storing seeds to check insect pests.
Field crops	Rice	stem borer attack in Rice	In areas where stem borer occurs as a serious pest in all seasons, apply any one of the following insecticides first 15-20 days after transplantation and then at the boot leaf stage keeping minimum water level: Fenthion, quinalphos (spray or granules), fenitrothion, Ecalux, carbofuran (granule), carbaryl.
Field crops	Rice	what are the Zinc deficiency symptom and correcting measures in paddy (kerala condition)	When zinc deficiency is noticed, apply zinc sulphate @ 20 kg/ha. Early stages of zinc deficiency are evidenced by interveinal chlorosis, bleaching of midribs and light yellow colouration of the leaf. Older leaves develop brown rusty spots and are extremely brittle. Zinc sulphate and potash should not be applied on the same day.
Field crops	Rice	Control of false smut disease in rice	Use disease free seeds, Destruction of straw and stubble, At tillering and preflowering stages, spray Hexaconazole @ 1ml/lit or Chlorothalonil 2g/lit.
Field crops	Rice	control of rice case worm	Control 1. Drain away the water from the fields. 2. If infestation is severe, apply carbaryl dust or spray.
Field crops	Rice	control of rice stem borer	Control 1. Collect egg masses from the nursery plants and observe for parasitisation. 2. Cultivate tolerant varieties like IR-20 in endemic areas. 3. In areas where stem borer occurs as a serious pest in all seasons, apply any one of the following insecticides first 15-20 days after transplantation and then at the boot leaf stage keeping minimum water level: Fenthion, quinalphos (spray or granules), fenitrothion, Ecalux, carbofuran (granule), carbaryl.
Field crops	Rice	weed control in transplanted rice field	Apply any of the following herbicides at 0-6 days after transplanting. Thiobencarb @ 1 kg ai/ha, pendimethalin @ 1.5 kg ai/ha, butachlor @ 1.25 kg ai/ha, anilofos @ 0.4 kg ai/ha. Where broad-leaved weeds and sedges are predominant, apply 2,4-D @ 1.0 kg ai/ha at 25 days after transplanting. Wherever the fields are level and water management could be effectively done, 2,4-D can be mixed with 10 kg urea/ha and broadcast on 20 DAS/DAT. This would save the spraying charges.

Field crops	Rice	weed control in Wet seeded rice	Spray any of the following herbicides: (a) Butachlor @ 1.25 kg ai/ha or thiobencarb @ 1.00 kg ai/ha 6-9 days after sowing; (b) Pretilachlor + safener (sofit) @ 0.45 kg ai/ha 3-5 days after sowing.. Give a follow up application of 2,4-D @ 0.8 kg ai/ha at 20 days after sowing.
Field crops	Rice	DFarmer asks about the control measures of rice bug	Chemical control include application of zolone 2ml/L or malathion 2ml/L or sevin 3g/L spray
Field crops	Rice	rice central leaf is showing white patching and withering. what is the control	cowdung spray. put bleaching powder in cloth bags and put in irrigation channels
Field crops	Rice	what is the control measure against yellow spot in rice leaves	check whether ooze is coming out from cut end. if ooze is coming out, spray streptomycin @ 2 ml/10 L or take the supernatant solution from 20 g fresh cowdung in 1 L of water
Field crops	Rice	rice leaves are yellowing in margins. yellow margins are even .	fill water in a glass jar and immerse cut end of yellowed leaf and observe whether white coloured twine like liquid ooze is coming out. If the ooze is coming apply bleaching powder in such a way that put bags of bleaching powder on the entrance of irrigation channels. Spray cowdung supernatant extract @20g cowdung per 1 L of water.
Field crops	Rice	in ten cent of rice plot, already applied 2 kg urea and 2 kg fatcumphos. number of plants per hill is more. Now yellowing is seen in hills where number of plants are more. What I have to do	you already applied more than enough qty of nitrogen . just apply little bit urea around hills which shows yellowing
Field crops	Rice	irrigation sri	Irrigation only to moist the soil in the early period of 10 days. Restoring irrigation to a maximum depth of 2.5cm after development of hairline cracks in the soil until panicle initiation. Increasing irrigation depth to 5.0cm after PI one day after disappearance of ponded water
Field crops	Rice	What is the seed rate for SRI ?	7- 8 kg for single seedling per hill. 12 -15 kg for two seedlings per hill wherever difficulty in establishment of rice is seen.
Field crops	Rice	Liming method of kerala land for direct seeded rice	For direct seeded crops during the first season, apply lime @ 600 kg/ha in two split doses, the first dose of 350 kg/ha as basal dressing at the time of first ploughing and the second dose of 250 kg/ha as top dressing about one month after sowing.
Flowers	Anthurium	leaf malformation and crinkling in anthurium	spray rogor at 2g /L on bottom of leaves
Flowers	Anthurium	leaf spot of anthurium	spray indofil 4g/lit
Flowers	Anthurium	HOW CAN I CONTROL BACTERIAL LEAF BLIGHT	spray pseudomonas @ 20g/l. in severe cases spray streptomycin @ 15g/ acre

Flowers	Anthurium	Control of root rot in anthurium	Avoid water stagnation and drench the base with akomin 3ml/L
Flowers	Anthurium	control of Excess vegetative growth in anthurium	May be due to over fertilizer especially nitrogen fertilizer application or may be due to excess shade, reduce the fertilizer application dose specially nitrogenous one and place them in proper shade (60%). Remove some basal excess leaves and retain one plant per pot (if it is not pot plant variety)
Flowers	Anthurium	My anthurium plant shows root rotting and basal rotting how can i control this disease	You can drench the medium with akomin 3ml/L and gave an akomin spray
Flowers	Anthurium	propagation of anthurium	Anthurium is multiplied vegetatively by stem cuttings or by separation of basal sprouts. Propagation by seed is not recommended as a commercial propagation method as it results in high variability. Plants can be multiplied in large number by micro-propagation techniques from the tender leaf bits. You may contact KAU sales counter Mannuthy for planting materials. Phone 0487 2370540 .
Flowers	Anthurium	Control measures of bacterial blight in anthurium	spraying a mixture of turmeric powder + sodium bi carbonate in the propotion 10:1 @ 1.5g/L at weekly interval from the initiation of disease is effective for management of this disease
Flowers	Anthurium	Anthurium harvesting	The flowers are harvested with its long stem when 1/4th to 3/4th flowers on the spadix are open, indicated by the change of colour. Colour change varies with the varieties.
Flowers	Anthurium	Anthurium varities suited for kerala condition	The economic varieties suitable for Kerala condition are Lima White, Cuba, Agnihotri, Liver Red, Can Can, Tropical, Nitta, Sunburst, Linda-de-Mol, Tinora, Acropolis, Gino Orange and Midori.
Flowers	Anthurium	Proper medium for anthurium cultivation	A loose medium above the ground is suitable for anthurium. Old and chopped coconut husk (3 cm size) mixed with brick pieces and charcoal are ideal also can use potting mixture 2 sand : 1 dried leaf powder: 1 red soil also can be used in home scale planting
Flowers	Anthurium	Manuring in Anthurium	Fresh cowdung or neem cake mixed with 10-15 times of water, kept for 4-5 days, can be sprayed on the plants after filtering. Cow's urine can be sprayed or drenched after mixing with 25 times of water. Complex fertilizer (N:P2O5: K2O 20:20:20) 2.5 to 5.0 g/l of water is applied in the medium once a week. Slow release fertilizers, if used, need be given only once in 2-3 months.

Flowers	Anthurium	is there is any method other than antibiotics application available for controlling bacterial blight in anthurium	spraying a mixture of turmeric powder + sodium bi carbonate in the propotion 10:1 @ 1.5g/L at weekly interval from the initiation of disease is effective for management of this disease
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Flowers	Anthurium	farmer enquired about anthurium anthracnose and amaranth white leaf spot	application of Dithane M45 3gm/litre recommended
Flowers	Anthurium	what is the control measures for anthurim plant showing root decay ?	You can drench the base of the plant with Akomin @ 3ml/L of water
Flowers	Anthurium	By hand pollination i manage to produce some anthurium seeds How can i germinate it	Seeds become mature within a period of 4-6 months after pollination. Mature seeds will have a pulpy coating. The pulp is carefully removed without injuring the soft seed. Seeds are sown immediately after extraction. Sowing is done on a medium of clean fine sand or on a moist cotton pad. Sprouted seeds on cotton pad are shifted to a sand medium for further growth
Flowers	Anthurium	techinques for harvesting in Anthurium	The flowers are harvested with its long stem when 1/4th to 3/4th flowers on the spadix are open, indicated by the change of colour. Colour change varies with the varieties.
Flowers	Anthurium	Harvesting time in Anthurium	The flowers are harvested with its long stem when 1/4th to 3/4th flowers on the spadix are open, indicated by the change of colour. Colour change varies with the varieties
Flowers	Carnnation	pinching method in carnation	Pinching refers to breaking the tip and encouraging growth of side shoots. Depending upon the need of crop spread a) single, b) one and half and c) double pinches are given. Ideal time for pinching is morning. When the plant attains 6 nodes, the first pinch is given. This is referred as ζsingle pinchζ. This would give rise to six lateral shoots. With a ζone and half pinchζ, 2-3 of these lateral shoots are pinched again. For the ζdouble pinchζ, all the lateral shoots are pinched off.

Flowers	Gerbera	gerbera propagation n planting	It can be propagated through suckers and tissue culture plantlets. Raised beds with 4 ft. width and 40 cm height are formed at an interval of 60 cm and planting is done at a spacing of 30 x 30 cm. It can be propagated through suckers and tissue culture plantlets. Raised beds with 4 ft. width and 40 cm height are formed at an interval of 60 cm and planting is done at a spacing of 30 x 30 cm.
Flowers	Gladiolus	Gladiolus propagation methods	Gladiolus is propagated by corms and cormels. Size of the corm markedly influences the growth and flowering of gladiolus. Medium and large sized corms are preferred for planting, as small corms produce only small flower spikes.
Flowers	Jasmine	propagation of jasmine	Layering and cutting are the main propagation methods. Better rooting of cuttings can be obtained by planting in coarse sand and also by using any of the rooting hormones like IBA (5000 ppm), IAA (1000 ppm) and NAA (5000 ppm). Simple and compound layering methods are followed during June-July to October-November. Layers will be ready for planting within 90-120 days.
Flowers	Jasmine	planting techniques in Jasmine	After ploughing the land, pits of about 40 x 40 x 40 cm size are taken and filled with topsoil and 15 kg well-rotten FYM. Planting distance depends on the species and also on soil and environmental conditions. Species Planting distance J. sambac J. auriculatum J. grandiflorum 1.2 x 1.2 m 1.8 x 1.8 m 2.0 x 1.5 m Planting is usually done during June-August.
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Flowers	Jasmine	plant protection in Jasmine	Major pests are bud and shoot borers and blossom midge, which can be controlled by spraying 0.15-0.20% carbaryl. Diseases Leaf blight: Can be controlled by spraying 0.2% mancozeb or 0.1% benomyl Fusarium wilt: Drench the soil with 1% Bordeaux mixture. Rust: Controlled by spraying 0.2% zineb.
Flowers	Lawn	What is the irrigation interval for lawn?	During autumn and winter months, watering is done at an interval of 10 days whereas during spring and summer months, it should be done at an interval of 7 days. Above all, irrigation should be done compulsorily after every fertilizer application.

Flowers	lawn	What is the irrigation interval for lawn?	During autumn and winter months, watering is done at an interval of 10 days whereas during spring and summer months, it should be done at an interval of 7 days. Above all, irrigation should be done compulsorily after every fertilizer application.
Flowers	Orchid		Slug caterpillar <i>Contheyla rotunda</i> Spray any one of the following: Dichorvos 76 WSC 2 ml/lit Bacillus thuringiensis 2 g/lit
Flowers	Orchid	how can I control Sanails in my orchids	Hand-picking is effective, if the number of plants is less. They move out during late night and hide before early morning. Damage is caused during this period. All the pests can be controlled by application of contact and systemic insecticides at appropriate concentration.
Flowers	Orchid	planting medium for ground orchid- Spathoglottis	potting mixture with a mixture of garden soil, dried cow dung and leaf mould. Addition of broken bricks and charcoal makes the growing medium loose for roots to spread easily.
Flowers	Orchid	nutrient management in orchid	One kg fresh cowdung mixed in 5 litres of water is sufficient for one square metre. Two to three applications can be given in a year. Sympodial orchids are sprayed with the supernatant liquid of cowdung slurry. Foliar feeding is very effective in orchids. Fertilizer mixture of N:P2O5:K2O 3:1:1 can be applied during vegetative period and 1:2:2 can be applied during flowering period The usual dose of such mixture is 2-3 g per litre of water, applied twice a week.
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Flowers	Rose	fertilizer application of rose	Pruning done Urea -100g Rajphos-150 Bone meal-125 Mop-125 50g of this mixture is add for every plant

Flowers	Rose	layering technique in rose	not a commercial method In air layering (or marcotting), the target region is wounded (3cm) and then surrounded in a moisture-retaining wrapper such as sphagnum moss or cocoapeat, which is further surrounded in a moisture barrier such as polyethylene film. Rooting hormone is often applied to encourage the wounded region to grow roots. When sufficient roots have grown from the wound, the stem from the parent plant is removed and planted.
Flowers		Which are the ornamental plants that can be used as foliage plants	Common foliage plants are (including trees)Thuja, Crotons, Alocasia, Anthuriums, Coleus, Colocasia, Monstera, Philoderndron, Dracaena, Ficus pumila, Ficus radicans variegata, Ficus pumila, Asparagus plumosus, A. springeri, Scindapsus aureus, Begonia 'Rex', Caladium in different colours, Aglaonema commutatum, Aralia elegantissima, Dieffenbachia exotica, Dieffenbachia picta, Philodendron bipinnatifidum, Polyalthia longifolia, etc.
Flowers		what is the fertilizer dosage of 19-19-19 mix for foliar spraying (garden plants)	3-5g/L spray
Forest		teak seed collection and sowing methods	collect seed from the tree base during oct-feb months. remove the seed coat by soaking in water. keep seeds in sack and wet it every night and dry in morning for 3 weeks. then sow in beds of 30 cmm ht. and 1m width. select one year old seedling for field planting.
Fruit	Banana	how to plant banana	Method of planting Prepare pits 15 days in advance of planting. Fill the pits with topsoil and FYM 15-20 kg per plant per pit. Plant the tissue culture plants on the top of the pit at ground level. Remove the polythene cover completely before planting without damaging the roots. Planting may be done preferably during evening hours. Provide partial shade to plants to protect against sun scorching for about two weeks. Irrigate the crop daily during initial days of establishment
Fruit	Banana	banana seed treatment	Remove the roots and outer skin of the rhizomes. Dip them in a solution of Chlorpyriphos @ 2.5 ml/l for 20mts. Drain the solution. The rhizomes are to be smeared with cowdung solution and ash and dried in the sun for about 3-4 days and stored in shade up to 15 days protecting from rain before planting
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fruit	Banana	leaf thrips control in banana	spray rogor 1.6 ml/L

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Fruit	Banana	Want to know more about cow dung pasting on banana rhizome to control pests	mix 3g /L phytolan with the cow dung slurry and dry in shade before planting
Fruit	Banana	fertilizer application in banana (nendran)	for first month 80g urea, 325g ssp, 100g mop/plant second month 60g urea, 250g ssp, 100g mop/plant third month to bunching 60g urea, 100g mop/plant after bunching 65 g urea/ plant
Fruit	Banana	banana seed treatment	Remove the roots and outer skin of the rhizomes. Dip them in a solution of Chlorpyrifos @ 2.5 ml/l for 20mts. Drain the solution. The rhizomes are to be smeared with cowdung solution and ash and dried in the sun for about 3-4 days and stored in shade up to 15 days protecting from rain before planting.
Fruit	Banana	control of pseudostem weevil	spray sevin (Carbaryl)4g/ L
Fruit	Banana	Table varieties of Banana	Robusta, Palayankodan,, Poovan, Njalipoovan, Kadali, Chenkadali, Dwarf Cavendish, Karpooravally, Poomkalli, Koopillakannan, Chinali, Virupakshi.
Fruit	Guava	how to controll kayeecha from perakka	Fruitfly is a serious pest of guava. The insect affects the fruit when it matures. The infested fruits show depression with dark green punctures. As a precautionary measure, the crop should be sprayed just before fruit maturity with carbaryl 2g/litre.
Fruit	Mango	how can induce flowering in mango	induced by hormonal treatment (cultar 5 ml/ 10 L water), ringing, smoking
Fruit	Mango	fruit fly	Adult flies insert the eggs inside the fruits and the maggots feed on the fruit. Malathion 50 EC 2 .2ml/l, mechanical control, bait traps.
Fruit	Papaya	papaya variety suitable for papain extraction	Co2 and Co5
Fruit	Pineapple	Hormone application in pineapple	For inducing uniform flowering, 25ppm ethephon is applied on physiologically mature plants having 39-42 leaves. The solution for application in 1000 plants is prepared by adding 1.25ml of ethephon, 1Kg urea and 20gm calcium carbonate to 50 litres of water. Pour 50ml of prepared solution to the heart of the plant during dry weather conditions.
Fruit	Pineapple	pineapple manuring	Apply FYM at the rate of 25t/ha at the time of planting . Apply N:P:K at 8:4:8gm/plant per year. Full dose of P2O5 is applied as basal at the time of planting. Nitrogen and K2O are applied in four equal split doses after planting. First dose may be applied at 40-50 days after planting and thereafter at 60-70 days intervals. Weeding is a very important operation required before every fertilizer application.

Fruit	Pineapple	pineapple leaf rot management	pour phytolan 3g/L in to the heart of the plant
Fruit	Pineapple	Pineapple hormone application	For inducing uniform flowering, 25ppm ethephon is applied on physiologically mature plants having 39-42 leaves. The solution for application in 1000 plants is prepared by adding 1.25ml of ethephon, 1Kg urea and 20gm calcium carbonate to 50 litres of water. Pour 50ml of prepared solution to the heart of the plant during dry weather conditions.
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Fruit	Rambutan	marketing of rambutan	
Fruit	Sapota	spacing for sapota orchard	spacing 7-8 m between plants
Fruit	Watermelon	watermelon spacing	Seeds are sown in pits or raised beds at a spacing of 2.5 to 3.5 cm between rows and 90-120 cm between hills in a row. Requires good irrigation in early stages and irrigation stopped when fruits start ripening.
Fruits	Avocado	how can I know the correct harvesting stage of avocardo fruit	ther eis no specific and clear cut measure to know the real harvesting stage of avocado. the fruit will grow as far as it is on the plant. pluck the fruit after 3-4 months of growth, put in shady cool placec and observe after 3 days whether the fruit has achieved enough softness. If it is softened the fruits are ready for harvesting
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Fruits	Banana	fertilizer for njalipoovan in first month	200g urea, 500g rajphos and 300g potash on 1st month
Fruits	Banana	fertilizer for 1 month old tissue culture banana	125g urea, 350g rajphos, 120g potash
Fruits	Banana	planting of banana	dig pits at a spacing of 2x2 m.Dig pits of 45 cm x 45 cm x 45 cm size. The pits are refilled with topsoil, mixed with 10 kg of FYM and 250 g of Neem cake to each pit.
Fruits	Banana	How can i plant banana sucker	Dig pits of 45 cm x 45 cm x 45 cm size. The pits are refilled with topsoil, mixed with 10 kg of FYM and 250 g of Neem cake to each pit. then plant it

Fruits	Banana	yellowing and drying of leaves started from the lower leaves of banana?	spray bordeaux mixture or bavistin 2g per litre or tilt 1ml per litre.
Fruits	Banana	fertilizer recommendation for banana tissue culture?	1st month-110g urea,360g rajphos and 110 g potash, 2nd month-110g urea 110g potash,3rd month-110 g urea and 280g rajphos and 110 g potash.4th and 5th month-110g urea,110g potash.after bunch emergence 110g urea and 110g potash.
Fruits	Banana	yellowing and drying of leaves starting from lower leaves of banana nendran?	spry bavistin 2g per litre and bordeaux mixture 1% alternatively at week interval.or spray tilt 1ml per litre.spray solution should reach on the lower surface of leaves.
Fruits	Banana	Banana nendran fertilizer schedule	Fertilizer schedule for Nendran 1 MAP 85g urea : 360g superphosphate : 100g muriate of pottash, 2 MAP 65g urea : 280g superphosphate : 100g muriate of pottash, 3 MAP 65g urea : 00g superphosphate :100g muriate of pottash 4 MAP 65g urea : 00g superphosphate : 100g muriate of pottash, 5 MAP 65g urea : 00g superphosphate : 100g muriate of pottash, Just after bunch emergence : 65g urea
Fruits	Banana	Planting time of Banana	Main seasons of planting are - Rain fed crop: April-May Irrigated crop: August-September(Adjust planting season depending upon local conditions. Avoid periods of heavy monsoon and severe summer for planting. Adjust the time of planting so as to avoid high temperature and drought at the time of emergence of bunches (7-8 months after planting)).
Fruits	Banana	Control of Pseudostem weevil	Remove dried leaves periodically and keep the plantation clean. Prune the suckers every month. Spray sevin 4g/lit of water once in a month form 4th month onward
Fruits	Banana	fertilizer recommendation for tissue culture banana?	110g urea,360g rajphos,110g potash-1st month, 110g urea and 110g potash-2nd month, 110g urea,250g rajphos and 110 g potash 3rd month,4-5th month-110g urea and 110 g potash.after bunch emergence-110g urea and 110 potash
Fruits	Banana	what is the daily requirement of irrigation water for nendran banana	Water requirement depent on many factors like climate,soil,plant growth stage etc, However in summer month(kerala condition) irrigate nendran banana at a rate of 40L/Plant/Day
Fruits	Banana	control measures for Banana cigatoka diseases ?	Can apply tilt 2ml/L, spray should reach both surface of leaf, distroy severly affected leaves and burn before chemical application.repeat the fungicide application (1% B.M mixture or bavistin 2.5g/L) 30 days interval if required with different fungicide

