



Rubber Board to collaborate with MG University in areas of academic and research activities



Rubber Board has signed a MoU with Mahatma Gandhi University (MG University) to strengthen cooperation in academic and research activities and to share technical knowledge, expertise and infrastructure for the same. Dr. K.N. Raghavan, Executive Director of Rubber Board and Prof. Prakash Kumar B., Registrar of MG University jointly signed the memorandum of understanding (MoU) regarding this in presence of Prof. Sabu Thomas, Vice Chancellor, Mahatma Gandhi University. Dr. K. Jayachandran (Head of the School of Biosciences, MG University), Dr. E.K. Radhakrishnan (Asst, Professor, MG University), Dr. M.D. Jessy (Director (Research)ic, Rubber Board), Smt. P.Sudha (Director (Training), Rubber Board) and Dr. Siby Varghese (Joint Director, RRII) were present on the occasion.

The MoU was signed considering the long term benefits of sharing knowledge, skill and expertise among Rubber Research Institute of India (RRII), National Institute for Rubber Training (NIRT) and MG University and establish a vibrant academic and research collaboration by undertaking joint activities in the respective field of research and training to provide opportunity for global experience and to facilitate advancement of knowledge on the basis of reciprocity, mutual benefit and frequent interaction. Detailed terms and conditions that, guide each activity will be determined separately as and when specific activities are taken up for implementation.

MG University, one of the premier universities in India, is a premier educational institution that strives to fulfill the higher educational needs of the people with academic and research programmes in more than forty disciplines through its own schools as well as its approved research centres.

Highlights

- **Grower's Corner**
 - Leaf Diseases in Summer and Control Measures
 - Farm Activities in January
- **'Rubber Kisan' The Mobile APP**
- **Training Programmes**
 - Rubber Cultivation for estate sector
 - Bee keeping in rubber plantations
 - Good agricultural practices
 - Latex Harvest Technology
 - Intercropping in Rubber
 - Manuring in rubber
- **Rubber Price**
- **And more**

Take care against seasonal diseases in rubber

Powdery mildew

Causative agent: *Oidium heveae* Steinm.



The disease is noticed predominantly on tender leaves developed during refoliation period (January - March). Affected tender leaves show white or ashy fungal coating, which curl, crinkle and then fall, leaving the petioles attached to the twigs giving a broom-stick appearance. After few days, the petioles also drop. Die-back of twigs is extensive if repeated defoliation due to disease occurs. On older leaves, the white patches later turn to brown necrotic spots. Infected flowers and tender fruits drop affecting seed production. Late-wintered trees suffer more. Persistence of disease is more in polyhouses, nurseries and partially-wintered trees. Cloudy days with light rains and/or misty nights with dew formation during refoliation favour disease outbreak. Under shaded conditions and in high elevation, the disease persists round the year.

Dusting, 3 to 5 rounds at weekly to fortnightly interval, with 11 to 14 kg 325-mesh fine sulphur dust per round per hectare during the refoliation period commencing from bud break in about 10% of the trees gives good protection. Sulphur mixed with an inert material like talc (70:30) is commonly used. For better efficiency, dusting may be carried out in the early morning hours when the leaves are moist and atmosphere

calm. In nurseries and for young plants, spraying wettable sulphur 0.2% or carbendazim 0.05% is more effective than sulphur dust. Alternate use of carbendazim and sulphur is recommended to avoid development of resistance against carbendazim in fungus.

Leaf Spot

Causative agent: *Corynespora cassiicola* (Berk & Curt)

Earlier the disease was confined to nurseries only. From 1996 onwards severe incidence of the disease was observed in mature plantations in the Dakshin Kannada District of Karnataka State and in the adjoining districts of Kerala. In nurseries, disease incidence is noticed during November to May period. On mature trees, disease is observed during the refoliation period from February to May.

Large spots, with brown margins and pale centre is the common symptom. The centre may fall off forming shot holes. On mature trees light green leaves during refoliation are more susceptible. Several lesions coalesce to form large blighted area. Disease spreads along the veins leading to a brownish "railway track" or "fish bone" like appearance. Even a localised infection on midrib or base of a leaf causes leaf abscission. Defoliation leads to die-back of branches.

Repeated spraying with Bordeaux mixture 1% or Dithane (Indofil) M-45 0.2% or Bavistin 0.02% is recommended for nursery. Shading the nursery reduces the disease incidence. Maintain seedlings in vigorous condition through adequate balanced nutrition. High volume spraying with mancozeb 0.2% (Dithane/Indofil M-45 2.66 g/l) carbendazim 0.05% (Bavistin 1g/l) at 2-3 weeks interval during refoliation is effective in mature plantation. Micron spraying with oil dispersible copper oxychloride 56% (8kg) or oil dispersible mancozeb 70% (7 kg) dispersed in 40 l spray oil per ha is also effective.

Corynespora leaf disease

Causative agent: *Corynespora cassiicola* (Berk. & Curt.)

This is a hot season disease. In nurseries, the disease is noticed during November to May. Formation of large spots with brown margins and pale centre which later fall off forming shot holes is the initial symptom. The spots coalesce, foliage then shows discoloration and defoliates. On mature trees, light green leaves after refoliation are more susceptible. Several lesions coalesce to form large blighted area giving foliage a burnt appearance. Disease spreads along the veins leading to a brownish "railway track"-like appearance. Infection on midrib or base of leaf causes discoloration of lamina and leaf abscission. Defoliation leads to die back of branches.

In nurseries and young plants, repeated spraying with Bordeaux mixture 1% or mancozeb 0.2% or carbendazim 0.05% is recommended. Shading the nursery and maintenance of vigour of plants through balanced nutrition reduce the disease severity.

In mature plantations, high volume spraying with mancozeb 0.2%, carbendazim 0.05% or Bordeaux mixture 1% at 2-3 week intervals during refoliation may be undertaken. Micron spraying at light green stage of leaves with oil-dispersible copper oxychloride @ 8 kg or oil-dispersible mancozeb 70% @ 7 kg dispersed in 40 L spray oil per hectare is also effective.



Important farm activities in January

GROWER'S CORNER

As the rainy season is over, young rubber seedlings in the nursery should be irrigated in the morning and evening. Irrigation, sufficient to drench the nursery, once in four days is enough. In large nurseries, the area may be divided into different quarters and irrigated on rotation. Polybag plants also