Fruits	Banana	how to control panama disease	<p>. In the field, Panama wilt disease can be prevented by corm injection methods. A small portion of soil is removed to expose the upper portion of the corm. An oblique hole at 45° angle is made to a depth of 10 cm. Immediately, a gelatin capsule containing 60 mg of Carbendazim or 3 ml of 2 % Carbendazim solution or capsule application for 50 mg of Pseudomonas fluorescens is injected into the hole with the help of ‘corm injector’ on 2nd, 4th and 6th month after planting</p>
Fruits	Banana	Control of cigatoka disease	<p>Remove affected leaves and burn. Spray any one of the following fungicides at monthly interval. Carbendazim 1 g/lit, Copper oxychloride 2.5 g/lit., propiconazole 2 ml/lit, Chlorothalonil 2 g/lit. Alternation of fungicides for every spray prevents fungicidal resistance. Always add 5 ml of wetting agent like Sandovit, Triton AE, Teepol etc. per 10 lit of spray fluid</p>
Fruits	Banana	which are the micronutrient sprays recommended for nendran banana	<p>Spray micronutrients viz., ZnSO4 (0.5%), FeSO4 (0.2%), CuSO4 (0.2%) and H3BO3 (0.1%) at 3, 5 and 7 MAP to increase yield and quality of banana.</p>
Fruits	Banana	rhizome scale attack in banana	<p>Rhizome scale Rhizome scale can be controlled by applying well rotten sheep manure @ 10 t/ha in two splits (once basally and other at earthing up) or Poultry manure in 2 splits followed by drenching Dimethoate 30 EC 2 ml/lit or Phosalone 35 EC 2 ml/lit or Application of Carbofuran 3 G @ 1.5 kg a.i./ha. Seed rhizomes dipped in Phosalone 35 EC 2ml/lit or Ecalux 36 WSC 1.5 ml/lit and then stored</p>
Fruits	Banana	what are the symptoms of Panama wilt diseases	<p>Initial symptoms appear in older leaves as characteristic yellowing which ultimately wither, break at petiole and hang down along the pseudostem. Young leaves may not dry immediately but are erect and also get affected later. If severe, entire foliage wilt within 2-3 days, Splitting of pseudostem , discoloured vascular region in rhizome are also seen.</p>
Fruits	Banana	what is rate of foliar application of potassium sulphate	<p>Spraying of Potassium Sulphate 3% (30gms/litre) on the bunches on second and fourth week after complete bunch emergence to boost bunch weight of banana</p>
Fruits	Banana	Longitudinal splitting of pseudostem. Discolouration of vascular vessels as red or brown streaks.	<p>is due to pseudostem weevil Select healthy sucker and plant Do not take regular crop in the same field to avoid initial infestation Ensure clean cultivation Removal of pseudo stems below ground level Trimming the rhizome Avoid growing Robusta, Karpooruvally, Malbhog, Champa and Adukkar Grow less susceptible varieties like Poovan, Kadali, Kunnan, Poomkalli Use cosmolure trap at 5/ha</p>

Fruits	Banana	bunchy top in banana	Bunchy-top The Banana Aphid <i>Pentalonia nigronervosa</i> is the vector of Bunchy-top virus disease. Spray Phosphamidon 1 ml/lit or Methyl Demeton 2 ml/lit or Ecalux 1 ml/lit to control it. The sprays may be directed towards crown and pseudostem base upto ground level at 21 days interval atleast thrice. Injection of Ecalux 36 WSC 1 ml/plant (1 ml diluted in 4 ml of water) at 45 days interval from the 3rd month till flowering is very effective.
Fruits	Banana	nematodes problem in banana	Application of neem cake @ 1 ton/ha at planting to control root knot nematode, <i>Meloidogyne</i> spp.
Fruits	Banana	Planting time of Banana	Main seasons of planting are - Rain fed crop: April-May Irrigated crop: August-September(Adjust planting season depending upon local conditions. Avoid periods of heavy monsoon and severe summer for planting. Adjust the time of planting so as to avoid high temperature and drought at the time of emergence of bunches (7-8 months after planting)).
Fruits	Banana	What is the irrigation requirement of nendran banana	Banana var. Nendran (October planting) grown under deep water table conditions (below 2 m from ground level) needs 10 mm (40 l/plant) irrigation once in two days during summer season to ensure higher bunch yield and better water use efficiency. Mulching the basin with 3.5 kg paddy straw (waste quality) will considerably improve the bunch yield
Fruits	Banana	Farmer asks about the banana intercropping in young rubber plantation	Non-Ratoon types like Nendran is suitable as intercrop during the initial three years. During the first year 1200 plants per hectare can be grown in a double row system at 2 x 2 metre spacing. The stand should be restricted to 600 during the second year in a single row system and 450 during third year. Ratoon types like 'Palayankodan', 'Poovan' etc. should be planted in a single row and only one sucker should be retained during the second year.
Fruits	Banana	white coloured tender leaf emerges from banana plants?	it can be due calcium deficiency or due to over fertilizer application.u can apply lime 500g to each plant.and only apply fertilizers on the recommended dosage.
Fruits	Banana	which are the profitable intercrop with nendran banana	Cucumber and amaranth can be cultivated profitably with banana raised in September-October without affecting the bunch weight. For vegetable purpose, cucumber may be harvested within 95 days and for seed purpose the duration may be about 130 days. Greater yam and elephant foot yam can be profitably intercropped with Nendran.

Fruits	Banana	Symptoms of bunchy top disease	The initial symptom is the presence of dark-green spots on the petioles, midribs, and leaf veins of the newly emerging leaves. The infected leaves are erect, narrow, stunted, and often have yellow leaf margins. The leaves become smaller as the disease progresses. Eventually, the crown of the plant is composed of only stunted leaves, producing a "bunchy top", hence this got that name
Fruits	Banana	Can i know the K ₂ so ₄ bunch spray application method and its concentration	Bunch spray can be given at a rate of 30g/L K ₂ S ₀ 4 2 weeks after bunch emergence and 4 weeks after bunch emergence
Fruits	Banana	how to plant banana	Method of planting Prepare pits 15 days in advance of planting. Fill the pits with topsoil and FYM 15-20 kg per plant per pit. Plant the tissue culture plants on the top of the pit at ground level. Remove the polythene cover completely before planting without damaging the roots. Planting may be done preferably during evening hours. Provide partial shade to plants to protect against sun scorching for about two weeks. Irrigate the crop daily during initial days of establishment
Fruits	Banana	what are the symptoms of kokkan diseases of banana	During the young stage of Nendran banana plant (two months old), pinkish streaks can be seen on the pseudostem. All the kokkan affected plants need not show this symptom. Necrotic streaks are another important symptom of the disease. The necrotic streaks are initially brown, which later turn black. It occurs on all aerial parts of the affected plant except on lamina, All the kokkan-affected plants will exhibit the necrotic streaks from third month onwards at one stage or other.
Fruits	Banana	banana leaves are severely affected with sigatoka leaves. What control I have to do	spray tilt @ 1 ml/L
Fruits	Banana	if once a banana plant is affected with bunchy top disease , is there any measure to save the plant?	affected plants can not be saved . we have to take the preventive measures to control the diseawes which includes cutiing and removal of affected plants
Fruits	Banana	Farmer asks about the desuckering /control of suckers in nendran banana	Remove (cut with sharp knife from base) the suckers produced till the emergence of bunch. Retain one or two suckers produced after the emergence of bunch
Fruits	Banana	n my banana plantation , some plants are shows black streaks, splitting of pseudostem. what control I have to do for control	the disease most probably kokkan. there is no control for this disease. Destroy the plant to prevent further infection

Fruits	Banana	Farmer asks about the control measures of cigatoka diseases	Give prophylactic spray of fungicides during rainy season Spray systemic and contact fungicide alternately (Tilt 2ml/L,B.M mixture 1%) Remove and destroy infected leaves before spraying Ensure that fungicide spray is done on the lower side of the leaves Use stickers while spraying during rainy season
Fruits	Campoge	Processing of Kudampuli (campoge)	Separated fruit rind is first sun dried and then either smoke-dried or oven-dried at 70-80°C. In order to increase the storage life and to impart softness, mix the dried rind with common salt @ 150 g and coconut oil @ 50 ml per kg of dried rind.
Fruits	Campoge	what is the correct method of approach grafting in kudampuli (campoge)	In approach grafting stock plants having 3-4 mm thickness are preferred and they are brought to the place where the mother tree is located. Grafting is done as in other crops and is kept intact for 45 days by which time union occurs. Graft is detached from the mother tree in three steps. Forty-five days after grafting, they will be ready for transferring to the main nursery for hardening. Grafts are to be watered daily using a rose-can or micro-sprinkler.
Fruits	Campoge	Farmer asks about the processing of comboge	Collect the ripe fruit,seperate seeds from fruit rint, cleaned rint then first sun dried (if possible,due to mansoon rains) and then smoke dried or oven dried 70-80 degree,dried one can store after mixing with common salt @150g and coconut oil @50ml/Kg of dried rint
Fruits	Citrus	root nematode control in citrus	Citrus root nematode Citrus root nematode can be controlled by applying Pseudomonas fluorescens at 20g per tree at a depth of 15 cm and 50 cm away from the trunk for the management of slow decline due to the citrus root nematode (Tylenchulus semipenetrans). Soil application of Phorate @ 2 g followed by drenching with Metalaxyl + Mancozeb 72 WP @ 0.1% 50 ml/ cutting/ poly bag/ kg of nursery soil for citrus decline.
Fruits	Gooseberry	Sowing of seeds in Goosberry	Goosberry is usually propagated by seeds and vegetatively by wedge grafting. The seeds are enclosed in a hard seed coat, which renders the germination difficult. The seeds can be extracted by keeping fully ripe fruits in the sun on a flat rock for about 2-3 days till they split open releasing the seeds. The seeds can be directly sown. Gooseberry can be vegetatively propagated through root suckers.
Fruits	Grape	training in grape	The vines are trained with single stem upto pandal with a stalk on tipping at 2 m height. The main arms are developed and trained on opposite directions. On further tipping, secondary and tertiary arms are developed for spreading all over pandal.

Fruits	Grape	details of pruning in grapes	Pruning In general four bud level of pruning for Muscat, Pachadraksha, Bangalore Blue, Anab-e-Shahi and Arka hybrids and two bud level for Thompson Seedless may be adopted. It is better to decide the level of pruning as per bud forecasting technique. Weak and immature canes should be pruned to one or two buds to induce vegetative growth.
Fruits	Guava	How to control bronzing of leaves in guava?	Combined spraying of ZnSO ₄ , MgSO ₄ , and MnSO ₄ @ 0.5 % and CuSO ₄ and FeSO ₄ @ 0.25 % + Teepol @ 1 ml per 5 lit. of solution on a new flush, one month of 1st spray, flowering and fruit set stage will control the bronzing of leaves in guava.
Fruits	Guava	bronzig in the leaves arre visible. what controol measure I have to do	it may be due to zinc defieciency. give spray of zinc sulphate @ 2 g/L
Fruits	Jackfruit	spacing of jack	Seedlings or grafts are planted in pits of 60x60x60cm size at a spacing of 12-15 m. Stake the grafted plants to prevent snapping at the graft joints. Excellent drainage and adequate watering need to be ensured.
Fruits	Jackfruit	Plant protection measures in Jack plantations	Pest Management : Shoot borer caterpillars & Jack scale : Spray ekalux 25%.EC .05% Mealy bug: Spray lime sulpher Disease Management : Pink disease, Budrot : Pruning of affected plants and protecting the cut- ends with Bordeaux paste are recommended.
Fruits	Jackfruit	Hoe can i prevent the rotting of jackfruit during immature stage	Please nite that jacktree also produce male flower seperatley that will dry or rote after polination, you can prevent this disease by spraying cupper oxy chloride 4g/L
Fruits	Jackfruit	Immature fruit drop in jackfruit	Jackfruit bears male and female flowers on the same plant. Male inflorescence falls rapidly after flowering. Developing fruits infected by fungal fruit rot disease may also fall off. Proper pruning, removal of excessive shade around the tree, and spraying fungicide solution like copper oxychloride @2 ml per litre of water will help to eradicate fungus.
Fruits	Jackfruit	spacing adopted in Jack fruit cultivation	Seedlings or grafts are planted in pits of 60x60x60cm size at a spacing of 12-15 m. Stake the grafted plants to prevent snapping at the graft joints. Excellent drainage and adequate watering need to be ensured.
Fruits	Jackfruit	control of Pink disease, Budrot in Jack fruit	Pruning of affected plants and protecting the cut- ends with Bordeaux paste are recommended.
Fruits	Jackfruit	pest management in Jack fruit	Pest Management : Shoot borer caterpillars & Jack scale : Spray ekalux 25%.EC .05% Mealy bug: Spray lime sulpher

Fruits	Mango	fruit fly control	Adult flies puncture the fruits with the ovipositor and insert the eggs inside the fruits. Maggots feed on the fruits which get rotten . Bait traps with carbofuran granules, Malathion 50 EC (2 ml per litre), Field sanitation.
Fruits	Mango	leaf cutting weevil attack in mango.what control measures can adopt?	spray sevin 4g per litre or roger 2ml per litre.
Fruits	Mango	Stone grafting in mango	Stone grafting is successful in mango. August is ideal for the operation. Select four month old scion materials. Defoliation of scion shoots 10 days prior to grafting is beneficial. Grafting of 8 cm long scion on rootstocks at a height of 6 to 8 cm is most successful.
Fruits	Mango	drying of branches in mango	spray 1% bordeaux mixture ,cut & remove the infected portion and apply bordeaux paste
Fruits	Mango	Spacing recommendation for mango	Spacing Mango is normally planted at 7 to 10 m either way. However under high density planting, it varies between 5 x 5 m and 6 x 6 m. Amrapalli, a North Indian variety is highly suitable for high density planting.
Fruits	Mango	how can i control Anthracnose and stalk end-rot in mango fruit	Pre-harvest spraying of Mancozeb 2g/lit or Carbendazim 1g/lit or Thiophanate methyl 1g/lit or Chlorothalonil 2 g/lit, 3 times at 15 days interval will control anthracnose and stalk end-rot.Also Dip the fruits in 52 ± 1°C hot water immediately after harvest for 5 minutes followed by 8% plant wax (Fruitox or Waxol) to reduce anthracnose disease in mango during storage.
Fruits	Mango	how hot water treatment of mango can done,to reduce fruit fly attacked portions in mature fruits?	harvest mango at mature stage.take 6 litre of boiling water and 4 litres of ordinary water.put 50g salt in to it.keep for 15 minutes.take the mangoes out and wipe it using a cloth
Fruits	mango	Mango nut weevil management practices	∫ Collect and destroy the fallen fruits ∫ Spray application of fenthion 100EC 1ml/l; (first at marble stage of the fruit second at 15 days interval). During non flowering season direct spray towards the base of the trunk
Fruits	mango	Control of dieback of mango twigs ?	To control dieback of twigs and branches, cut the affected twigs below the infected region and apply Bordeaux paste to the cut ends.Give a general spray of bordeaux mixture to the entire plant
Fruits	Mango	Artificial flower induction in mango	Application of Paclobutrazol @ 10 g a.i. for non-bearing trees during first fortnight of September will induce flowering and fruitset yield during off years

Fruits	Mango	what measures can adopt to induce flowering in mango?	NAA @ 20 ppm is sprayed at flowering to increase the fruit retention. v During February 0.5% Urea (5 g/lit.) or 1% Potassium Nitrate (10g/lit.) may be sprayed to induce flowering, if trees do not flower by that time. v Spraying of 2% KNO3 at mustard size will increase the fruit set and retention of fruits. v Application of Paclobutrazol @ 10 g a.i. for non-bearing trees during first fortnight of September will induce flowering and fruitset yield during off years
Fruits	Mango	leaf cutting weevil attack in mango?	spray dimethoate or roger 2ml per litre of water.
Fruits	Mango	how can avoid mango fruit fly attack on mature stage of mango?	u can avoid this by hot water treatment.for this take 6litre of hot water and 4 litres of ordinary water.also add 50g salt to this.then kept mango in the above solution for about 20 minutes and take the mango and wipe it off using a cloth.
Fruits	Mango	Control of powdery mildew in mango	Dusting the plants with fine sulphur (250-300 mesh) at the rate of 0.5 kg/tree. The first application may be soon after flowering, second 15 days later (or) spray with Wettable sulphur (0.2%), (or) Carbendazim (0.1%),(or) Tridemorph (0.1%),(or) Karathane (0.1%).
Fruits	mango	what is the rate of cultar application in mango	if it is 10 yr old mango tree, apply 10 ml in 10 L of water in a trench of 1 M radius in september - october
Fruits	mango	Tender leaves of my mango trees are cut down by some insets how I can control this?	Keep the field clean. Collect and destroy all the fallen leaves. Spray carbaryl @4 gram per litre of water(Sevin 4g/L) on all tender leaves immediately after their emergence. Spraying should also be done on soil around the tree.
Fruits	Mango	what is the effective controlling stragy against mealy bugs in mango	mealy bugs deposit their eggs in soil and frm soil uit reaches the tender parts of the plant. it can be efectively controlled by putting barriers in the trunk so that their mmovement can be checked. For the above purpose put greeze on the trubnk as a band. If attack is severe spray ekalux@ 2ml/L
Fruits	Mango	mango flowers shedding profusely. what comntrol measures I have to adopt	mango flower drop is adoptedbecause for 4 main reasons. they include weather factores like rainy and cloudy weather, pest attack from jassids and hoppers, diseases like powdery mildew and hormonal balances. to control pests spray sevin @ 4g/L immediately after flowering and just after tender mango formation. to control powdery milew apply karathane 1ml/L. to control hormonal imbalance spray NAA @ 20ppm
Fruits	Mango	Tender leaves of my mango trees are cut down by some insets how I can control this?	Keep the field clean. Collect and destroy all the fallen leaves. Spray carbaryl @4 gram per litre of water on all tender leaves immediately after their emergence. Spraying should also be done on soil around the tree.

Fruits	Mangosteen	Is mangosteen an alternate bearer	It is found that flowering in alternate years is less or Mangosteen has been reported to flower in alternate years, similar to other perennial crops e.g. mangoes
Fruits	Mangosteen	Farmer asks about Mangosteen seed viability	fully developed seeds should be chosen for planting. Even these will lose viability in 5 days after removal from the fruit
Fruits	Papaya	If Polybag raising of papaya for planting in the main field will show better survival, what is the size of polybag and what is the age of transplantation	Polybag raising of papaya (2 seeds per bag in Feb-March) show better survival and size of polybag is 20 * 15 cm, 150 gauge. 2 month old plant can be transplanted in the main field
Fruits	Papaya	What is the use of papain?	Papain is a proteolytic enzyme that tenderises meat and can act as a clarifying agent in many food industry processes. It is a common ingredient in brewery and meat processing. Although synthetic substitutes are available at lower cost, the demand for papain is still strong as a food ingredient since it is perceived as a natural product.
Fruits	Papaya	Seed treatment and polybag rearing of papaya seedling	Treat the seeds with Captan @ 2 g/kg of seeds. Dibble four seeds in polythene bags in depth not exceeding one cm. Keep the polythene bags in partial shade. Watering can be done with the help of rose can. Seedlings will be ready in about 60 days
Fruits	Papaya	Irrigation requirement of papaya	The crop should be irrigated in summer once in 2 days. The ring system of irrigation is better for papaya than the basin system because the ring system prevents irrigation water coming into contact with the stem, thus preventing collar rot.
Fruits	Papaya	Organic manure requirement of papaya plant	Organic manure may be applied at the rate of 10 to 25 kg / plant / year at the onset of southwest monsoon in basins around the plant
Fruits	Papaya	Farmer asks about the control measures of collar rot in papaya	Waterlogging and bad drainage are the chief contributing factors. Application of Bordeaux paste on the stem and soil drenching with Bordeaux mixture are control measures.
Fruits	Pineapple	Pineapple sucker treatment	Suckers weighing 500-1000gm are selected. Dipping of suckers in 1% Bordeaux mixture and 0.05% Quinalphos is recommended
Fruits	Pineapple	What is the spacing of commercial pineapple cultivation	Pineapple is planted in paired rows at 45x30cm spacing on ridges taken at 60-90cm height depending on the water table and drainage requirement. Ridges are separated by drainage channels having 60cm width. Width of the ridges varies from 120-150cm.
Fruits	Pineapple	What is the planting season of pineapple	April- May and August- September are the ideal seasons for commercial planting

Fruits	Pineapple	How much time require to harvest fruit from flowering in pineapple	It will tke about 100-115 dyas to reach harvesting age from flowering
Fruits	Pomegranate	Fruit cracking in pomegranate	In young fruits it could be due to Boron deficiency, but fully grown fruits crack due to moisture imbalances as this fruit is very sensitive to variation in soil moisture. Prolonged drought causes hardening of peel and if this is followed by heavy irrigation or down pour then the pulp grows then peel grows and cracks. can avoid by Maintaining soil moisture and not allowing wide variation in soil moisture depletion.Cultivation of tolerant types,Early harvesting not allowing fruits to crack
Fruits	Sapota	Flowering and fruiting in sappota	The tree flowers continuously in several flushes at short intervals throughout the year. But there are two seasons when flowers will be produced profusely i.e., October to November and February to March. Grafted sapota begins to bear in the third year after planting. Fruit production increases with age up to 30 years followed by a decline. Fruits mature about 4 months after flowering.
Fruits	Sapota	manuring in sapota	The recommended nutrient dosage for a full-grown sapota tree per year is: FYM 5 kg N:P2O5:K2O 500:360:750 g Apply FYM in May-June with the onset of monsoon. Apply the fertilizers in two equal split doses, the first during May-June and the second during August-September. Apply the manures and fertilizers in trenches 30 cm deep taken at a distance of 1 m from the base of the tree.
Fruits	Watermelon		Harvest Fruits are harvested when it produces dull sound upon tapping or the fruits surface on the ground level produces light yellow colour are the harvest index for water melon.
Fruits	Watermelon	which are the watermelon varieties suitable for kerala	Arka manik (Multiple resistance to powdery mildew, downy mildew and anthracnose), Sugar baby, Arka Jyothi (F1 hybrid), Pusa Bedana (Seedless variety)
Fruits	Watermelon	watermelon cultivation practices	Season: The ideal season is Dec-April. Varieties: Sugar Baby, Arka Jyothi Seed rate: 1 to 1.5 kg/ha Spacing: 3.0 m x 2.0 m Preparation of land Pits of 60 cm diameter and 30-45 cm depth are taken. Well rotten FYM and fertilizers are mixed with topsoil in the pit and four or five seeds are sown in a pit. Remove unhealthy plants after two weeks and retain two or three plants per pit

Fruits	Westindian cherry	Planting method of west indian cherry	For planting, pits of size 1 x 1 x 1 m are made, 6 m apart. Fill the pit with topsoil and 10 kg cowdung. After planting, mulching may be done with dry leaves to conserve moisture. July to December is considered to be the best time for planting. Irrigation once in four days during early stages of growth up to one year of planting and later on, once in 7-10 days is necessary.
Fruits		what is the precautionary measure I have to adopt against phytophthra fruit rot	give adequate pruning so that light will enter to field. Apply bordeauxmixture 1% as a precautionary measure
Medicinal plant		Seed rate of medicinal plant - Chittaratha (Alpinia calcarata)	Fresh healthy disease free rhizome bits with at least one shoot is the planting material, which is required @ 1000-1500 kg/Ha
Mulberry		Farmer asks about the spacing of Mulberry plant for sericulture	There are two methods of planting recommended by Kerala Agricultural university 1. Pit system (for Rain fed crop) Spacing 75 X 75 cm (30 X 30 X 30 cm pit size) 2. row system (for irrigated crop) Spacing 60 X 60 cm (in ridges and furrow)
Mulberry		Farmer asks about the spacing of Mulberry plant for sericulture	There are two methods of planting recommended by Kerala Agricultural university 1. Pit system (for Rain fed crop) Spacing 75 X 75 cm (30 X 30 X 30 cm pit size) 2. row system (for irrigated crop) Spacing 60 X 60 cm (in ridges and furrow)
Mushroom		i want to know more about mushroom cultivation from where training and spawn will get?	there is krishi vigyan kendra in each district. one of their mandate is to give training to farmers related to agriculture and allied subjects. you can contact there.
Mushroom		i want to know about the sterilization procedures for substrate of mushroom?	125 litre water +7g bavistin+100ml formalin 5-10 kg hay can be put in this. Keep for 24 hours. Or Hotwater for 30minutes.
Oilseed	Groundnut	Which fertilizer is suitable for ground nut	Nitrogen, phosphorus and potash may be supplied through urea, superphosphate and muriate of potash. Apply lime if the soil is acidic.
Others	Bees	nesting for small bees	place a clay pot over the hive with a small hole at the bottom, smear little wax over the mouth of the hole, then bees will get attracted to the the pot
Others	Hoey	method of honey extraction with mechine	Honey is extracted only from super combs using honey extractor. The sealing of cells on combs is removed with sharp knife before placing in the extractor. Extractor should be worked slowly at the beginning and at about 150 rpm at the end for about 1 to 2 minutes. Then the sides of the frames are reversed and the extractor is again worked. Extracted honey is filtered through muslin cloth

Others	Hoey	what should be the characters of ideal bee hive location	The apiary must be located in well-drained open area, preferably near orchards, with profuse source of nectar, pollen and water. Windbreaks may be provided by planting shrubs, flowering plants and also creepers like antigonon. Shade must also be provided. Ant wells are fixed around the hive stand. The colonies must be directed towards east, with slight changes in the directions of the bee box as a protection from rain and sun. Keep the colonies away from the reach of cattle, other animal.
Others	Honey	Honey extraction with mechine	Honey is extracted only from super combs using honey extractor. The sealing of cells on combs is removed with sharp knife before placing in the extractor. Extractor should be worked slowly at the beginning and at about 150 rpm at the end for about 1 to 2 minutes. Then the sides of the frames are reversed and the extractor is again worked. Extracted honey is filtered through muslin cloth
Others	Honey	Stingless bee rearing	They are not truly stingless, but sting is poorly developed. They make nests in the ground, hollows of trees, bamboo, rocks or cracks of walls. Honey and brood cells are separate in the nest. They are efficient pollinators. They yield 300-400 g of honey per year.You can take training on this bee rearing from KVK Santhanpara 0486-8247541
Others	Honey	i would like to know about the availability of honey bee colony for commercial cultivation in thrissur	you can contact KHADHI & VILLAGE INDUSTRIES nadathara 0487-2372170
Others	mulberry	Farmer asks about the spacing of Mulberry plant for sericulture	There are two methods of planting recommended by Kerala Agricultural university 1.Pit system (for Rain fed crop) Spacing 75 X 75 cm (30 X 30 X 30 cm pit size) 2. row system (for irrigated crop) Spcing 60 X 60 cm (in ridges and furrow)
Others		panjagavya preparation	5kg fresh cow dung and .5 kg ghee ae mix well keep it for 4 days with mixing well in each day, on the fifth day to this mix add 3 L cow urine +1 kg jagerry powde + 2L curd +2 L milk+ 2L coconut toady +10kg old palayamkodan banana + 5 tender coconut water + 5L water all this mix well and keep it in shade after close with lid mix well once in 2-3 days this can use fom 16th day to 6 month, 3 L of this solution can mix with 97 L of water and can spray
Others		preparation of beejamrith	Take 200 litres of water in a drum. ¿ Add 10 kg dung into water and stir continuously . Add 2 kg crushed jaggery and 2 kg besan and stir it ¿ Add 10 litres cow urine ¿ Add handful of soil ¿ Stir it well and close the mouth of the drum with a gunny bag ¿ Stir once atleast two days
Others		When will get yield from a top worked tree	Top worked tree start yielding right from the second year of top working.

Others	What is the season for top working	The best season for beheading trees is May- September and best season for Grafting is July-November.
Others	what is drip irrigation	Drip irrigation is a recent advanced irrigation method. Irrigation water is conveyed from motor or pressure water sources to the plant root zone directly through a network of PVC and low density polyethylene pipes. The water is emitted through drippers for longer period and at low rate drop by drop matching plant water requirement
Others	neem garlic emulsion preparation	20 g garlic -20 ml neem oil -5g barsoap
Others	Soil acidity	In order to adjust the acidity in the soil, apply lime at the rate of 500g to 1 kg. Apply Organic manure @10 kg/plant, NPK - 190:115:300g/plant Tissue culture Nendran banana: Apply Organic manure @20 kg/plantNPK- 300:115:450 g/plant in 6 splits.
Others	NEEM OIL EMULSION	200 G GARLIC+200 ml neem oil+ 100 g bar soap per 10 l it water
Others	how to make bordaux mixer	mix 10 g cuso4 in a 1/2 lit water,and take another 1/2 lit water in another vessel and mix 10 lime .after that mix ,pour cuso4 solution in to lime solution and sieve
Others	management of termite	Adoption of field sanitation by disposal of organic matter in nursery soil and covering germinating nuts with a layer of river sand. Drench the nursery with 0.05% chlorpyriphos twice at 20-25 days interval Swab the affected trunk with the same chemical.
Others	Aloa vera harvesing	harvesting can be done every two month for 3 year
Others	preparation of neem oil garlic emulsion	make 50ml soap solution using 5g soap. add 20 ml neem oil to this and shake vigorously. grind 20g garlic, add supernatent to the already prepared neem oil garlic emulsion. finally add 950ml water and use
Others	Jeevamrith preparation	Take 200 litres of water in a drum.Add 10 kg dung into water and stir continuously. Add 2 kg crushed jaggery and 2 kg besan and stir it. Add 10 litres cow urine. Add handful of soil. Stir it well and close the mouth of the drum with a gunny bag. Stir once atleast two days. In one week the Jiwamrit is ready.
Others	farmer wants to know about how to prepare bordeaux mixture?	1kg copper sulphate and 1kg lime in 100 litres of water.1st mix 1kg copper sulphate in 50 litres of water.1kg lime in 50 litres of water.then pour copper sulphate solution in to lime solution.mix well.and can use.
Others		Preparation of Bordeaux paste Take 200 g of Copper sulphate and dissolve it in one litre of water and 200 g of lime in one litre of water separately. Both are mixed simultaneously in a third vessel and the resultant mixture can be used as a paste.

Others	method of preparation of kerosene emulsion	Contact insecticide against many sucking pests. Slice 500 g of ordinary bar soap and dissolve in 4.5 L water by boiling. Cool and add 9 L kerosene under violent agitation till the oil is fully emulsified. The stock solution may be diluted with 15-20 water before spraying.
Others	how to prepare Neem-kernal suspension (0.1%)	1 g of powdered neem seed is required per litre of water. 1 g of powdered neem seed put in small muslin cloth bag and dipped in water for about 12 hrs. There after squeeze the bag repeatedly so that the out flowing fluid turns light brownish. The NKS is now ready to be sprayed as such on crops
Others	preparation of Neem oil -garlic emulsion (2%)	Neem oil 200ml Garlic 200g Bar soap 50g slice+500 ml lukewarm water Grind 200g garlic and take the extract in 300 ml water. Pour the 500 ml soap solution in 200ml neem oil slowly and stir vigorously to get a good emulsion. Mix the garlic extract in the neem oil soap emulsion. Dilute this 1 L stock solution by adding 9 L of water to get 10 L of 2% neem oil garlic emulsion
Others	Preparation of rosin washing soda mixture as a sticker for B.M mixture	For preparing the rosin washing soda mixture, 10 litres of water out of 100 litres required for preparing Bordeaux mixture may be kept apart. Boil this water, add 500 g of good quality washing soda. Boil again until the solution becomes slightly dark in colour. Add 1 kg of powdered rosin, Reduce the flame for avoiding frothing, foaming and spilling over. Boil the solution for 5-10 minutes till black bubbles appear. Cool the solution below 45°C. add to B.M mixture
Others	what is mean by kissan credit card	A credit card system for farmers having the objective is to meet the credit needs of the farmers for cultivation of crops and other requirements in a very convenient. This facility is provided to the farmers for meeting expenditure connected with cultivation of various crops, maintenance of small dairy/poultry units, non farm activity and consumption needs to some extent
Others	Please inform ways of fumigating nursery beds and proper procedure	nursery soil may be drenched with formalin 2% solution i.e 20 ml per lit of water and covered with polythene sheets for 3 days. Planting should be taken up only 15 days after treatment to avoid phytotoxicity.

Others	Please let me know how i can multiply Trichoderma at farm level using low cost innovations.	Take about 15 baskets of sieved Farm Yard Manure (100 kg) or Vermicompost (Keep in shade or cool condition), sprinkle water so that it should be moist (30% around). Add Trichoderma culture @ 1-1.5 kg, cover it with a polythene sheet perfectly, keep it for about 15 days, then mix it, use it for spot application or apply at furrow. This can be used for soil application wherever soil is infested with pathogens.
Others	what is the procedure for filling vermicompost jar unit	Fill sand/metal chips up to the level of plastic tap inside the jar. Then place wetted coconut fibres above the sand. Earth worm can be placed above the fibre. Daily available bio waste can be added to it. Water can be sprinkled in 2 to 4 days interval. The decaying waste can be turned upside down in 10 days interval. The jar must be placed in a water channel to protect the earthworm from ants and cover the lid with net to protect from flies.
Others	fertilizer recommendation for sugarcane (chittoor area)	as basal dose apply urea 98 kg/acre, SSP 166 kg/acre, Mop 25kg/acre 45 DAP and urea 98 kg/acre, Mop 25kg/acre 90 DAP
Others	what is the min. gap that should be given between organic and inorganic fertilizer	2 weeks
Others	different methods of pseudomonas application	Seed treatment: 10g for 1 Kg seed wait for 8-12 hrs. Seedling dip: 100g in 1 L water, for 20 minutes. For soil application: 1 Kg/ha with 20 Kg cow dung. Foliar application: 2-10g/L of water, give 10 days interval
Others	give me the preparation of any contact insecticide against sucking pest, that i can prepare in my home	Slice 500 g of ordinary bar soap and dissolve in 4.5 L water by boiling. Cool and add 9 L kerosene under violent agitation till the oil is fully emulsified. The stock solution may be diluted with 15-20 water before spraying.
Others	Farmer asks about the procedure for collection of soil for soil testing	Surface litter is to be removed, For field crops the minimum depth of soil sampling is 15-20 cm where as for plantation crops the depths are 0-25 and 25-50 cm. Thick slices of soil from top to bottom of exposed cuts is removed and placed in a clean container. Reduce the bulk to 500g by quartering procedure.
Others	Farmer asks about the azolla cultivation	A pit of 2 x 2 x 0.2 m is dug as a first step. The pit is covered with plastic gunnies. About 10 - 15 kg of sieved fertile soil is uniformly spread over the silpauline sheet. Slurry made of 2 kg cow dung and 30 g of Super Phosphate mixed in 10 litres of water, is poured onto the sheet. More water is poured on to raise the water level to about 10 cm. About 0.5 - 1 kg of fresh and pure culture of azolla is placed in the water.

Others		how can i apply trichoderma in field?	(Dried cowdung+neem cake=90:10)+Trichoderma 1-2 Kg. Provide necessary moisture, heap it in shade, cover with moist sack or polythene sheet. After 1 week we can see the green colored mycelia .Rake once more and heap in shade.
Others		preparation of Cheshnut compound	CuSo4 60g Ammonium carbonate 330 g.These two are well powdered and thoroughly mixed. the dry mixture is stored in an air tight glass container for 24 hrs before use. About 25 g of this mixture is dissolved in a little hot water and solution is made up to 8 L with cold water and used for soil drenching.
Others		Farmer asks about the rate of application of NOMINEE GOLD® (Commercial name), a broad spectrum systemic herbicide	80-120ml commercial product /acre
Others		Farmer ask about Earthworm multipliation methods	Earthworms can be multiplied in 1:1 mixture of cowdung and decaying leaves taken in a cement tank or wooden box or plastic bucket with proper drainage facilities. The nucleus culture of earthworms is to be introduced into the above mixture @ 50 numbers per 10 kg of organic wastes and properly mulched wet gunny bag.The unit should be kept in shade. Sufficient moisture level should be maintained by occasional sprinkling of water. Within 1-2 months, the earthworms multiply
Others		Please inform ways of fumigating nursery beds and proper procedure	It is recommended that the primary and secondary nursery soil may be drenched with formalin 2% solution i.e 20 ml per lit of water and covered with polythene sheets for 3 days. Planting should be taken up only 15 days after treatment to avoid phytotoxicity.
Plantation crops	Arecanut	second split of fertilizer for arecanut	apply 217 g urea, 200g mussooriphos, 235 g potash
Plantation crops	Arecanut	cultivation practice for arecanut for this month (jan)	continue irrigation cover the palm with dry leaves or paint limestone slurry on the bark to protect from sun scorching
Plantation crops	Arecanut	spacing and pit size of arecanut	2.7*2.7m distance between plants and a pit size of 60*60*60cm
Plantation crops	Arecanut	Farmer asks about the fertilizer recommendation for arecanut adult plant (7 year)	apply 12kg cattle manure per plant per yr during september -october time, apply urea 220g, rajphos 180g, muriate of pottash 220 per plant per year apply this amount in two equal split first sept- oct and second march april after first rain

Plantation crops	Arecanut	Management of lethal yellowing in arecanut	<p>1. Apply the recommended dose of fertilizers. 2. In addition to the above, apply 160 g of rock phosphate per palm in the affected garden. 3. Apply organic manure @ 12 kg each of compost and green leaves per palm per year. 4. Provide irrigation during summer months 5. Avoid water stagnation in the garden by providing drainage facilities. 6. Grow cover crops in the garden. 7. When only a few palms are affected in a garden, remove them to prevent further spread of the disease.</p>
Plantation crops	Arecanut	Farmer ask about the intercrops planting in arecanut	<p>Crops such as elephant foot yam, pineapple, pepper, betel vine, banana, guinea grass, cocoa, ginger and cardamom can be grown in arecanut gardens. While planting cocoa, a spacing 2.7 x 5.4 m is recommended. In all cases, the intercrops should be manured adequately and separately</p>
Plantation crops	Arecanut	Contol of Anabe disease in arecanut (shows some fungal bract growth in base)	<p>Anabe disease is caused by a fungus Ganoderma. It is controlled by root feeding with Calyxin (5 ml Calyxin in 300ml water feed through 3-4 healthy roots) followed by Phytosanitation and isolation by making trenches around plants to avoid root contact with other palms.</p>
Plantation crops	Arecanut	Farmer asks about the fertilizer recommendation for arecanut adult plant (9 year)	<p>Apply 12kg cattle manure per plant per yr during september -october time, apply urea 220g, rajphos 180g, muriate of pottash 220 per plant per year apply this amound in two equal split first sept- oct and second march april after first rain</p>
Plantation crops	Arecanut	Seedling selection in arecanut	<p>Select good seedlings for transplanting in the main field when they are 12-18 months old. Selection of seedlings can be based on the selection index. Multiplying leaf number by 40 and subtracting the seedling height gives the selection index. Select seedlings with higher selection index values.</p>
Plantation crops	Arecanut	arecanut varieties	<p>Mangala, Sumangala, Subamangala, Mohitnagar, Srimangala and Samruthi (Andaman) are mainly cultivated</p>
Plantation crops	Arecanut	control measures of Yellow leaves disease of arecanut	<p>1. Apply the recommended dose of fertilizers.2. In addition to the above, apply 160 g of rock phosphate per palm in the affected garden.3. Apply organic manure @ 12 kg each of compost and green leaves per palm per year.4. Provide irrigation during summer months5. Avoid water stagnation in the garden by providing drainage facilities.6. Grow cover crops in the garden.7. When only a few palms are affected in a garden, remove them to prevent further spread of the disease.</p>

Plantation crops	Arecanut	Give me control measures against foot rot in Arecanut ?	Affected palms have to be isolated by digging trenches all round. The severely affected palms should be cut and destroyed. The stumps should be pulled out by digging and the drainage improved. Root feeding with 125 ml of 1.5 % (15 ml/litre of water) Tridemorph at 3 months interval.
Plantation crops	Arecanut	Please give details about the arecanut variety SAS 1	This variety is characterized by tall palm with compact canopy. Nuts are round and even sized and closely arranged on compact bunches. This variety is a regular bearer and has higher procuring percentage. Also it is suitable for both tender and ripe nut processing. It has got the potential to yield about 4.60 kg chali per palm per year. The variety has been recommended for traditional arecanut growing valleys of Sirsi hill zone of Karnataka.
Plantation crops	Arecanut	Fertilizer dosage for arecanut	application of urea 200gm,rajphos 200gm,MOP-240gm in two split doses recommended. One split during Sept- Oct and another split during March-April
Plantation crops	Arecanut	Farmer asks about the control measures of arecanut spindle bug	A fine spray to the spindle leaf alone in the morning hours (before the day temperature rises) with dimethoate (at 0.05 per cent concentration) (roger 1.5 ml/L) will reduce the population of these bugs
Plantation crops	Arecanut	Farmer ask about the intercrops planting in arecanut	Crops such as elephant foot yam, pineapple, pepper, betel vine, banana, guinea grass, cocoa, ginger and cardamom can be grown in arecanut gardens. While planting cocoa, a spacing 2.7 x 5.4 m is recommended. In all cases, the intercrops should be manured adequately and separately.
Plantation crops	Cashew	What intercrop can be grown with cashew	Pineapple is the most profitable intercrop in cashew plantations during early stages. Tapioca, ground nut, pulses , vegetables like yam, spices like ginger, turmeric etc can also be grown successfully during the initial 3-4 years depending upon the availability of rains.
Plantation crops	Cashew	What are the nut characters of cashew	A fully matured nut will have 25% moisture and grey in colour. Average weight of nuts varies between 6-8 gms and apple 50-80 gms.
Plantation crops	Cashew	Whether the cashew grafts need to be watered during the first year and what is the quantity and how to irrigate cashew?	Cashew plants require irrigation. 200 litres of water per adult tree may be applied at an interval of 15 days during January to May.
Plantation crops	Cashew	What is the season of planting cashew	Under rainfed conditions, planting is to be done during June-July or September-October coinciding with the monsoon.
Plantation crops	Cashew	Cashew soft wood grafting rootstock age	40-50 days

Plantation crops	cashew	What are the climatic conditions for cashew cultivation	Cashew can be grown in areas where temperature does not fall below 10 degree C in cooler periods for prolonged duration and 32-36 degree C during summer months
Plantation crops	Cashew	What are the profitable intercrop that can be cultivated in young cashew plantation	Pineapple is the most profitable intercrop in cashew plantation in the early stages of growth. It can be planted between two rows of cashew in trenches opened across the slope. Paired row of pineapple suckers can be planted in each trench at 60 cm between rows and 40 cm between two suckers with in the row. These trenches can be opened at 1 m between two rows of cashew. Ginger, lemongrass and tapioca are also suitable as intercrops.
Plantation crops	Cashew	How can I control Tea Mosquito Bug in my Cashew plantation?	spray 0.1% carbaryl or 0.05% quinalphos or 0.03% phosphamidon. A rational rotation of insecticides would be desirable to counteract the tendency of the pest to develop field resistance. Spraying may be done once, twice or thrice depending upon necessity. First spraying is to be given synchronizing with the emergence of new vegetative flushes in Oct-nov. The 2nd spraying may be given synchronizing with the commencement of panicle emergence in Dec-Jan. 3rd at initiation of fruit set in Jan-Feb.
Plantation crops	Cashew	manuring in cashew	A fertilizer dose of 750 g N, 325 g P ₂ O ₅ and 750 g K ₂ O per plant is recommended for cashew. Apply 1/5th dose after the completion of first year, 2/5th dose during second year and thus reaching full dose from 5th year onwards. Broadcast the fertilizer within an area of 0.5 to 3.0 m (15 cm deep) around the tree and incorporate by light raking.
Plantation crops	Cashew	what is the optimum spacing of cashew	Planting may be done at a spacing of 7.5 m for poor and 10 m for rich and deep soils and sandy coastal area. On very sloppy lands, the rows may be spaced 10-15 m apart with a spacing of 6-8 m between trees in a row. While adopting a high density planting technique, grafts may be planted initially at a spacing of 4 x 4 or 8 x 4 m so that there will be 625 or 312 plants respectively. This population can be retained for a period of seven to nine or ten years depending upon the canopy expansion rate.
Plantation crops	Cashew	at waht stages I have to adopt chemiccal control measures against tea mosquito bug attack in cashew	at flushing, flowering and nut forming stages

Plantation crops	Cashew	control of Cashew stem and root borer	Swab the trunk and exposed roots with carbaryl. remove the dead trees and trees in advanced stage of infestation at least once in 6 months. Prophylactic treatment by swabbing the trunk region (up to 1 m height from the ground level) and exposed roots, with a suspension of mud slurry + carbaryl 0.2% or coal tar and kerosene (1:2) or 5% neem oil twice a year during March-April and November-December along with soil application of Sevidol 4 G @ 75 g/tree.
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plantation crops	Cocoa	How can I control thread blight on cocoa? Boardo one percent done twice	Ensure proper field sanitation. Completely remove and destroy the affected plant parts. Ensure more sunlight penetration. Avoid heavy shade. Repeat the application of 1per cent Bordeaux mixture.
Plantation crops	Cocoa	In which type of soil will cocoa grows	It grows in wide range of soils. Well drained rich soils acidic to neutral in reaction are best suited. The soil should have a minimum soil depth of 1.5 m.
Plantation crops	Cocoa		Black pod disease Spray 1 % Bordeaux mixture or 0.2 % Mancozeb or Copper oxychloride at 20 days interval.
Plantation crops	Cocoa	fertilizer recommendation for cocoa?	200g urea,200g rajphos and 200g potash per tree per year.
Plantation crops	cocoa	management of cocoa mealy bug	Management ĳ Band the trees with 20 cm wide alkalthene of polythene (400 gauge) ĳ Stem with jute thread and apply a little mud of fruit tree grease on the lower edge of the band. ĳ If necessary apply methyl parathion1ml/lit, chlopyriphos 20EC 2.5 ml/l and Ecalux 36 WSC 1.5 ml/l ĳ Release of Australian ladybird beetle, Cryptolaemus montrouzieri @ 10/tree Top
Plantation crops	cocoa	cocoa manuring	Cocoa manuring: 1 year: 72g urea+65g ssp+ 77g mop 2 yr: 144g U+ 130 g ssp+154g mop 3 yr onwards: 220 g U+200g ssp+ 230 g mop 2 splits apr-may& sep
Plantation crops	cocoa	Is there is any hybrid coca variety available at kerala	There are 3 hybrid varieties available CCRP 8,9,10 from KAU-Cadbury research project

Plantation crops	Cocoa	Pruning and training in cocoa	In the early stages, pruning is done to give a particular shape to the tree. After the establishment of the trees in the garden, prune them to the extent of retaining only the required number of leaves (20-30 leaves per developing pod). Removal of secondary branches from the centre should be restricted only to those trees growing in excess shade.
Plantation crops	cocoa	sir may i please know about black pod diseases of cocoa	<p>∩ The pods are susceptible to the attack at all the stages of development. The most obvious symptoms of the disease is its effect on pods. This enlarges concentrically and evenly to involve the whole pod surface. ∩ The affected area quickly darkens and the whole pod turns dark brown to black.</p>
Plantation crops	Cocoa	Spacing of cocoa in arecanut garden having a spacing of 2.7 X 2.7m	In Arecanut garden optimum spacing of cocoa is 3.4 m X 5.4 m
Plantation crops	cocoa	Farmer asks about the control measures of charcol pod rot in cocoa (Pod rot on dry season,start as pale yellow spot on tip or stalk end,later lesions enlarge and cover the entire pod in chocolate colour)	Diseases is more common on pods of plants under stress,better management practices will reduce the incidence of disease, Remove all the affected pods and spray 1% Bordeaux mixture spray
Plantation crops	Coconut	mulching in coconut cultivation	Mulching Mulching is an effective method of conserving soil moisture. Mulch the coconut basins with green / dry leaves at the close of northeast monsoon (October-November). Mulching also adds organic matter to the soil and reduces the soil temperature. Do not disturb soil in the coconut garden during summer months. In level lands, during rainy seasons excess water may be conserved in small trenches dug out in the plantation. In sloppy areas, land may be terraced and trenches dug across.
Plantation crops	Coconut	What is the symptom of red palm weevil attack and give effective measures for controlling the pest ?	Red palm weevil is a major pest of coconut which if not controlled in the early stages can kill the palms. The attack of red palm weevil is more severe in young palms below 15 years. The pest can cause damage to the crown and stem portion close to the crown region. The bole region of the seedling is also damaged by its infestation.
Plantation crops	Coconut	What are the causes of root (wilt) disease and give the recommended control measures ?	Root wilt disease of coconut is caused by a micro organism called phytoplasma. The disease is transmitted by lace bug Stephanities typicus and plant hopper Proutista moesta. No definite control measure has been developed so far. The bearing palms in the early and middle stages of the disease respond well for the management practices and the yield of those palms could be maintained at economic level by the

Plantation crops	Coconut
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How much quantity of fertilizers should be applied to an adult coconut palm ?

Suggest few annual / biennial crops that can be raised as intercrops in coconut garden ?

Whether intercropping can be practiced in coconut garden during all the stages of its growth ?

Can coir pith be used as organic manure in coconut garden?

which is the time for collection of seednuts in coconut

What are the criteria for Mother Palm selection in coconut ?

adoption of

General fertilizer doze recommended for an adult coconut palm is 500 gm. N, 320 gm. P₂O₅ and 1200 g K₂O per palm per year. In the first year after planting, one tenth of the recommended doze should be applied 3 months after planting. In the second year and third year 1/3rd and 2/3rd of the recommended dozes respectively should be applied in two equal splits. From the fourth year onwards full doze of fertilizers should be provided.

Tuber crops - Tapioca, elephant foot yam, sweet potato, colocasia, greater yam, lesser yam, Spices - Ginger and turmeric, Cereals - Rice, Maze, finger millet, pearl millet. Vegetables- Chilly, potato.

Intercropping in the coconut garden has to be done based on the availability of sunlight. in the holdings. During the initial 8 years, there is a good light transmission and annual / biennial crops can be raised as intercrops.

Coir pith has to be composted before using as an organic manure as it contains very less nitrogen and large amount of lignin and polyphenol in raw form. For composting 1tonne of coir pith, 5 kg. urea, and 5 bottles of Pleurotus fungus are required

Seednuts can be collected during the period January to April under Kerala conditions, and from October to March in Karnataka and Andhra Pradesh and March to August in Tamil Nadu and August to Sept. in Orissa and Assam, West Bengal and other coconut growing southern states conditions.

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Age of 20 years or more In general, regular bearer with annual yield of more than 80 nuts per palm per year. However, in Tamil Nadu and Karnataka conditions high yielding palms giving less than 100 nuts/palm/year, should be chosen for collection of seed nuts. Free of disease

Plantation crops	Coconut	How coconut husk can be utilized in coconut garden	Husk burial : Husks, if buried in the soil acts as a water reservoir and also supply palms with small amount of potash present in it. A fully soaked husk is able to retain about 6-8 times of its weight of water which will become available to the palms when they experience water stress. Besides, on an average 100,000 husks contain potash equivalent to 1 tonne of muriate of potash which is also made available to the palm.
Plantation crops	Coconut	Whether yield on coconut palm will increase due to toddy tapping	It is reported that in the case of low yielding palms there would be a slight increase in the yield after tapping toddy for a brief period. More studies on toddy tapping under varied conditions are required to substantiate the observation.
Plantation crops	Coconut	What is the difference between TxD and DxT hybrids	TxD and DxT are inter varietal hybrids. In TxD Tall variety is used as the female parent and Dwarf as male parent whereas in DxT dwarf is the female parent and the Tall is the male parent.
Plantation crops	Coconut	Whether coconuts can be sown as soon as they are harvested from the tree	In the case of Tall seednuts before sowing, the husk of the coconuts should be allowed to dry. Storage of seednuts in shade for a month prior to sowing facilitate speedy and maximum germination. But for Dwarf seednuts, sowing may be done without delay. For dwarf seednuts, water content is low and it gets dried up immediately. Hence, it is advisable to sow the dwarf seednuts when the husk get dried within a few days after harvest.
Plantation crops	Coconut	How can i control the Eriophyid mite of coconut without disturbing beneficial insets ?	In order to protect the natural enemies of the mite present in the coconut gardens, avoid too much use of plant protection chemicals and use them as the last resort. Use plant protection chemicals at the correct dose and spray to cover the buttons / nuts of 2-6 months only. Organic insecticides like neem oil garlic emulsion and neem based commercial products which are not harmful to the natural enemies can be sprayed
Plantation crops	Coconut	Whether growing pepper on coconut will adversely affect the growth of coconut palm?	No. The pepper is a commercially viable crop in the mixed cropping system under coconut
Plantation crops	Coconut	What are the criteria for Mother Palm selection in coconut ?	Tree with the following characteristics should be selected as Mother Palms for getting good quality seednuts. Age of 20 years or more In general, regular bearer with annual yield of more than 80 nuts per palm per year. However, in Tamil Nadu and Karnataka conditions high yielding palms giving less than 100 nuts/palm/year, should be chosen for collection of seed nuts. Free of disease Have medium sized nuts with average weight of 600 grams per husked nut and copra content of 150 g
Plantation crops	Coconut	What is the difference between TxD and DxT hybrids ?	TxD and DxT are inter varietal hybrids. In TxD Tall variety is used as the female parent and Dwarf as male parent whereas in DxT dwarf is the female parent and the Tall is the male parent.

Plantation crops	Coconut	We have just a single coconut tree. The flowers and small coconuts (Vellakka) of all the bunches are getting dried and in turn fall, so the coconut yield is very poor. Kindly recommend a pesticide and the proper fertilizer for this coconut tree. The tree has a small pit around it where we put bio-waste from kitchen. Last week we put 2 kg of Table Salt around the tree. Kindly advise the suitable dose per occasion of pesticide/fertilizer	Pesticide is not required now. Provide 750g urea, 850 g rajphos and 1.2 kg potash for coconut palm in a year. Apply fertilisers in 2 split doses during may and november. Common salt is not required if you provide potash. See our crop information section/coconut for more details.
Plantation crops	Coconut	fertilizer dosage for coconut	750 g urea, 850 rajphos and 1150 g potash in two splits before rainy season for moderate management level
Plantation crops	Coconut	manuring of 5 year old palm	750g urea 600g rock phosphosphate 1250 potash
Plantation crops	Coconut	Chemical for controlling bud rot in coconut	aKOMIN 45 5ML PER LIT WATER
Plantation crops	coconut	management of stem bleeding in coconut	Chisel affected tissue and dress the wound with 5% Calixin (5ml in 100ml water). Apply coal tar after 2 days. Burn off chiselled pieces
Plantation crops	Coconut	coconut copra recovery percentage and oil recovery	copra recovery 17-20 %, oil recovery 60-65 %
Plantation crops	coconut	management against rhinoceros beetle in coconut	Hook out the beetle from the attacked palms using beetle hook. As a prophylactic measure, fill up the top most three leaf axils with Sevidol 8G(25g) + fine sand (200g) thrice in April, September and December.
Plantation crops	Coconut	Bud rot of coconut-Management	Clean crown of coconut. Then apply Akomin (Potassium phosphonate) 5ml/lit through leaf axils. Apply this chemical 3 times from august to november.
Plantation crops	Coconut	fertilizer recommendation for coconut?	750g urea, 850g raj phos, 1200g potash per palm per year. apply this in 2 splits.
Plantation crops	Coconut	immature nut fall in coconut?	apply 1200g potash and 250g borax per palm per year. apply this in 2 splits.

Plantation crops	Coconut	how do i control stem bleeding	Chisel affected tissue and dress the wound with 5% Calixin (5ml in 100ml water). Apply coal tar after 2 days. Burn off chiselled pieces. To avoid spread of disease on to upper portion of trunk, root feeding with 5% calixin may be adopted 3 times a year - April-May, Spetember-October and January-February. Along with 50kg organic manure, apply 5kg neem cake containing the antagonistic fungi, Trichoderma culture to the basin during September
Plantation crops	coconut	What is the difference between TxD and DxT hybrids ?	TxD and DxT are inter varietal hybrids. In TxD Tall variety is used as the female parent and Dwarf as male parent whereas in DxT dwarf is the female parent and the Tall is the male parent.
Plantation crops	coconut	fertilizer recommendation for coconut.rainfed?	750g urea,850g rajphos and 1200g potash per palm per year.apply this in 2 splits may -june and sept-oct.
Plantation crops	coconut	what are the symptoms of Root wilt disease	Symptoms of root wilt are Abnormal bending or ribbing of the leaflets, flaccidity of the leaves, general yellowing followed by marginal necrosis of the leaflets.Abnormal shedding of buttons, reduced leaves and crown, gradual reduction in yield.
Plantation crops	coconut	fertilizer recommendation for coconut.10 years age.	750 g urea,850g rajphos or massuriphos and 1200g potash per palm per year.apply this in 2 splits.in may june and sept-oct.
Plantation crops	Coconut	Rhinoceros beetle control in coconut ?	Apply Sevidol 8G 25g + fine sand 200g mixture can use to fill the innermost 2-3 innerwhorl,which should be done thrice in a year April-May,Sept-Oct & Dec-Jan
Plantation crops	Coconut		Bud rot or Mahali disease Infected tissues of the bud should be scooped off and treated with 10 % Bordeaux paste. Destruction and removal of seed palms and also bunches affected by Mahali and drenching crowns of surrounding healthy palms with 1 % Bordeaux mixture would help in minimizing the incidence of the disease.
Plantation crops	Coconut	Biofertilizer recommended for application in coconut garden	Bio-fertilizer recommendation Mix 50 g of Azospirillum, 50 g of Phosphobacteria (or) 100 g Azophos and 50 g of VAM in sufficient quantity of compost or FYM and apply near feeding roots once in 6 months / palm starting from planting. Don't mix with chemical fertilizers and pesticides
Plantation crops	Coconut	Farmer asks about the control measures of mahali in coconut	Fruit rot can be successfully controlled by application of a copper fungicide, such as Bordeaux mixture 1%, as spray or paste, on the infected and wounded surface, preferably during the pre-monsoon and post-monsoon periods.To be effective, the sprayings should be given during the pre-monsoon and post-monsoon periods.the crowns of the palms, whether affected or not, should be given a thorough cleaning

Plantation crops	Coconut	Eriophid mite in coconut IPM	<p>ζ Azadirachtin5% 7.5 ml.+7.5 ml. of water/ tree (or) Azadirachtin1% 10 ml.+10 ml. of water/ tree ζ Carbosulfan25 EC (15ml +15 ml water/ tree)-----40 days waiting period</p>
Plantation crops	Coconut	how much magnesium sulphate should be applied for coconut	<p>500 gms</p>
Plantation crops	Coconut	Control of lethal yellowing	<p>1. Apply the recommended dose of fertilizers. 2. In addition to the above, apply 160 g of rock phosphate per palm in the affected garden. 3. Apply organic manure @ 12 kg each of compost and green leaves per palm per year. 4. Provide irrigation during summer months 5. Avoid water stagnation in the garden by providing drainage facilities. 6. Grow cover crops in the garden.</p>
Plantation crops	Coconut	which are the major coconut hybrid variety available at kerala	<p>The major cocont variety available at kerala are 1 . Lakshaganga (Lakshadweep Ordinary x Gangabondam) 2. Anandaganga (Andaman Ordinary x Gangabondam) 3. Keraganga (West Coast Tall x Gangabondam) 4. Kerasankara (West Coast Tall x Chowghat Orange Dwarf) 5. Chandrasankara (Chowghat Orange Dwarf x West Coast Tall) 6. Kerasree (West Coast Tall x Malayan Yellow Dwarf) 7. Kerasoubaghya (WCT x SSA)</p>
Plantation crops	Coconut	Farmer asks about the control of crown chocking in coconut	<p>Application of 50 g Borax at half-yearly intervals (Feb-Mar and Sept-Oct) along with recommended fertilizer in the basins will control the disease when it is in the early stage. In root wilt affected areas a dosage of 200gm - 300gm per palm per year is recommended.</p>
Plantation crops	Coconut	i want to know the method of fertilizer application in adult coconut	<p>Under rainfed conditions, apply fertilizers in two split doses, 1/3 at the time of early southwest monsoon showers in April-June and 2/3 in September-October.Under irrigated conditions, apply fertilizers in three or four equal doses in April-May, August-September,December and February-March.Apply fertilizers and manures in circular basins at a radius of 2.0 m from the base of the palm and 10 cm deep, opened after the onset of southwest monsoon.</p>
Plantation crops	Coconut	what is the spacing of nut spacing in coconut seedling nursery	<p>Plant the seed nuts at a spacing of 30 cm (between rows) x 30 cm (between nuts) with four or five rows per bed.</p>
Plantation crops	Coconut	how can i identify a good coconut seedling	<p>Select healthy seedling of 9-12month age having Early germination, rapid growth and seedling vigour. 2. Six to eight leaves for 10-12 month old seedlings and at least four leaves for 9 month old seedlings. 3. Collar girth of 10-12 cm. 4. Early splitting of leaves</p>

Plantation crops	Coconut	Method of preparation of coconut water vineger	Materials:3 L coconut water,1/4tsp. yeast,2.25 cups white sugar,1 L mother vinegar(starter)Procedure: Collect coconut water and strain .Dissolve the sugar in coconut water.Pasteurize the mixture for 20 minutes at 65 C. Cool and transfer the mixture into sterilized containers. Add yeast. Cover tightly and ferment for 4-7 days.Slowly decant mixture and heat further for 20 minutes at 65 C.Add the starter and set aside undisturbed for a month or until maximum acidity is attained.
Plantation crops	Coconut	control of button shedding in coconut	button shedding may occur due to many reasons but in your case occurs due to Boron deficiency. This can be corrected by Basal application of Borax @ 250 g/tree. Root feeding of Boron @ 200 ml/tree at four months interval (5 g of Borax is dissolved in 1 lit water 1. Collect and destroy all the fallen buttons of the affected palm. 2. Apply 2% neem oil + garlic emulsion or commercial neem formulation azadirachtin 0.004% (Neemazal T/S 1% @ 4 ml per litre of water) or micronized wettable sulphur 0.4 % in the crown on young bunches. In large coconut plantations, dicofol 0.1% can be applied after taking adequate precautions. However, spraying of dicofol should be avoided in homesteads.
Plantation crops	Coconut	control of Coconut eriophyid mite attack	Cut and burn affected leaves Arrange for liberation of Braconid/Bethylid/Elasmid parasites as soon as infestation is noted. If infestation is severe spray under surface of the fronds with Malathion 1 ml/l Quinalphos 2 ml/l, or Phosalone 1.4 ml/l Hook out beetles using beetle hook. Fill to the inner most leaf axils on the crown with Sevidol 8G 20g+200g fine sand. Insecticidal treatment of manure pits/breeding sites with 0.01% Carbaryl on w/w basis- repeated every 3 months. Use the virus Bacuiovirus oryctes against adults & grubs and the fungus Metarrhizum anisopliae against grubs
Plantation crops	Coconut	Cocounut-black headed caterpillar attack	u can either contact CPCRI kasargode,CPCRI kayamkulam or coconut development board kochi.
Plantation crops	Coconut	How can I control Rhinoceros beetle attack in My Coconut Palams?	Pour fungicide solution of Hexaconazol (Contaf 5E) - 2ml or Mancozeb (Dithane M45/Indifil M45) - 3g in 300ml water per palm to the base of spindle leaf.
Plantation crops	Coconut	from where i will get training for value added products of coconut?	Urea 1kg Factomphos : 2.5 Kg MOP 3.3 kg per palm /year,give 4 eqal split,For each palm organic manures @ 15-25 kg, For root wilt affected area Mgso4 @ 500g / palm (Aug Sept), Can apply 1kg lime April - May
Plantation crops	Coconut	How can i effectively control leaf rot in coconut	
Plantation crops	Coconut	Farmer asks about the fertilizer recommendation of hybrid coconut	

Plantation crops	Coconut	Distance to be maintained while planting pepper vines in the basins of coconut palms ?	The pepper vines are to be planted in pits taken at a distance of 1 to 1.5 Meter away from the trunk at the North-Eastern side of the palm.
Plantation crops	Coconut	coconut top width is highly reduced and it is in stunted condition . What control measure I have to adopt	put 200 g mgso4 and 50 g borax
Plantation crops	Coconut	is it advisable to apply salt to cocconut now	it is not recommendable now. if you want you can give it in rainy period
Plantation crops	Coconut	Inner leaves of coconut are showing rotting symptoms. wwhat control measure i have to follow	take indofil M 45 in pouches containing 3g and hang in the inner leaves
Plantation crops	Coconut	yellowing of leaves of coconut	recommended magnesium sulphate application @500g/tree
Plantation crops	Coconut	Farmer asks about the control measures of eriophyid mite attack in coconut nuts	1. Collect and distroy all the fall buttons of the affected palms 2. Apply 2% neem oil + garlic emulsion or commercial neem formulation azadirachin 0.004% (Neemazal 4ml/L) in crown on young bunches (2nd -7th bunch, gave 3 round of spray per year viz March-april,aug-sept and dec -jan
Plantation crops	Coconut	Farmer asks about copra dryer developed by CPCRI	Indirect type copra dryers of 400 nuts to 3000 nuts per batch capacity using agricultural waste as fuel are available, an electrical dryer of 1000 nuts capacity has also been developed at CPCRI.
Plantation crops	Coconut	Farmer asks about uses of activated carbon from coconut shell	Shell based activated carbon is extensively used in the process of refining and bleaching of vegetable oils and chemical solutions, water purification, recovery of solvents, recovery of gold etc. It is used in gas masks and a wide range of filters for war gases
Plantation crops	Coconut	rodent attack in coconut, what is the solution ?	1. Use warfarin-based wax blocks containing 0.025% active ingredient at intervals of three months for reducing rodent population. 2. Place wax blocks of 0.005% bromadiolone in coconut crown of the infested palms at 3 to 4 days interval till the bait is no more consumed.
Plantation crops	Coconut	how to control mealy bug attack in coconut	Remove and destroy all dried up inflorescence and unproductive buttons. Apply non-residual phosphatic insecticides like dimethoate 0.1%, quinalphos 0.05 %, fenthion 0.1% at the site of infestation. Neem garlic emulsion 2% applied on infested bunches checks button mealy bugs.

Plantation crops	Coconut	coried bug attack on tender coconut	Pesticide application is necessary if infection is severe. Spraying has to be done 3 times a year. Apply 0.1% Carbaryl or Endosulfan on the inflorescence after the receptive phase of the female flowers. Destruction of pollinating insects can be avoided if spraying is done in afternoon hours. Tying perforated polybags (2 bags/palm) containing 2.5g phorate on to the stalk of inflorescence is also effective.
Plantation crops	Coffee	Shade regulation in coffee	Dadap (<i>Erythrina lithosperma</i>) is generally used as a lower canopy in India. It is always planted along with coffee in new clearings. When stakes are planted in June they grow quickly since sufficient moisture will be there in the soil. In areas where the establishment of dadap is difficult due to poor rooting, application of rooting hormones and manuring have been found useful.
Plantation crops	Coffee		Spacing Arabica Coffee A spacing of 1.5 to 2.0 m either way can be adopted for Arabica coffee. Dwarf varieties For Sanraman : 1 x 1 m spacing is followed.
Plantation crops	Coffee	Shade regulation in coffee ?	Dadap (<i>Erythrina lithosperma</i>) is generally used as a lower canopy in India. It is always planted along with coffee in new clearings. When stakes are planted in June they grow quickly since sufficient moisture will be there in the soil. In areas where the establishment of dadap is difficult due to poor rooting, application of rooting hormones and manuring have been found useful.
Plantation crops	Rubber	Management of TPD	Giving tapping rest and changing the tapping panel are the generally followed plantation practices to mange TPD in rubber
Plantation crops	Rubber	rubber varieties suitable for kerala	RRII 105, 414,417,422, 430
Plantation crops	Rubber	What is the latest recommendation on tapping system?	1/2S d/3 and other lower (d/4 & d/7) frequencies of tapping with stimulation as recommended for different clones.
Plantation crops	Rubber	what are the advantages of cover crops in rubber plantation	Prevent the beating action of rain and effectively reduces run off Increase soil moisture and keep down the temperature during summer Smother weeds Add large quantities of organic matter and improve soil structure Fix atmospheric nitrogen resulting in improved soil fertility
Plantation crops	Rubber	inter crops to be planted in rubber plantation	banana, pineapple,vegetables, ginger and turmeric
Plantation crops	Rubber	fertilizer recommendation for rubber tapping stage?	10-10-10 fertilizer mixture 900g per tree

Plantation crops	Rubber	what is scheduled amount of 10:10:4:1.5 mixture for young rubber of 21 month old	You can apply 550g of 10:10:4:1.5 mixture per plant on 21st month
Plantation crops	Rubber	fertilizer recommendation for rubber under tapping?	apply 10-10-10 mixture or 22kg urea,50kg rajphos,17 kg potash and 11kg filler.apply this mixture 900g per plant or 300kg per hectre.
Plantation crops	Rubber		Ethrel treatment Ethrel is recommended to increase latex yield of trees. It is applied at 5% a.i. concentration with a brush below the tapping cut to a width of 5 cm after light scraping of the outer bark. The first application may be done after a drought period preferably after a few pre-monsoon showers and subsequent applications may be done in September and November
Plantation crops	Rubber	Farmer asks about control measures of abnormal leaf fall in rubber	Prophylactic spraying of the foliage prior to the onset of southwest monsoon with 1% Bordeaux mixture (3000-4000 l/ha) or oil based copper oxychloride (30-40 litres of CoC-oil mixture / ha mixed in 1:5 proportion) is recommended.
Plantation crops	Rubber	fertilizer recommendation for rubber?(6 years)	12:12:12 mixture 300g per tree or 125kg per hectre.or mix straight fertilizers urea 26kg,rock phosphate 54kg,20kg potash to get 100kg of the mixture.
Plantation crops	Rubber	Method of fertilizer application in mature rubber plantation	Fertilisers should be applied in square or rectangular patches in between rows, each patch serving four trees. Once the canopy of the plants closes, say, 5 to 6 years after planting, light forking to incorporate the fertilisers into the top soil is necessary. In areas where the legume ground cover is present or where the legume cover has died out leaving a thick mulch, it is enough to broadcast the fertilisers between two rows of rubber trees.
Plantation crops	Rubber	Abnormal leaf fall in Rubber	Prophylactic spraying of the foliage prior to the onset of south west monsoon with (1) Bordeaux mixture using high volume sprayers or (2) Oil-based copper oxychloride dispersed in diluent spray oil employing either low volume airblast sprayers from the ground or through aerial application.
Plantation crops	Rubber	Fertilizer recommendation Rubber plants for 5th yr up to tapping	By mixing the straight fertilisers, 65 kg of urea, 165 kg rock phosphate and 50 kg of muriate of potash, fertilizer required per yr per ha can be supplied. Otherwise 300 kg/ha of 10-10-10 NPK mixture can be used. Alternatively, any of the complex fertilisers of the grades 15-15-15 or 17-17-17 or 19-19-19 NPK may be used and the quantities of these should be 200,175 or 160 kg/ha respectively.

Plantation crops	Rubber	How can i protect young rubber plants from sun scorching	Mulching and shading help prevent sun scorch in nurseries. In the field too, mulching and provision of bamboo or plaited coconut leaf tree guards afford same protection in this regard. From the second year onwards, young plants in the field may be protected by whitewashing brown portions of the main stem. This is done by the beginning of the dry weather, that is during November & December. For white washing, fresh lime is superior even though china clay can also be used.
Plantation crops	Rubber	Control of powdery mildew in rubber	usting during the refoliation period commencing from bud break in about 10% of the trees, giving 3 to 5 rounds at weekly to fortnightly interval using 11 to 14 kg 325-mesh fine sulphur dust per round per hectare. Sulphur mixed with an inert material like Talc (70:30) is commonly used. Wettable sulphur (Carbendazim 2.5 g /l) is also effective in nurseries and for young plants as a spray. Affected roots should be pruned off and burnt along with any rotting stump in the immediate vicinity and partially affected and healthy roots washed with tridemorph 0.5% (Calixin 6.25 ml) propiconazole 0.13% (Tilt 5 ml/l) solution (Provisional recommendation by RRIL). When the fungicide dried up, a thin coating with a wound dressing compound may be given. Refill the soil and drench the base with fungicide solution. The dried up plants may be uprooted, root traced, collected and destroyed.
Plantation crops	Rubber	Control of poria root rot in rubber	This is a disease called shoot rot caused by Phytophthora palmivora .Control:spraying with copper fungicides b4 the onset of S-W monsoon coupled with repeated spray rounds during bright breaks protect the plants. Phosphorus acid 0.16% (Akomin and Phosjet 4 ml/L) and metalaxyl Mz 0.2% (Ridomil Mz 2.77 g/L) are aslo effective. For ensuring proper sticking of the spray on tender foliage sticker (Sandovit, Tenac, Teepol, Triton AE etc) may be added at the rate of 0.5 ml/litre of spray fluid.
Plantation crops	Rubber	In my rubber plantation some disease noticed.The symptoms are The tender green shoots rot. More damaging for nursery seedlings and the young plants in the field.Can u identify this disease ? and give me the control measure ?	apply 10-10-10 mixture 900g per plant per year.to get 100 kg of this mixture take 22 kg urea,50kg rajphos,and 17 kg potash and 11kg filler.
Plantation crops	Rubber	fertilizer recommendation for rubber tapping stage?	Dusting during the refoliation period commencing from bud break in about 10% of the trees, giving 3 to 5 rounds at weekly to fortnightly interval using 11 to 14 kg 325-mesh fine sulphur dust per round per hectare. Sulphur mixed with an inert material like Talc (70:30) is commonly used.
Plantation crops	Rubber	Sulphur desting in rubber	

Plantation crops	Rubber	Good day. Is it possible to make tissue culture plants for rubber trees. Is there existing tissue culture unit for that.If yes, what are the constraints of that?	Research on Micropropagation of elite clones of Hevea through shoot tip culture and somatic embryogenesis are done at Rubber research Institute. You may contact RRII for details. Website: http://rubberboard.org.in/rubberresearchinstitute.asp
Plantation crops	Rubber	which manures shall i use while planting rubber	Apply compost / FYM @ 12 kg/pit and rock phosphate 175 g/pit at the time of filling the pit. From first to fourth year, 10:10:4:1.5 NPKMg mixture may be applied @ 225, 450, 450, 550, 550, 450 and 450 g / plant at the 3rd, 9th, 15th 21st, 27th, 33rd and 39th months, respectively.
Plantation crops	Rubber	Method of fertilizer application on Rubber 3 month after planting	During the first application after planting, fertilisers should be evenly distributed over a circular band of about 30 cm around the base of the young plant, leaving about seven cm from the base all around and slightly forked into the top five to eight cm of the soil. The plant bases should then be immediately mulched. This will help in better retention and utilization of the applied fertilisers and control of weed growth in the plant bases.
Plantation crops	Rubber	Spacing of rubber plantation in moderately sloping area (for bud plants)	General spacing is 6.7 x 3.4 m ad Contour lining is done in undulating and hilly areas where the slope exceeds 8 per cent. Here the planting points are marked as lines passing through points of the same elevation. The planting density recommended is 420 to 500 plants per ha in the case of buddings
Plantation crops	Rubber	fertilizer recommendation for rubber 3 years age?	10:10:4:1.5 mixture 450g per plant per year.or mix 22kg urea,34kg rock phosphate,7kg mop and 10kg magnesium sulphate and remaining quantity filler for preparing 100kg mixture.
Plantation crops	Rubber	ideal planting season for rubber?	Continuous wet weather can be expected during June-July in the major rubber growing areas in India and hence this period is considered to be ideal for planting rubber.
Plantation crops	Rubber	What is the harvesting index of rubber plant (Tapping index)	It is generally economical to begin the tapping when 70% of trees in the plantation attain a standard girth of 50 cm at 125 cm above the bud union
Plantation crops	Rubber	Induction of branches in rubber	The double-blade ring-cut device has two V-shaped blades fixed 20 cm apart on a rod. By pressing the V-shaped blades and rotating them around the trunk complete ringing of the bark is done down to the surface of the wood. The cuts are made above a cluster of leaf scars so that a number of trunk shoots is produced around this region. This method can be applied only on greenish brown or brown tissues and is not suitable for young green tissues.

Plantation crops	Rubber	Control of powdery mildew in rubber	<p>sulphur dusting during the refoliation period commencing from bud break in about 10% of the trees, giving 3 to 5 rounds at weekly to fortnightly interval using 11 to 14 kg 325-mesh fine sulphur dust per round per hectare. Sulphur mixed with an inert material like Talc (70:30) is commonly used. Wettable sulphur (Carbendazim 2.5 g /l) is also effective in nurseries and for young plants as a spray.]</p> <p>or young plants in the nursery as well as in the field, spraying with copper fungicides before the onset of south west monsoon coupled with repeated spray rounds during bright breaks protect the plants. Phosphorus acid 0.16% (Akomin and Phosjet 4 ml/L) and metalaxyl Mz 0.2% (Ridomil Mz 2.77 g/L) are aslo effective. For ensuring proper sticking of the spray on tender foliage sticker (Sandovit, Tenac, Teepol, Triton AE etc) may be added at the rate of 0.5 ml/litre of spray fluid.</p>
Plantation crops	Rubber	control of shoot rot in rubber	<p>give tapping as 1/2 spiral and once in 3 days. on ce TPD comes, give rest for 6 months, in severe cases, remove bark for 1.5 mm and apply chemical NoBb</p>
Plantation crops	Rubber	what control emeasure I have to adopt against TPD	<p>The Dry Cut Syndrome (Tapping Panel Dryness or TPD), often linked to the overexploitation of the trees (yield stimulation and tapping intensity). The TPD disease particularly affects the mature trees along their exploitation, especially at the end of their economical life. These two physiological diseases are presently among the major constraints in rubber tree plantation worldwide, including Asia.</p>
Plantation crops	Rubber	Farmer asks about the Tapping Pannel Dryness in rubber	<p>Zinc deficiency causes interveinal chlorosis of leaves. The laminae become much reduced in breadth in proportion to their length and the young leaflet becomes incurved towards one another and present a hooked or claw appearance. The cause of deficiency appears to be heavy application of phosphatic fertilisers resulting in poor availability of Zinc. Zinc deficiency incidences so far only in the case of young rubber plants either in the nursery or in the field</p>
Plantation crops	Rubber	Farmer ask about the symptoms of zinc deficiency in rubber	<p>The tapping cut of the budded trees should have a slope of about 30 degree to the horizontal. For seedling trees the cuts need to have a slope of only about 25 degree, since the bark is fairly thick. A very steep cut leads to wastage of bark when tapping reaches the base of the tree and too flat a cut leads to overflow of latex</p>
Plantation crops	Rubber	Farmer ask about tapping slope for rubber tree tapping	<p>sulphur dust + talc mixture(70:30) at fortnightly intervals 10kg for 1 spray</p>
Plantation crops	Rubber	what is the control measure of powdery mildew in rubber	

Plantation crops		Farmer asks about the control of crown chocking	Application of 50 g Borax at half-yearly intervals (Feb-Mar and Sept-Oct) along with recommended fertilizer in the basins will control the disease when it is in the early stage. In root wilt affected areas a dosage of 200gm - 300gm per palm per year is recommended.
Pulses	Blackgram	black gram seed treatment	Treat the seeds with Carbendazim or Thiram @ 2 g/kg of seed 24 hours before sowing (or) with talc formulation of Trichoderma viride @ 4g/kg of seed (or) Pseudomonas fluorescens @ 10 g/kg seed. Bio control agents are compatible with biofertilizers. First treat the seeds with Biocontrol agents and then with Rhizobium. Fungicides and biocontrol agents are incompatible. Note: Seed treatment will protect the seedlings from seed borne pathogens, root-rot and seedlings diseases.
Pulses	Greengram	green gram manuring	Apply fertilizers basally before sowing. Rainfed : 12.5 kg N + 25 kg P2O5 + 12.5 kg K2O +10 kg S*/ha Irrigated : 25 kg N + 50 kg P2O5 + 25 kg K2O + 20 kg S*/ha *Note : Applied in the form of gypsum if Single Super Phospate is not applied as a source of phosphorus b) Soil application of 25 kg ZnSo4/ha under irrigated condition
Pulses	Horsegram	horse gram varieties suitable for kerala	varieites : co-1, Pattambi local
Pulses	Soybean	soy bean-processing	The bulk of the soybean is processed industrially into oil and protein. It may also be used as a pulse for direct consumption after cooking. It can be substituted for black gram and other pulses in the common household preparations. The soybean preparations will have the characteristic soyodour, which can be eliminated by treatment. Soybean may also be used for making soymilk, soymilk shake, etc.
Spice	Arrowroot	Harvesting age of curcuma aromatica	Curcuma aromatica (kasthurimangal) will ready for harvest with in 7 month after planting, Drying up of the leaves is the indication
Spice	Asafoetida	how asafoetida is harvested	it is harvested from at least 4 yrs lod plant in summer season before flowering of the plant. Cut the plant 1 feet above the ground level and make wounds in main roots as well as in the main stem where it joins with roots. Gum will exudes from the wounds and get soldified. Afeter soldification gum can be taken . this process can be repeated for 4-5 times
Spice	Cardamom	foot rot in cardomom what control measures can adopt?	apply fytolan 4g per litre of water on base of plant and spraying also done on leaves.

Spice	Cardamom	Control of Azhukal disease in cardomom	Trashing and destruction of the infected parts should be done as a phytosanitary measure just prior to the onset of southwest monsoon. Spray the shoots with 1% Bordeaux mixture with adhesive by the commencement of the monsoon and continue the spraying operation two or three times up to November-December. Give a copious spray to the panicle with 1% Bordeaux mixture @ 3 l/plant during July-August when the disease intensity is maximum.
Spice	Cardamom	attack by root grub in my cardomom plantations.give me control measures ?	Collect the beetle with hand nets or sticky traps at the time of mass emergence (March-April and August-September) and destroy. Early stages of the grub which are usually present in soil during May-June and September-October can be controlled either by drenching chlorpyrifos 0.04% @ 3-4 litre per clump or by applying phorate @ 2-4 g ai/ha 10-15 cm around the plant.
Spice	Cardamom	How can I control Azhukal disease in Cardomom?	Trashing and destruction of the infected parts.Spray the shoots with 1% Bordeaux mixture with adhesive (rosin soda or any other sticker) by the commencement of the monsoon and continue the spraying operation two or three times up to November-December according to the intensity of the disease and rainfall. Give a copious spray to the panicle with 1% Bordeaux mixture @ 3 l/plant during July-August when the disease intensity is maximum.
Spice	Cardamom	control of Kattee disease in Cardomom	Eradication of the source of inoculum by destroying infected plants and destruction of the vector by insecticide application are effective. Regular application of insecticide against cardamom thrips controls the aphids also. Avoid using katte-infected rhizome for planting. Destruction of plants showing symptoms of the disease should be done promptly once in two months. Removal of all alternate hosts of virus is also recommended
Spice	Cardamom	Damping off in Cardomom	This disease is caused by Pythium vexans and Rhizoctonia solani. Infection is observed at the collar region. Provide good drainage, and spray and drench the nursery with 1% Bordeaux mixture or 0.2% copper oxychloride
Spice	Cardamom	Shoot fly (Formosina flavipes) attack in Cardomom	The pest is observed in the nursery during January to May. Dead heart or decay of the central spindle is the external symptom. Spraying of quinalphos 0.025% recommended for the control of the pest.

Spice	Cinnamon	planting techniques of cinnamon	Planting Cinnamon seedlings or rooted cuttings are planted under partial shade. Pits are dug at a distance of 2 m either way filled with top soil and FYM 10 kg at 1:1 ratio. One year old seedlings or rooted cuttings are transplanted.
Spice	Cinnamon	Can u please give some details about cinnamon oil	Cinnamon leaf oil is produced by steam distillation of leaves yielding 0.5 to 0.7% oil. It is yellow to brownish yellow in colour and possesses a warm, spicy but rather harsh odour. The major constituent is eugenol (70 to 90 %) while the cinnamaldehyde content is less than five per cent. The oil is used in perfumery and flavouring, and also as a source of eugenol.
Spice	Cinnamon	Method of Harvesting cinnamon	The harvesting starts from 3th or 4th year after planting. season of harvest- in May and again in November. After cutting, young shoots spring up from the stump which will be ready for removal in subsequent season within 18 months. The bark is peeled from the selected shoots of 18 to 24 months old, which are usually one metre long and 1 to 2 cm thick. Shoots ready for peeling are removed from the stumps and terminal ends of shoots are also removed
Spice	Cinnamon	cinnamon-cultivation practices	Select seedlings with green leaf petioles. Plant seedlings in the main field when they are 1-2 year old with the commencement of southwest monsoon. Planting is done in pits of size 60 x 60 cm at a spacing of 2 x 2 m. Dig the pits sufficiently early to allow weathering. Fill the pit with leaf mould and topsoil before planting.
Spice	Cinnamon	how maturity is determined in cinnamon to cut the bark	give a sample cut, IF bark is readily coming out of stem it is time to take the harvest
Spice	Clove	Climate requirement of clove	Cinnamon grows in areas up to an altitude of about 1800 m. Humid tropical evergreen rain forest conditions favour the best growth of cinnamon. Well-drained, deep sandy soil, rich in humus is suitable for the crop. Avoid marshy areas and hard laterites.
Spice	clove	correct maturity index for clove harvest	The stage of harvest of flower buds determines the quality of the final dried product. Buds are harvested when the base of calyx has turned from green to pink in colour. If allowed to develop beyond this stage, the buds open, petals drop and an inferior quality spice is obtained on drying.
Spice	Ginger	pesticide/ fungicide dip before storage of ginger	dip in solution of indofil (3g/ L) and malathion (2g /L)
Spice	Ginger	pesticide and chemicals for storage of ginger	dip for 10 minutes in solution of Indofil 3g /L and Ecalux 2ml/L and dry and store

Spice	Ginger	Seed treatment in ginger for storing	Ginger is always propagated by portions of rhizomes known as seed rhizome or setts. Rhizome bits are treated with 0.3% Dithane M-45 (3g/L) solution for 30 minutes against fungal diseases. If required, it may also be treated with insecticide (0.05% Malathion 50 EC 2ml/L) and bactericide solutions (200 ppm streptomycin).
Spice	Ginger	when we start ginger farming how to prevent fungus	Plant protection operations recommended for ginger- (1)For control of shoot borer spray dimethoate or quinalphos at 2ml per litre of water. (2) For control of rhizome rot adopt the following measures: a. Select sites having proper drainage. b. Select seed rhizomes from disease free areas. c. Treat seed rhizomes with 0.3% mancozeb. d. When incidence of rhizome rot is noted in the field, dig out the affected plants and drench the beds with 1% Bordeaux mixture or 0.3% mancozeb.
Spice	Ginger	ginger fertilizer recommendation?	basal-12t/acre farm yard manure, mop 17kg, rajphos 90kg .60 DAP 15KG UREA AND 17KG MOP, 120DAP 15kg urea and 17kg mop.
Spice	Ginger	seed treatment of ginger before planting/storage?	indofil 3g per litre+ ekalux 2ml per litre.put ginger seeds in it for about 15 minutes.then dry and store before planting.
Spice	Ginger	Seed treatment in ginger for storing	Ginger is always propagated by portions of rhizomes known as seed rhizome or setts. Rhizome bits are treated with 0.3% Dithane M-45 (3g/L) solution for 30 minutes against fungal diseases. If required, it may also be treated with insecticide (0.05% Malathion 50 EC 2ml/L) and bactericide solutions (200 ppm streptomycin).
Spice	Ginger	Please give the details of the collection and storage of seed ginger	Select best rhizomes free from pest and disease from the marked plants. Handle seed rhizomes carefully. Soak the selected rhizomes for 30 minutes in a solution of mancozeb and malathion to give terminal concentration of 0.3% for the former and 0.1% for the latter. Dry the treated rhizomes in shade . Store the treated rhizomes in pits dug under shade, the floor of which is lined with sand or saw dust. Cover the pits with coconut fronds.
Spice	Ginger	what is the transitional period and buffer zone for the production of organic ginger	transitional period is 3 yrs and buffer zone is 50 m
Spice	Nutmeg	fertilizer recommendation for nutmeg 4 years age?	300g urea,380g rajphos,380g potash per plant per year.apply this in 2 splits.
Spice	Nutmeg	fertilizer recommendation for nutmeg 15 years age?	urea 1kg,rajphos 1.1 kg and potash 1.6 kg per plant per year.apply this in 2 splits in may-june and sept.oct,

Spice	Nutmeg	fertilizer recommendation for nutmeg 6 years age?	400g urea,480g rajphos and 480 g potash per plant per year.apply this in 2 splits.may-june and sept-oct.and farm yard manure 30kg per year.
Spice	Nutmeg	Seed sowing of Nutmeg	Fully ripened tree-burst fruits are selected.The seeds should be sown immediately after collection.A mixture of garden soil and sand in the ratio 3:1 may be used for preparing nursery beds. Over this, sand is spread to a thickness of 2-3 cm and the seeds dibbled 2 cm below the surface at a spacing of about 12 cm on either side. When the plumule produces two elongated opposite leaves, the seedlings are to be transferred from beds to polybags.
Spice	Nutmeg	Harvesting time and method in nutmeg	Fruits are available throughout the year, but the peak period of harvest is from December to May. When fruits are fully ripe, the nuts split open. These are either plucked from the tree or allowed to drop
Spice	Nutmeg	symptoms and management of leaf spot in nutmeg	Sunken spots surrounded by a yellow halo are the initial symptoms. Subsequently the central portion of the necrotic region drops off resulting in shot hole symptoms. Dieback symptoms are also observed in some of the mature branches. On young seedlings drying of the leaves and subsequent defoliation are seen. The disease can be controlled by spraying 1% Bordeaux mixture two or three times during rainy season.
Spice	Nutmeg	Management of loranthus (on nutmeg)	Loranthus sp It is a serious plant parasite affecting the growth of the nutmeg plant. This can be controlled by mechanical removal of the plant parasite. Remove severely affected branches. Twigs of nutmeg trees may also be removed along with the plant parasite and paint with Bordeaux paste.
Spice	Nutmeg	what is the ideal spacing of nutmeg & ideal male:female plant ratio ?	Planting in the main field is done at the beginning of the rainy season. Pits of 0.75 m x 0.75 m x 0.75 m size are dug at a spacing of 9 m x 9 m and filled with organic manure and soil about 15 days earlier to planting. For planting plagiotropic grafts, a spacing of 5 m x 5 m has to be adopted. A male graft has to be planted for every 20 female grafts in the field.
Spice	Nutmeg	Control of plant parasite loranthus in nutmeg	It is a serious plant parasite affecting the growth of the nutmeg plant. This can be controlled by mechanical removal of the plant parasite. Remove severely affected branches. Twigs of nutmeg trees may also be removed along with the plant parasite and paint with Bordeaux paste.

Spice	Nutmeg	Farmer asks about the control measures of fruit rot in nutmeg	This is caused by <i>Colletotrichum gloeosporioides</i> and <i>Botryodiplodia theobromae</i> . Water soaked lesions are seen on the fruits, the tissues of which become discoloured and disintegrated. Premature splitting of the pericarp and rotting of mace and seed are the main symptoms of the disease. The internal tissues are found rotten. The fallen fruits become enveloped with the growth of the organism. The disease can be controlled by spraying 1% Bordeaux mixture.
Spice	Nutmeg	Seed sowing of Nutmeg	Fully ripened tree-burst fruits are selected. The seeds should be sown immediately after collection. A mixture of garden soil and sand in the ratio 3:1 may be used for preparing nursery beds. Over this, sand is spread to a thickness of 2-3 cm and the seeds dibbled 2 cm below the surface at a spacing of about 12 cm on either side. When the plumule produces two elongated opposite leaves, the seedlings are to be transferred from beds to polybags.
Spice	Nutmeg	my nutmeg plant shows peculiar growth of Fine black silky threads of the fungus which form an irregular, loose network on the stems and leaves.	This is a type of blight called horse hair blight. This disease is caused by <i>Marasmius equicrinus</i> . Both the diseases are severe under heavy shade. These diseases can be managed by adopting phytosanitation and shade regulation. In severely affected gardens, Bordeaux mixture 1% spraying may be undertaken in addition to cultural practices.
Spice	Nutmeg	Details about planting nutmeg	Since the nutmeg trees require shade, suitable fast growing shade trees like <i>Albizia</i> , <i>Erythrina</i> etc. are planted in advance. Banana can also be grown as a shade crop in the early stages. Pits of 90 x 90 x 90 cm are dug at a spacing of 8 x 8 m with the onset of southwest monsoon. The pits are filled with topsoil and compost or well-decomposed cattle manure and seedlings/graft/budded plants are planted.
Spice	Nutmeg	i have a nutmeg plant the fruit shows splitting and imature ut fall, what may be the probable cause	Beacuse of the absence of any fungal attack symptoms (fruit show deformation and fungal groth on fallen fruits) most probably it is due to nutrient disorder especially due to boron deficiency, apply fertilizer at recommended dose & apply boron as borax 200g/P
Spice	Pepper	Distance to be maintained while planting pepper vines in the basins?	The pepper vines are to be planted in pits taken at a distance of 1 to 1.5 Meter away from the trunk at the North-Eastern side of the palm.
Spice	Pepper	control of pepper pollu	spray cymbush 1 ml/l of water at the time of berry formation and one month after the 1st spray
Spice	Pepper	foot rot of pepper	drench fytolan and redomil

Spice	Pepper	quick wilt of pepper.what control measures can adopt?	you can spray bordeaux mixture 1% or akomin 3g per litre.or fytolan 4g per litre
Spice	Pepper	how to control topshoot borer in pepper	Top shoot borer Top shoot borer can be controlled by spraying Ecalux or Sevin (0.05%) on terminal shoots at monthly intervals (during July & October) to protect emerging new shoots.
Spice	Pepper	Climate requirement of pepper	Soil and climate Pepper is grown mainly as a rainfed crop. Pepper requires heavy rainfall (150 - 250 cm) high humidity and warm climate. It thrives best on virgin soils rich in humus content at elevations up to 1500 m.
Spice	Pepper	Distance to be maintained while planting pepper vines in the basins of coconut palms ?	The pepper vines are to be planted in pits taken at a distance of 1 to 1.5 Meter away from the trunk at the North-Eastern side of the palm.
Spice	Pepper	leaf gall thrips attack in pepper	Leaf gall and thrips can be controlled by spraying Ecalux 36 WSC 1.5 ml/lit or Dimethoate 30 EC 2 ml/lit or Chlorpyrifos 2 ml/lit or Dichlorvos 76 WSC 1 ml/lit or Phosphomidan 40 SL @ 2 ml/lit three rounds at monthly intervals starting from new flush formation
Spice	Pepper	Is there is any recommendation for growing cover crop in pepper garden for controlling weeds	Where pepper is grown on a plantation scale, growing of cover crops like Calapagonium muconoides is recommended. When such cover crops are grown, they are to be cut back regularly from the base of the plants to prevent them from twining along with the pepper vines.
Spice	Pepper	Can you explain the procedure for treating pepper cutting in rooting hormone for better rooting %	Dipping the lower cut end (up to 2 cm) of the pepper cuttings in 1000 ppm solution of 3-indol butyric acid (IBA) for 45 seconds will increase root formation and development. Can be prepared by dissolving 1 g of IBA in 1 L of water containing 3-5 g of washing soda. The dipping period of 45 seconds should be strictly adhered. Treating the cuttings with Seradix B2 is equally effective.Dip cut end in water and then Seradix B2 powder. Plant the treated cuttings
Spice	Pepper	Details of polybag raising of pepper cutting	Select runner shoots produced at the base of mother plants Separate them from the vines in February-March. The middle one-third portion of runner shoot is preferred for planting. The shoots are cut into pieces with 2-3 nodes in each. Leaves, if any, are to be clipped off Treating the cuttings with Seradix B2 is effective. Plant the treated cuttings in polythene bags or baskets filled with potting mixture.retain in shady place.

Spice	Pepper	I want to plant some pepper vine on my arecanut garden using arecanut as stake plant what are the proper methods	When pepper is grown on arecanut trees, the pepper cuttings are to be planted 1-1.5 m away from the trunk. Trail the pepper vines on a temporary stake for 1-2 years. When they attain sufficient length to reach the tree trunk, tie the pepper plants on to the tree trunk and trail them on it. The pit size should be 50 x 50 x 50 cm. Fill the pits with a mixture of topsoil and compost or well rotten cattle manure @ 5 kg/pit. With the onset of southwest monsoon plant 2-3 rooted cuttings in the pits
Spice	Pepper	What is the normal concentration of Copper oxy chloride for drenching	Normal concentration is 4g/L in (Depending on the crop)
Spice	Pepper	which are the suitable standards for growing pepper and its planting methods	Murukku(<i>Erythrina indica</i>), karayam or killingil(<i>Garuga pinnata</i>), <i>Ailanthus</i> sp., subabul(<i>Leucaena leucocephala</i>) etc. are suitable standards. In high altitude areas, dadap (<i>E. lithosperma</i>) and silver oak (<i>Grevillea robusta</i>) can be successfully used as standards. Seedlings of subabul and silver oak are to be planted 2-3 years before planting pepper. The cuttings of standards are to be planted in narrow holes of 40 to 50 cm depth.
Spice	Pepper	Farmer asks about the control measures of quick wilt in pepper	All infected or dead vines along the root system are to be removed and burnt, after the receipt of monsoon showers (May-June), all the vines are to be drenched over a radius 45-50 cm with 0.2 % copper oxychloride at the rate of 5-10 litres per vine. A foliar spray with 1 % Bordeaux mixture is also to be given. Drenching and spraying are to be repeated just before the northeast monsoon. A third round of drenching may be given during October if the monsoon is prolonged.
Spice	Pepper	at what stage i have to harvest the black pepper for selling as black pepper	when 1 or 2 berries in the inflorescence get red coloured, harvest the entire berries in that inflorescence
Spice	Pepper	what control measures I have to adopt against dropping of berries with stalk in pepper	It is due to phytophthora. For control spray indofil M45 @ 3 g/L, and soak the root zone with fytolan @ 3 g/L
Spice	Turmeric	polishing of turmeric	boil the turmeric and dry first rub against hard surface of keep in a sack and rub with feet mechanically : use a central axle attached rotary drum polisher which have cylinder of iron net which rubs the turmeric
Spice	Turmeric	Shoot borers attack in Turmeric	Shoot borers can be controlled by spraying 0.05% dimethoate Rogor (1.5ml/L) or 0.025% quinalphos

Spice	Turmeric	what is the ideal seed rate of turmeric and planting method of turmeric	The seed rate is about 2000-2500 kg per ha. Prepare the land to a fine tilth during February-March. On receipt of pre-monsoon showers in April, prepare beds of size 3 x 1.2 m with a spacing of 40 cm between beds. Plant finger rhizomes flat with buds facing upwards and cover with soil or dry powdered cattle manure.
Spice	Vanilla	Spacing of vanilla	Plant the cutting with the onset of monsoon rains. Set out the cutting at a spacing of 2.7 m between plants and 1.8 m between rows in pits of size 40 x 40 x 40 cm. Trail the vines on the live supports and when they attain a height of 135 cm trail them horizontally on bamboo poles tied to vertical supports or branches of support plants in loops touching the ground.
Tuber	Amorphph allus	Planting of amorphophalu	Dig pits of 60 x 60 x 45 cm size 90 cm apart. Collect the topsoil to a depth of 15-20 cm separately and fill it after the pits are formed. Apply cowdung or compost at 2-2.5 kg/pit and mix with topsoil.
Tuber	Amorphph allus	what are the propper organic fertilizers to be applied as basal fertilizers for amorphophallus	as a basal dose apply 5kg shade dried cowdung and 250 g bone meal as basal dose per pit also may use green leaf manures for covering pit
Tuber	Amorphph allus	preparation of land for Amorphophallus cultivation	Dig pits of 60 x 60 x 45 cm size 90 cm apart. Collect the topsoil to a depth of 15-20 cm separately and fill it after the pits are formed. Apply cowdung or compost at 2-2.5 kg/pit and mix with topsoil.
Tuber	Coleus	fertilizer recommendation for coleus?	apply 250g urea,1kg rock phosphate and 300g potash as basal.then apply 250g urea and 300 potash 45 DAP(this is for 1 cent)
Tuber	Coleus	Coleus-root rot and wilt problems	Apply Trichoderma viridii @ 5kg/ha and mixed with well rottened FYM and applied twice at 20 days interval to control rootrot. To control wilt, drench 300 ppm of streptocycline. Also apply Pseudomonas fluorescence mixed in 5kg/ha of well rotten FYM.
Tuber	Coleus	How we can control root - knot nematod in coleus	To control the root Knot nematod plough the field deeply in summer,adopt crop rotation and distroy root residue and other plant part by burning, use neam cake etc
Tuber	Elephant foot yam	Which are the best variety among the Elephant Yam seeds and where from I can get these seeds nearer to palakkad or elsewhere	Sree Padma and Sree Athira are good varieitis.Contact ATIC Mannuthy Phone 0487 2371340 OR CTCRI Trivandrum (Ph:0471- 2598551) for planting materials.
Tuber	Sweetpotat	sweet potato growing season	rained - june-july , sept - oct irrigated - oct-nov, jan-feb

Tuber	Sweetpotato	Control of sweet potato weevil	Remove previous sweet potato crop residues and alternate host and destroy them. Use pest free planting materials. Dip the planting material in Fenthion 100 EC or Ecalux 36 WSC @ 2 ml/lit. Rake up the soil and earth up at 50 days after planting. Spray Sevin 4g/L, if needed. Harvest the crop immediately after maturity and destroy the crop residues.
Tuber	Tapioca	management of weeds in tapioca	spray diuron 8ml/l
Tuber	Tapioca	fertilizer recommendation at the time of tapioca planting as basal	Urea 2.5kg, Rajphos 17kg, potash 2kg for 10 cents
Tuber	Tapioca	Control of CMV disease in cassava	The disease is transmitted by a white fly Bemisia sp. As a rule, only stem cuttings from disease free plants should be used for planting to minimize the spread of the virus disease. For this purpose, tagging of disease free healthy plants for selection as planting materials must be practiced from September to December. All plants showing even very mild symptoms must be rejected. Mosaic tolerant varieties such as H-97 may be used to minimize economic loss of tubers.
Tuber	Tapioca	mealybug attack in tapioca?	spray neem oil emulsion (5ml neem oil+3ml kerosene+5g soap per litre of water.) or roger 2ml per litre or confidor 1ml per litre.
Tuber	Tapioca	yellowing and crinkling of leaves in tapioca. what control measures can adopt?	it is a virus disease. apply confidor 0.5 ml per litre of water on plants to control the spread of disease.
Tuber	Tapioca	Seasons for tapioca cultivation	The main planting seasons are April-May with the onset of southwest monsoon and September-October with the onset of north-east monsoon. Planting can also be done during February-April, provided sufficient moisture is made available through irrigation. For maximum tuber production, April-May planting is preferred because the crop can effectively utilize both the monsoons. The second best season is September-October.
Tuber	Tapioca	fertilizer recommendation for tapioca?	65kg urea, 130kg rajphos (basal) and 50kg potash. mop and urea 3 equal split doses 1map, 2map and 3map
Tuber	Tapioca	which are the different planting seasons suitable for tapioca cultivation in kerala	The main planting seasons are April-May with the onset of southwest monsoon and September-October with the onset of north-east monsoon. Planting can also be done during February-April, provided sufficient moisture is made available through irrigation. For maximum tuber production, April-May planting is preferred because the crop can effectively utilize both the monsoons. The second best season is

			September-October.
Tuber	Tapioca	Fertilizer recommendation for HYV Cassava	For HYV basal urea;110kg/ha,Rajphos 250kg/ha,pottash 85 kg/ha top dressing 45-60 DAP;110kg urea/ha, Pottash 85 kg/ha
Vegeables	Amaranthu s	Planting of amaranthus and its spacing	Prepare the land by ploughing or digging followed by levelling. Then shallow trenches of width 30-35 cm are made 30 cm apart. Well rotten FYM is mixed with soil in the trenches. Transplant 20-30 day old seedlings in the shallow trenches at a distance of 20 cm in two rows. During rainy season planting shall be done on raised beds.
Vegeables	Amaranthu s	leaf webber attack in amaranthus?	Caterpillars web the leaves together and feed from inside.Destroy the caterpillars along with the leaf.Apply cows urine-capsicum mixture. Avoid pesticides as far as possible.If the attack is severe apply Malathion 50EC @ 2ml/l.
Vegeables	Ashgourd	Ash gourd variteis suited for kerala	KAU local:High yielding. Medium sized oval to oblong fruits with high flesh thickness and an average weight of 6-8kg. Indu:High yielding. Tolerant to mosaic disease. Medium sized round fruits with high flesh thickness. Fruits have an average weight of 4-5kg.
Vegeables	Ashgourd	which is the harvesting stage of the ash gourd	appearance of whhite powdery growth on surface and dropping of small spines
Vegeables	Brinjal	best season for brinjal cultivation	september - october for irrigated crop
Vegeables	Brinjal	brinjal stem borer attack?	1st remove the affected parts and spray sevin 4g per litre.or roger 2ml per litre.
Vegeables	Cabbage	is it possible to produce new plants from the remainings of harvested cabbage crop?	no.it can't produce.cabbage seeds are used for propagation.seeds can't produced in kerala conditions.
Vegeables	Cauliflower	Farmer ask about sowing time of cauliflower under kerala condition	Cauliflower can sow from otober 10 to october 20 and, 20 days old seedling can transplant to main field
Vegeables	Coccinia	stem cutting from a coccinia plant having little brittled leaves used for planting. Now the leaves fro the new cutting also expresses similar symptoms. What I have to do for control	the plant is already infected with virus. So don't use it for further prppagation. Uproot the present cutting and replace it with a healthy non-infected one

Vegeables	Cowpea	hormone spray in cow pea	Spraying Planofix (NAA) @ 3ml in 10 litre of water at 30 and 60 days after sowing is found to minimize flower drop and increase the yield of cow pea. 2.5 litre hormone solutions are required for one cent.
Vegeables	Cowpea	What is the correct dosage of Planofix application in trailing variety of cowpea	Application of Planofix @ 3-6ml in 10 litres water one month after sowing will improve the yield. Approximately 2.5litre solution is required for one cent. Repeat the application 2 months after sowing.
Vegeables	Cowpea	foot rot in cowpea.what control measures can i take to reduce the problem?	u can apply fytolan 3g per litre on the base of the plant.remove the completely decayed plant and apply fytolan in that site also.
Vegeables	Cowpea	I planted cowpea variety kanakamoney around 45 days ago. It is not flowered till now. what I have to do for flowering	45 days is not much for flowering in cowpea. flowering delayed temporarily may be becoz of the rain nowadays. nip the overgrowing tips
Vegeables	cucumber	i grew anupama variety cucumbers.but the cucumbers are bitter taste to its kernal.why it is so?what is the remedy?	Bitterness in cucumber is due to cucurbitacin present in the fruit. Generally the cucurbitacin content is high near to the fruit rind than the internal portion. Development of fruits under stress conditions may result in the production of bitter fruits. Some varieties having wild genes may also produce bitter fruits. Bitterness can be eliminated to some extend by removing the outer flesh with the peeling.
Vegeables	Cucurbits	hormones use in cucurbits	Ethylin(trade name ethral)-40%-1ml/2lit-spray at 4 leaf stage and 15 days after spraying Spray at evening , It helps to start flowering(female) at 30-35 days after spraying instead of 45-55days
Vegeables	Okra	Control of leaf folder in bhindi	can be controlled by spraying Ecalux 36 WSC 2 ml./lit. or Dimethoate 30 EC 2 ml/lit combined with Neem Seed Kernel Extract 5 %.Provide propper waiting period after pesticide application
Vegeables	Okra	okra varities suited for kerala condition	Green/light green fruited: Kiran:High yielding. Light green and long fruits. Suitable for the Southern areas of the state. Salkeerthi: Attractive light green long fruits. High yielding. Red Fruited: Aruna:High yielding. Attractive red long fruits rich in anthocyanin. Co-1: Pinkish red fruits Yellow vien mosaic resistant:Arka Anamika
Vegeables	Pumpkin	How can I control downy mildew in Pumpkin ?	Yellow spots on the upper surface and water soaked fungal spots on the lower surface of leaves. Dithane M.45 (4g/l), Field sanitation.

Vegeables	Pumpkin	control of fungal diseases in pumpkin	Downy mildew : Yellow spots on the upper surface and water soaked fungal spots on the lower surface of leaves. Dithane M.45 (4g/l), Field sanitation. Powdery mildew : Ashy spots on the leaves and stem. Bavistin (4g/l), Field sanitation. Mosaic : Yellow and green mottled appearance. Control the vector insects- White flies, jassids, Field sanitation.
Vegeables	Tomato	Control measures of flower drop in tomato	The most frequent cause of tomato blossom drop is temperature.Since temperature is always above 29 degree nowadays it may be the possible reason,also in your case it also may be due to the excess nitogen application(since u use cow dung,cow urine diluted etc in good quantity) so reduce the nitogen application,flower drop may be also due to Lack of Pollination, Humidity Too High or Low Humidity,Lack of water,Stress from insect damage or disease
Vegeables	Amaranthu s	rate of pseudomonas for seed treatment	250g Pseudomonas in 750ml of water
Vegeables		what is the concentration urea in urea spray solution	20 gram urea in 1 liter of water
Vegeables	Amaranthu s	Amaranthus leaf spot disease	Small white spots appear on the leaves. The disease is severe during the rainy season and spreads through irrigation water.Plant CO1, which is resistant to the disease. Mixed planting of red varieties with CO1 will prevent the spread of the disease.Apply turmeric & soda powder mixture.Spray the plant with Dithane M-45 @4g per litre of supernatant cow dung slurry. Harvesting should only be done 2 weeks after the application of the fungicide.
Vegeables	Amaranthu s	farmer asks about the control measures of amaranth leaf spot ?	1. Red varieties are more vulnarable to diseases so as far as possible cultivate green varieties (only after considering market preferences) 2. Spray indofil M 45 4g/L if needed or spray psuedomonas 20g/L at frequent intervals 3.or Spray Asafoitida 40g + 32 g turmeric powder + 8 g soda ash in 10L water
Vegeables	Amaranthu s	How can I control leaf spot disease in vegetables especially in Amaranth	Small white spots appear on the leaves. The disease is severe during the rainy season and spreads through irrigation water.Plant CO1, which is resistant to the disease. Mixed planting of red varieties with CO1 will prevent the spread of the disease.Apply turmeric & soda powder mixture.Spray the plant with Dithane M-45 @4g per litre of supernatant cow dung slurry. Harvesting should only be done 2 weeks after the application of the fungicide.

Vegeables	Amorphph allus	How can I propagatae amorphophallus / elephant foot yam?	The tuber is cut into small bits in such a way that each bit has atleast a small portion of the ring around each bud. There are also projections with tender buds called ĆArumbuĆ. These are removed before planting as they do not give vigorous growth. An ordinary sized yam gives about 6 to 8 bits for planting. The cut pieces are dipped in cow dung solution to prevent evaporation of moisture from cut surface. In some places, the small round daughter corms are also planted.
Vegeables	Beetroot	beetroot manuring	Apply FYM 20t/ha as basal N: P :K75: 37.5: 37.5Kg/ha is required. Full dose of P2O5 and K2O and half dose of N are applied as basal. Remaining half dose of N is applied as top dressing when plant is in vigorous growth stage. Irrigation required. Crop Management: Ensure sfficient moisture. Uproot excess seedlings three weeks after sowing.Shallow hoeing and earthing up are the essential inter cultural operation
Vegeables	Bittergourd	manuring of bittergourd	Apply FYM @ 20-25 t/ha as basal dose along with half dose of N (35 kg) and full doses of P2O5 (25 kg) and K2O (25 kg). The remaining dose of N (35 kg) can be applied in several split doses at fortnightly intervals.
Vegeables	Bittergourd	bittergoud spacing	Pit size of 60 X 30-45 cm are taken at a spacing of 2 x 2 m and seeds are sown @ 4-5 per pit. Unhealthy plants are removed after two weeks and only 3 plants are retained per pit.
Vegeables	Bittergourd	bittergoud manuring	Apply FYM @ 20-25 t/ha as basal dose along with half dose of N (35 kg) and full doses of P2O5 (25 kg) and K2O (25 kg). The remaining dose of N (35 kg) can be applied in several split doses at fortnightly intervals.
Vegeables	Cabbage	give me name of some cabbage varities suited for our condition (Kerala) ?	September, Pusa Drum Head, Golden Acre, Kaveri, Ganga, Sri Ganesh and Pride of India. Since it is a cool season crop, sowing is done from August-November. Seed rate is 500-750 g/ha. Seeds are to be sown in nursery beds. Three to five weeks old seedlings are used for transplanting. Field is prepared by three or four ploughings. Seedlings are transplanted at a spacing of 45 x 45 cm.
Vegeables	Cauliflower	cauliflower crop management	Earthing up one month after transplanting produce large curds.Blanching is an important operation in cauliflower to get good quality curd. Curds are covered and tied with leaves to protect the heads from sun scorch and yellowing preventing the loss of flavour and attractiveness.The duration of blanching should not exceed 3-5 days in hot weather and 8-10 days in cool weather.
Vegeables	Chilli	management of bacterial wilt	Drench with pseudomonas @ 20g/l

Vegeables	Cowpea	How can i control cow pea stem borers	Spray 2% neem oil-garlic emulsion or insecticide rogor 2ml/l
Vegeables	Cowpea	cowpea varieties	Kanakamony:Semi trailing dual-purpose type. Pods are green in colour and bold seeded. Suitable for the kitchen gardens. Anaswara:Light green medium long pods. Kairali: Violet coloured medium long pods. Varun:Long purple poded and bold seeded. Trailing :
Vegeables	Cowpea	cultivation practices of cowpea	For vegetable type Bush: 20-25 kg/ha Trailing: 4-5 kg/ha For grain and dual purpose type Broadcasting: 60-65 kg/ha (45 kg for Krishnamony) Dibbling: 50-60 kg/ha (40 kg for Krishnamony)
Vegeables	Cowpea	Control of cow pea mosaic	Yellow mottled appearance on leaves and stunted growth of the plant.Once afected this disease cannot cured However Aphid controlcan be done to reduce the spread of disease by applying - 10% neem oil emulsion. Healthy seeds should be used to avoid seed born infection .
Vegeables	Cowpea	what is the spacing adopted in commercial cultivatio of cowpea	Bushy/semitrailing:1m X10-15 cm. Planting can be done on ridges during rainy season and in channels during summer. Trailing type: pits at a spacing of 2X2 m, retaining 2-3 plants / pit or ridges at a spacing of 1.5 m X 50-60cm.
Vegeables	Cowpea	Control measures of cow pea Antracnose disease	Seeds treatment with Bavistin @ 2g per kg, spray plants with 1% Bordeaux mixture/Fytolan @4g per litre, Field sanitation & Application of Trichoderma enriched manures
Vegeables	Cowpea	foot rot in cowpea.what control measures can i adopt?	u can apply fytolan 3g per litre on the base of the plant.remove and destroy completely decayed plant.and apply the same.
Vegeables	Cowpea	cowpea spacing	Bushy/semitrailing:1m X10-15 cm. Planting can be done on ridges during rainy season and in channels during summer. Trailing type: pits at a spacing of 2X2 m, retaining 2-3 plants / pit or ridges at a spacing of 1.5 m X 50-60cm.
Vegeables	Okra	Bhindi spacing	Planting can be done in pits or channels,at a spacing of 60 X 30-45 cm depending upon the planting season, topography and soil texture .
Vegeables	Okra	Bhindi green fruited varieties	Green/light green fruited: Kiran:High yielding. Light green and long fruits. Suitable for the Southern areas of the state. Salkeerthi: Attractive light green long fruits. High yielding.

Vegeables	Okra	Bhindi manuring details	Apply FYM or compost as basal dose @ 12 t/ha. At the time of sowing, apply N, P2O5, and K2O @ 25, 8 and 25 kg/ha. Another 25 kg N per ha may be applied one month after sowing. Crop Management: Ensure sufficient moisture. water stress at flowering and fruiting stage will result in low yield.
Vegeables	Okra	bhindi seed rate/ha	The seed rate is 8.5 kg/ha for the summer crop sown in February-March and 7 kg/ha for kharif crop.
Vegeables	Tomato	tomato varieties	Sakthi:Bacterial wilt resistant variety. Fruits are flat round, medium sized and green shouldered. Susceptible to cracking. Mukthi:Bacterial wilt resistant variety. Fruits are flat round, medium sized, whitish green without green shoulders. Susceptible to cracking. Heat tolerant variety. Anagha:High yielding.Reddish, round, medium-sized and slightly acidic fruits.
Vegeables	Tomato		Fruit borer <i>Helicoverpa armigera</i> and <i>Spodoptera litura</i> (common control measures for both the pests) Grow simultaneously 40 days old American tall marigold and 25 days old tomato seedlings @ 1:16 rows. 1. Set up pheromone traps @ 12/ha. 2. Collection and destruction of damaged fruits and grown up caterpillars. 3. Spray Sevin 35 EC 2 ml/lit or Carbaryl 50 WP 2 g/lit or Bacillus thuringiensis 2g/lit or Quinalphos 2.5 ml/lit.
Vegeables	Tomato	tomato spacing	Seeds are sown in the nursery and one-month-old seedlings are transplanted to the main field at a spacing of 60X60 cm.For spreading varieties provide wider spacing of 75-90 x 60 cm
Vegeables		cuucumber spacing	Take the pits at a spacing of 2X1.5 m and the seeds are sown @ 4-5 per pit. After two weeks remove the unhealthy plants retaining three plants per pit.
Vegeables	Amaranthu s	Amaranthus nutrient managemnt	Apply 50tonnes of cowdung/ha and NPK @ 50:50:50 kg/ha as basal dose. Apply N @ 50kg/ha as top dressing 15 days after transplanting. Foliar spray of 1% urea(10g per litre)after every harvest.
Vegeables	Amaranthu s	amaranthus manuring details	Apply 50tonnes of cowdung/ha and NPK @ 50:50:50 kg/ha as basal dose. Apply N @ 50kg/ha as top dressing 15 days after transplanting. Foliar spray of 1% urea(10g per litre)after every harvest.

Vegeables	Amaranthus	amaranthus leaf spot disease	Small white spots appear on the leaves. The disease is severe during the rainy season and spreads through irrigation water. Plant CO1, which is resistant to the disease. Mixed planting of red varieties with CO1 will prevent the spread of the disease. Apply turmeric & soda powder mixture. Spray the plant with Dithane M-45 @4g per litre of supernatant cow dung slurry. Harvesting should only be done 2 weeks after the application of the fungicide.
Vegeables	Amaranthus	leafspot in amaranthus	spray indofil m 45 ---4g /lit
Vegeables	Amaranthus	amaranthus manuring	Apply 50tonnes of coddung/ha and NPK @ 50:50:50 kg/ha as basal dose. Apply N @ 50kg/ha as top dressing 15 days after transplanting. Foliar spray of 1% urea(10g per litre)after every harvest.
Vegeables	Amaranthus	Amaranthus manuring	Apply 50tonnes of coddung/ha and NPK @ 50:50:50 kg/ha as basal dose. Apply N @ 50kg/ha as top dressing 15 days after transplanting. Foliar spray of 1% urea(10g per litre)after every harvest.
Vegeables	Amaranthus	amaranthus red varieties	Kannara Local :Dark red, season bound ,flowers in Nov-Dec. Adjust Planting accordingly. Multi cut variety. Arun: Maroon red leaves. High yielding. Photoinsensitive. Suitable for multi cut and once over harvests Krishnasree: Reddish brown leaved,fleshy stemed,multicut variety
Vegeables	Amaranthus	varities of amaranth	Kannara Local :Dark red, season bound ,flowers in Nov-Dec. Adjust Planting accordingly. Multi cut variety.
Vegeables	Amaranthus	amaranthus varieties	Kannara Local :Dark red, season bound ,flowers in Nov-Dec. Adjust Planting accordingly. Multi cut variety. Arun: Maroon red leaves. High yielding. Photoinsensitive. Suitable for multi cut and once over harvests Krishnasree: Reddish brown leaved,fleshy stemed,multicut variety
Vegeables	Amaranthus	How can I control leaf webber attack in Amaranthus?	Caterpillars web the leaves together and feed from inside.Destroy the caterpillars along with the leaf.Apply cows urine-capsicum mixture. Avoid pesticides as far as possible.If the attack is severe apply Malathion 50EC @ 2ml/l.
Vegeables	Amaranthus	nutrient management in Amaranthus?	Apply 50tonnes of coddung/ha and NPK @ 50:50:50 kg/ha as basal dose. Apply N @ 50kg/ha as top dressing 15 days after transplanting. Foliar spray of 1% urea(10g per litre)after every harvest.

Vegeables	Amaranthus	Amaranthus-cultivation practices	Seed rate: 1.5 to 2 Kg/ha Seeds available with VFPC: Arun,CO-1 Raising Nursery: Sow in raised seedbeds and spread a thin layer of fine sand on top. Transplanting: Transplant 20-30 days old seedlings with 4-5 leaves in the shallow trenches during summer and raised beds during rainy season Spacing: 30cmX20cm
Vegeables	Amaranthus	How can I control leaf webber attack in amaranthus ?	Caterpillars web the leaves together and feed from inside.Destroy the caterpillars along with the leaf.Apply cows urine-capsicum mixture. Avoid pesticides as far as possible.If the attack is severe apply Malathion 50EC @ 2ml/l.
Vegeables	Amaranthus	amaranth nutrient mangmnt	Apply 50tonnes of cowdung/ha and NPK @ 50:50:50 kg/ha as basal dose. Apply N @ 50kg/ha as top dressing 15 days after transplanting. Foliar spray of 1% urea(10g per litre)after every harvest.
Vegeables	Amaranthus	amaranthus-land preparation	Prepare the land by ploughing or digging followed by levelling. Then shallow trenches of width 30-35 cm are made 30 cm apart. Well rotten FYM is mixed with soil in the trenches. Transplant 20-30 day old seedlings in the shallow trenches at a distance of 20 cm in two rows. During rainy season planting shall be done on raised beds.
Vegeables	Amaranthus	is it foliar application is require in amaranthus ,if so how much is the dose	if we apply urea 10g/lit after every harvest will increase the yield
Vegeables	Amorphphallus	Fertilizer recomendation for amorphophalus	Apply 2-2.5 kg compost or cowdung on planting pit and mix well with soil, After 45 days (of planting) apply 430g urea per 1 cent,900 g rajphos and .5kg MOP per cent, after 1 month after first application apply 430 g urea and .5 kg MOP per cent
Vegeables	Amorphphallus	which is the most suitable Amorphophallus varity for keala	Sree Padma: The crop matures in 8-9 months. Cooked tubers are free from acidity.
Vegeables	Bittergourd	fruit fly in bittergourd	Adult flies puncture the fruits with the ovipositor and insert the eggs inside the fruits. Maggots feed on the fruits which get rotten . Bait traps with carbofuran granules, Malathion 50 EC (2 ml per litre), Field sanitation.
Vegeables	Bittergourd	Bittergoud f fly ruit	Adult flies puncture the fruits with the ovipositor and insert the eggs inside the fruits. Maggots feed on the fruits which get rotten . Bait traps with carbofuran granules, Malathion 50 EC (2 ml per litre), Field sanitation.
Vegeables	Bittergourd	How to control downy mildew in bitter gourd?	Yellow spots on the upper surface and water soaked fungal spots on the lower surface of leaves. Dithane M.45 (4g/l), Field sanitation.
Vegeables	Bittergourd	what control i can adopt against stem gall in bittergourd	remove the affected part and spray malathion 2ml/L

Vegetables	Bittergourd	i am growing bittergourd in my homestead. the fruits are attacked by fruit fly. can I adopt any mechanical or cultural practice against it	cover the fruits with paper or polythene cover . rake the soil to kill the pupae
Vegetables	Brinjal	brinjal spacing	Adjust the spacing depending up on the variety, soil fertility and season. Transplant less spreading varieties like Swetha and Surya at 60 x 60 cm. For spreading varieties like Haritha and Neelima, provide wider spacing of 75-90 x 60 cm
Vegetables	Brinjal	organic management of leaf eating caterpillar in Brinjal	Spray 2% neem garlic emulsion
Vegetables	Brinjal	Brinjal spacing	Adjust the spacing depending up on the variety, soil fertility and season. Transplant less spreading varieties like Swetha and Surya at 60 x 60 cm. For spreading varieties like Haritha and Neelima, provide wider spacing of 75-90 x 60 cm.
Vegetables	Brinjal	which are the common brinjal varieties of kerala	Surya:Glossy oval and medium sized fruits, resistant to bacterial wilt Swetha: White and medium long fruits, resistant to bacterial wilt Haritha:Light green long and fleshy fruits resistant to bacterial wilt, Neelima:Large oval to round glossy violet fruits resistant to bacterial wilt
Vegetables	Brinjal	BRINJAL SPACING	Seeds are sown in the nursery and one-month-old seedlings are transplanted to the main field at a spacing of 60X60 cm.For spreading varieties provide wider spacing of 75-90 x 60 cm.
Vegetables	Brinjal	brinjal bacterial wilt	The whole plant turns yellow and gets dried up. Follow field sanitation.Plant resistant varieties. Drench the soil thoroughly with the solution of Fytolan @4g per litre before planting. Repeat if the disease is found in later stages.
Vegetables	Brinjal	Control of shoot and fruit borer	Remove and distroy all the infected fruits and dried twigs, distroy the crop residue after economic period, spray carbaryl (Sevin) 4g/L
Vegetables	Brinjal	Farmer asks about the control measures of fruit and shoot borer in brinjal	Cut and burn the affected branches and rotten fruits, burn the debris of crop after cropping season, avoid volunteer plants from the field, apply carbaryl (Sevin 4g/L) spray on plant, repeat the application if needed
Vegetables	Cabbage	how to cotrol cabbage black rot	Remove the affected seedling and provide proper drainage. Dip the seeds in water at 50 degree Celsius for 25- 30 mts as a prophylatic measure. 2-3 spraying of 50 gm of streptocycline +250 gm Copper oxy chloride in 250 litres of water / ha are suggested as control measure.
Vegetables	Cabbage	nutrient management in cabbage	Organic manure 25 T/ha, N:P:K of 150:100: 125 kg/ha . Full dose of N and K2O before transplanting and remaining half dose one month after transplanting is recommended

Vegeables	Cabbage	cabbage spodoptera attack	
Vegeables	Cabbage	cabbage head borer caterpillar management	spray malthion 2ml/L
Vegeables	Cabbage	cabbage nutrient management	Organic manure 20t/ha and N: P : K : at 150: 100: 125 kg/ha. Apply full dose of P2O5 and half dose of N+ K2O before transplanting and remaining N+ K one month after transplanting.
Vegeables	Cabbage	management of Bacterial wilt in cabbage	Spray pseudomonas @ 20g/l Remove the affected seedling and provide proper drainage. Dip the seeds in water at 50 degree Celsius for 25- 30 mts as a prophylatic measure. 2-3 spraying of 50 gm of streptocycline +250 gm Copper oxy chloride in 250 litres of water / ha are suggested as control measure.
Vegeables	Cabbage	cabbage black rot	
Vegeables	Cabbage	Yellowing in Cabbage leaves	Drench with Pseudomonas- 20gm/l of water
Vegeables	Cabbage	how to control Black rot, Black leg and clubroot of cabbage diseases	Remove the affected seedling and provide proper drainage. Dip the seeds in water at 50 degree Celsius for 25- 30 mts as a prophylatic measure. 2-3 spraying of 50 gm of streptocycline +250 gm Copper oxy chloride in 250 litres of water / ha are suggested as control measure.
Vegeables	carrot	carrot varieties	Ooty-1, Early Nantes and New Korda are suitable for cultivation in hilly areas
Vegeables	carrot	disease management in carrot	Fusarium rot : Affects the root quality. Provide proper drainage. Dip seed in water at 50 degree Celsius for 15 mts before planting as prophylatic measure.
Vegeables	Cauliflower	Cauliflower blight control	Seed treatment with captan 3 gm/ Kg of seed and spraying mancozeb 0 .25% at 15 days interval soon after the appearance of disease can control the same.
Vegeables	Cauliflower	about cauliflower flowerin	cauliflower is harvested with a sharp knife along with a few outer jacket leaves. Delay in harvesting leads to ricey, fuzzy or leafy curd
Vegeables	Cauliflower	manuring of cauliflower	Organic manure 20t/ha and N: P : K : at 150: 100: 125 kg/ha. Apply full dose of P2O5 and half dose of N+ K2O before transplanting and remaining N+ K one month after transplanting.
Vegeables	Cauliflower	caulifower spacing	Arka Anamika:Unbranched. Green fruited. Arka Abhay:Green fruited. Susthira:Green fruited long duration variety suitable for homesteads. Anchitha: Suitable for Southern part of the state Manchima: Light green fruited.Suitable for cultivation during rainy season at high altitudes.

Vegeables	Cauliflower	cauliflower spacing	Apply FYM or compost as basal dose @ 12 t/ha. At the time of sowing, apply N, P2O5, and K2O @ 25, 8 and 25 kg/ha. Another 25 kg N per ha may be applied one month after sowing. Crop Management: Ensure sufficient moisture. water stress at flowering and fruiting stage will result in low yield.
Vegeables	Cauliflower	disease management in cauliflower	Black rot, Black leg and clubroot of cabbage: Remove the affected seedling and provide proper drainage. Dip the seeds in water at 50 degree Celsius for 25- 30 mts as a prophylatic measure. 2-3 spraying of 50 gm of streptocycline +250 gm Copper oxy chloride in 250 litres of water / ha are suggested as control measure. Alternaria blight: : Seed treatment with captan 3 gm/ Kg of seed and spraying mancozeb 0 .25% at 15 days interval soon after the appearance of disease can control the same.
Vegeables	Cauliflower	How many days required to start curd formation in couliflower	In couliflower curd formation will start around 55 days after transplanting
Vegeables	Chilli	approximate yield of chilli	Yield: Green chilli yield is about 8-10 tonnes/ha. Dry chilli yield would be 1800 -2200 kg/ha. Apply well rotten FYM / compost @ 20-25 t/ha at the time of land preparation and mix well with the soil. A fertilizer dose of 75:40:25 kg N:P2O5: K2O / ha may be given. Half the dose of nitrogen, full phosphorus and half of potash may be applied as basal dose before transplanting. One fourth of nitrogen and half of potash may be applied 20-30 days after planting. The remaining quantities may be applied two months after planting.
Vegeables	Chilli	chilli manuring details	The whole plant starts wilting, leaves turn yellow and the plant gets dried up within one week. Grow resistant varieties, drench with cow dung supernatant. Soil Solarisation of nursery. Apply Fytolan 4g/l soil drench, , mechanical control.
Vegeables	Chilli	chilli bacteril wilt	Whitefly 1. Install yellow sticky traps to attract the adult. 2. Spray Dichlorvos 76 WSC @ 1 ml/lit or Triazophos 40 EC 2 ml/lit or fish oil rosin soap 25 g/lit or Dimethoate 2 ml/lit or Methyl demeton 25 EC 2 ml/lit along with the wetting agent (Teepol@ 1 ml/lit) 3. Remove alternate weed host Abutilon indicum
Vegeables	Chilli	crinkling of leaves in chilli.what control measures can adopt?	spray neem oil garlic emulsion or confidor 0.5ml per litre
Vegeables	Cowpea	cowpea seed treatment	Cowpea seeds should be inoculated with Rhizobium and pelleted with lime. 10g Rhizobium +2.5% starch solution + 50-100g calcium carbonate for 1 kg seed.Dry the inoculated seeds under shade over a clean paper or gunny bag and sow immediately
Vegeables	Cowpea	cow pea karimbin kedu	seed treatment bavistin 2g/kg

Vegetables	Cowpea	cowpea seed treatment	Cowpea seeds should be inoculated with Rhizobium and pelleted with lime. 10g Rhizobium +2.5% starch solution + 50-100g calcium carbonate for 1 kg seed. Dry the inoculated seeds under shade over a clean paper or gunny bag and sow immediately.
Vegetables	Cowpea	Control of Pod bug in Cowpea	Spray a filtered solution of 20g garlic paste in Malathion 50EC @4ml per litre and Mechanical control.
Vegetables	Cowpea	Rhizobium treatment on cowpea seeds	Mix the inoculant uniformly with the seeds by using minimum quantity of water (instead of water, either 2.5% starch solution or kanjivellam of the previous day can be used in order to ensure better stickiness of the inoculant with the treated seed material). Dry the inoculated seeds under shade over a clean paper or gunny bag and sow immediately. The Rhizobium culture or the inoculated seeds should not be mixed with chemical fertilizers.
Vegetables	Cowpea	Farmer asks about the control measures of cowpea virus diseases	since the cow pea mosaic disease is a virus disease there is no control measures, however the spread of this diseases can be avoid or reduce by the uprooting and distroying the affected plants (if a small number of plant shows symptoms or spray ekalux 2ml/L to distroy the vector, use seeds from disease free plants.
Vegetables	Cucumber	fruit fly attack in cucumber	Adult flies insert the eggs inside the fruits and the maggots feed on the fruit. Malathion 50 EC 2 .2ml/l, mechanical control, bait traps
Vegetables	Cucumber	cucumber manuring schedule	Apply FYM @ 20-25 t/ha as basal dose along with half dose of N (35 kg) and full dose of P ₂ O ₅ (25 kg) and K ₂ O (25 kg/ha). The remaining dose of N (35 kg) can be applied in two equal split doses at the time of vining and at the time of full blooming.
Vegetables	cucumber	cucumber varieties	Cucumber Varieties: AAU C-2: Long cylindrical and whitish fruits. Poinsette: Dark medium long fruits. Resistant to many fungal diseases. Seethal: Early variety. Green fruits of medium length. CO 1: Long fruits with a characteristic narrow neck.
Vegetables	cucumber	cucumber-nutrient management	Apply FYM @ 20-25 t/ha as basal dose along with half dose of N (35 kg) and full dose of P ₂ O ₅ (25 kg) and K ₂ O (25 kg/ha). The remaining dose of N (35 kg) can be applied in two equal split doses at the time of vining and at the time of full blooming
Vegetables	Cucurbits	fruit fly management in cucurbits	Fruit fly : Adult flies puncture the fruits with the ovipositor and insert the eggs inside the fruits. Maggots feed on the fruits which get rotten . Bait traps with carbofuran granules, Malathion 50 EC (2 ml per litre), Field sanitation.

Vegeables	Frenchbean	cultivation practices of french bean	Provide support, 1 to 1.5 m long for trailing the plants. First weeding can be given about 4 weeks after sowing and second weeding will be essential 50 days later. Pods become ready for harvest in 50-60 days in the case of bush beans and in 70-80 days for the pole beans. The average yield of green pods is 8-10 t/ha.
Vegeables	Ivy gourd	My Ivy gourd plant is having lot of flowers and tiny fruits but in its early stage it is loosing I never got a metured kovakkai fruit. What I have to do convert all flowers to metured fruits.	Fruitfly attack is suspected. Remove and destroy affected and decayed fruits. Apply carbaryl 10 per cent DP in pit before sowing of seeds to destroy the pupae. The fruits may be covered with polythene, cloth or paper bags to ensure mechanical protection. If infestation is severe apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jaggery at 10 g/l at fortnightly intervals at flowering and fruit initiation stages. Spray as coarse droplets on the ventral surface of leaves.
Vegeables	Okra	bhindi manuring schedule	Apply FYM or compost as basal dose @ 12 t/ha. At the time of sowing, apply N, P ₂ O ₅ , and K ₂ O @ 25, 8 and 25 kg/ha. Another 25 kg N per ha may be applied one month after sowing. Crop Management: Ensure sufficient moisture. water stress at flowering and fruiting stage will result in low yield
Vegeables	Okra	bhindi fruit borer attack	Caterpillars bore the fruits and shoot of the plant. Apply Neem oil emulsion 5%, mechanical control
Vegeables	Okra	yellow bhindi varieties	Anamika:Unbranched. Green fruited. Arka Abhay:Green fruited. Susthira:Green fruited long duration variety suitable for homesteads. Anchitha: Suitable for Southern part of the state Manchima: Light green fruited.Suitable for cultivation during rainy season at high altitudes.
Vegeables	Okra	Yellow mosaic tolerant bhindi	Arka Anamika:Unbranched. Green fruited. Arka Abhay:Green fruited. Susthira:Green fruited long duration variety suitable for homesteads. Anchitha: Suitable for Southern part of the state Manchima: Light green fruited.Suitable for cultivation during rainy season at high altitudes.
Vegeables	Okra	bhindi manuring	Apply FYM or compost as basal dose @ 12 t/ha. At the time of sowing, apply N, P ₂ O ₅ , and K ₂ O @ 25, 8 and 25 kg/ha. Another 25 kg N per ha may be applied one month after sowing.
Vegeables	Okra	Is there is any seed treatment for bhindi	Seed treatment with Trichoderma viride 4 g/kg of seeds and again treated with 400 g of Azospirillum using starch as adhesive and dried in shade for 20 minutes will increase the plant vigor and growth. It also help to reduce disease
Vegeables	Others	management of white fly in vegetables	Suck sap from the lower side of the leaf. Kiriyaath soap extract and Nattappochedi extract with Malathion 25EC 2ml/l

Vegeables	Others	Preparation of tobacco decotion	Used mainly to control of aphids and other soft bodied insects infecting vegetable crop.can be prepared by steeping 500g of tobacco waste in 4.5 L water for 24 h, 120g of ordinary soap is sliced and dissolve separately add to tobaco decotion dilute to 6-7 times
Vegeables	Pumpkin	epilacna beetle	Epilachna beetle Collect the beetles, grubs, pupae and destroy. Spray Carbaryl 50 WP 2 g/lit or Sevin 35 EC 2 ml/lit.
Vegeables	snakegourd	Control of leaf eating caterpillar in snakegourd	Spray malathion 2ml/L at initial stages and 1% pyrethrin during head formation stage
Vegeables	snakegourd	Farmer asks about the control measures of leaf eating caterpillar	Since the cultivation is ment for household purpose use organic pesticide like neem oil garlic soap emulsion, in severe cases apply sevin 4g/L spray on foliage after harvesting the fruits
Vegeables	Tomato	tomato fruit borer attack	Caterpillars are seen feeding the fruits with head and half of the body inside the fruits and the remaining part outside. Quinalphos 25EC 2ml/l, mechanical control, plant Marigold plants 1 row for every 25 rows of tomato Apply well rotten farm yard manure / compost @ 20-25 t/ha at the time of land preparation and mix well with the soil. A fertilizer dose of 75:40:25 kg N:P2O5:K2O / ha may be given. Half the dose of nitrogen, full phosphorus and half of potash may be applied as basal before transplanting. One fourth of nitrogen and half of potash may be applied 20-30 days after planting. The remaining quantity may be applied two months after planting.
Vegeables	Tomato	manuring of tomato	shakthi, mukhthi, anagha
Vegeables	Tomato	K.A.U. tomato varieties	Seeds are sown in the nursery and one-month-old seedlings are transplanted to the main field at a spacing of 60X60 cm.For spreading varieties provide wider spacing of 75-90 x 60 cm.
Vegeables	Tomato	tomato spacing	Caterpillars are seen feeding the fruits with head and half of the body inside the fruits and the remaining part outside. Quinalphos 25EC 2ml/l, mechanical control, plant Marigold plants 1 row for every 25 rows of tomato.
Vegeables	Tomato	Tomato fruit borer	it is bacterial wilt.apply urea and lime on the base of the plants.severely affected plants can destroy
Vegeables	Tomato	sudden wilting and drying of tomato plants.	
Vegeables	Tomato	From the newspaper i heard about the technology of using curd against tomato bacterial wild can you provide me the details of that organic solution	Mix 500 ml curd and 600ml cow urine to 20 L water apply this on the base of tomato plant 100-150ml/Plant. reapeat this 3- 4 times .Its founds to be effective against bacterial wilt during the trails

Vegeables		Damping off (nursery) Treat the seeds with Trichoderma viride 4 g/kg or Pseudomonas fluorescens 10 g /kg of seed 24 hours before sowing. Apply Pseudomonas fluorescens as soil application @ 2.5 kg/ha mixed with 50 kg of FYM. Water stagnation should be avoided. Drench with Copper oxychloride at 2.5 g/lit at 4 lit/sq.m.
Vegeables		Seed treatment Treat with Trichoderma viiridi 4 g or Pseudomonas fluorescens 10 g or Carbendizim 2g/kg of seeds
Vegeables	which are the vegetable varieties suitable for summer rice fallow (Irrigation facility available)	Can be done a wide varieties of vegetable like cow pea, amaranth,different types of cucurbits(OP Melon,bittergourd,Snake gourd,Salad cucumber etc)Brinjal etc
Vegeables	what is Vegetable and Fruit Promotion Council Keralam (VFPCCK)	an ISO 9001-2000 certified company registered under section 25 of Indian Companies Act 1956 and has been established to bring about overall development of fruit and vegetable sector in Kerala. Established in 2001 as the successor organization of Kerala Horticulture Development Programme (KHDP), VFPCCK is managed by a result oriented multidisciplinary team of professionals
Veterinary	severe diarrhoea for 8 months pregnanat heifer. no history of deworming.	Fentas 1.5g bolus orally once and if not cured give Diaroak sig 30g BID orally for 2 days.
Veterinary	4 year old cow is voiding dung with mucous. history of constipation and giving cotton seed cake.	stop feeding cotton seed cake and give plenty of green fodder. ddeworm with Albex 1.5g orally once.
Veterinary	whitish diarrhoes for laying hens.	Bactrisol 1.5g bolus sig as directed orally for 5 days.
Veterinary	change in the consistency and taste of milk for the past one month.	it is due to mastitis. adviced to take the necessary antobiotic treatment immediatly.
Veterinary	which are the broiler breeds of rabbits?	grey giant,white giant, soviet chinchilla, NZ white etc are the commen breeds which are raised for meat purpose.
Veterinary	sudden reduction in the milk yield of the cow.	may be due to sudden change in feed or climate or can be due to mastitis. adviced owner to rule out the chance of mastitis by doing mastitis test.
Veterinary	feeding management of goat.	from 6-12 months 300-400 of concentrate and for adults 200-300g along with 1-2 kg of green fodder. for every 1 lt of milk 400g of extra concentrate should be given.
Veterinary	2 year old heifer is not showing any heat signs.	Geata forte sig 2 boli BID orally for 5 days.

Veterinary	cow is showing pain while milking and is having slight edema in the udder since the last 2 days.	can be due to mastitis. advised to test the milk for mastitis and take the necessary antibiotic treatment.
Veterinary	age of 1st anti rabies vaccination.	if the mother was properly dewormwd and vaccinated, need to vaccinate at 3 months of age. have to deworm the animal 3 weeks before vaccination.
Veterinary	summer management of cow.	give plenty of cold drinking water and green fodder, give mineral mixture and salt as suppliment, tie the animal in shade, and give bath once daily, feed the animal in the cool hours of the day etc.
Veterinary	is there any need of taking i/v calcium injection immediately after calving.	it is not obligatory. need to take the systemic treatment only if it is showing any symptoms of hypocalcemia. you can give Ostovet as Ca suppliment sig 100ml BID orally.
Veterinary	maggot wound on vulva.	advice to plug the wound with cotten dipped in eucalyptus oil and remove it after 3 minutes . remove all live and dead maggots and then spray Lorexane.
Veterinary	feeding schedule.	starter ration upto 2 months of age ,then grower upto egg laying and then shift to layer ration after the first egg is layed.
Veterinary	advantages of using rubber mats in the floor cattle shed.	can clean the floor easily and can hence decrease the chance of mastitis and diseases of hoof. while selecting the mat care should be taken to have proper grip, to avoid dislocation and fracture.
Veterinary	presence of clot in milk.	it is due to mastitis. advised to give the systemic treatment immediately and milk out frequently.
Veterinary	my goat has been bitten by a dog some hours before. which medicine i have to apply?	since your goat was bitten by a stray dog, post exposure vaccination should be taken. if the wound is too deep has to put the stitch. otherwise apply Betadine oint or Nebasulf on the wound.
Veterinary	feeding management of goat.	kids should be provided with 50-100g of concentrate per day for the first 10 week.for growing 100-150 g per day upto 3 months.pregnant 300g extra and for milch 400g for every lit of milk production.
Veterinary	details about incubation of chicken and quail eggs.	he eggs will have to be turned at least 3 times a day. It is advisable to use bottled distilled water.The temperature should be checked regularly to make sure it is remaining stable. The humidity should be increased, usually by filling an additional trough with water, two days before the hatch date of your eggs. The temperature may be dropped by 1 degree at this time also.temperature 1-18 d: 37.6-37.8 dc and19-21: 36.9-37.5 dc

Veterinary	my heifer shows the sign of heat for the first time. can i inseminate it. it is 2 years old.	yes you can .
Veterinary	my goat showed the first heat. can i inseminate it. age is 6 months.	a goat reach sexual maturity at an age of 7-12 months. so better you skip this heat and inseminate in the next if it as attained proper growth.
Veterinary	feeding management for adult goat.	300g concentrate per day with 400g of extra concentrate for every liter of milk production. additional 2 kg of green fodder should also be given.
Veterinary	sexual maturity of quail. how many years can we rear one lot profitably.	quails will reach sexual maturity at 6 weeks of age. it will produce upto 300 eggs/year in the first year. from 2nd year onwards egg production will reduce drastically. you will get the kit from the nearest veterinary hospital at a cost of about 20 Rs. it contains reagent, KMnO ₄ , boric acid powder and a testing paddle. instructions to use will be there in the mastitis kit. you have to take the milk from the 4 teats separately into the 4 dips of paddle and mix equal quantity reagent, and look for the clumps for positive result.
Veterinary	from where will i get the mastitis kit, cost, contents and how to use it?	gestation period of cow can go upto 290 days. so wait and observe for the signs of calving like decreased feed intake, depression, frequent getting up and down, coming of colostrum etc.
Veterinary	the cow was inseminated 283 days before. but the animal is not showing any signs of parturition.	site proposed to start a commercial farm with 6000 layers should be located at a distance of 500 m from the main road and 1 km from the residential area.
Veterinary	what is the minimum distance to the nearest residential area to start a poultry farm with 6000 layers.	advised to seek the help of a veterinary doctor to take antibiotic injection for 3-5 days.
Veterinary	cow is having mastitis for the last one week. today onwards it is having fever and anorexia.	no tablets available for making an adult male buffalo impotent. you have to castrate the animal surgically.
Veterinary	any tablets available for making the male buffalo impotent.	will start laying egg at about 8 wks of age, on the second year the egg production will reduce drastically, male female ratio is 1:2, available at ollur hatchery and chathamangalam farm.
Veterinary	quail farming, age of maturity, availability, male female ratio.	advised to seek the help of nearby veterinary doctor as it seems to be the symptoms of acidosis.
Veterinary	Goat which was kidded 2 days before is showing symptoms of stomach ache after feeding rice with rice gruel.	

Veterinary	animal is 8 months pregnant but still giving 5 litres of milk even after doing alternate day milking.	advised to completely withdraw the concentrate feed and give only staw for drying off the cow.
Veterinary	optimum dry period for cow and how to dry off .	optimum dry period to be given is 60 days. advised the owner to do one time milking followed by intermediate day milking and to decrease the concentrate feed.
Veterinary	maggot wound in between the due claws.	advised to plug eucalyptus oil in the wound for 2 minutes, remove it and remove the maggots. apply lorexane ointment
Veterinary	is it necessary to take antirabies vaccination every year even if they have vaccinated the dog yearly for 3 years.	since the immunity by vaccination is only one year yearly vaccination is mandatory.
Veterinary	1)10 day old calf is showing diarrhoea with undigested milk. 2)4 year old cow is eating soil.	1)advised the owner to withdraw milk for 1 day and fed with ad libitum water and brink back to normal diet gradually. 2) advised to deworm the animal with Fenbendazole 1.5 gm bolus.
Veterinary	animal was inseminated some months before. whether we can know the age of pregnancy by doing perrectal palpation.? period of dry period to be given ?	we can know the approximate month of pregnancy by doing per rectal palpation.recommended period of dry period is 60 days.
Veterinary	the cow was double inseminated 50 days before.animal had also inseminated 2 times before. now the animal is showing clear vaginal discharge . will it be due to heat and is there any need for uterine wash.	advised the owner to seek the help of near by veterinary doctor to do the per rectal palpation to conform pregnancy and do uterine wash if he/she suggests.
Veterinary	Want to know about the growth rate of broiler chicks.	Advised that the broiler chick will reach a live weight of 1.6- 1.7 kg within 2 months.
Veterinary	Guinea fowl not taking feed and egg laid without shell.	Prescribed vimeral tonic and oyster shell and bayrocin tab
Veterinary	Cow has not conceived yet , inseminated 5 times	Advised to present the animal to the nearby veterinary hospital.
	field preparation	Field preparation Dig pits of 1 m x 1 m x 1 m. Fill in with topsoil mixed with 10 kg of FYM and 100 g Lindane 1.3% dust per pit

Interval for replacing the food based insecticide solution ?

Give the following details about pheromone traps ? 13 (i). Height of the traps ?

Whether skipping of phosphatic fertilizers can be done ?

Suggest few perennial crops that can be grown as mixed crops in coconut garden ?

How to control Stem borer

Preparation of fish amino acid

fungicide against powdery mildew

what is the correct method of approach grafting in kudampuli (camboge)

tender nut fall in coconut.what control measures can i adopt?(irrigated).no colour change on nuts.i am doing organic farming.

The traps are to be checked once in 10 days for replacing the food bait and insecticidal solution

Placing of the trap at a height of 1 to 1.5 metre above the ground level.

When the available phosphorus in the soil is more than 20 ppm, application of phosphatic fertilisers can be skipped off for a few years until the level goes below 20 ppm. If the level is between 10 to 20 ppm, half of the recommended P₂O₅ can be applied.

Cocoa, Clove, nutmeg, cinnamon, pepper, Betel vine

To control the stem borer, extract mechanically by chiseling out the damaged area of the tree and swab that portion with 5% neem oil on the tree trunk up to a height of 1m during April-May and October-November. OR Apply 75g Sevidol 4G per tree, in the soil at the tree base and incorporate.

Fish amino acid is prepared as under: Mix 2.0 kg cheap fish or fish waste with equal quantity of raw sugar (Panamchakkara). Keep it in a closed container in a dark place. After 10 days you will find a sweet smelling solution and it is the fish amino acid. Strain it and spray after dilution.

controlled by dusting Sulphur 25 kg/ha or spray Wettable sulphur 2 g/lit.

In approach grafting stock plants having 3-4 mm thickness are preferred and they are brought to the place where the mother tree is located. Grafting is done as in other crops and is kept intact for 45 days by which time union occurs. Graft is detached from the mother tree in three steps. Forty-five days after grafting, they will be ready for transferring to the main nursery for hardening. Grafts are to be watered daily using a rose-can or micro-sprinkler.

it can be due to potassium or boron deficiency. u can apply mop 1.2kg per year and borax 250g per year.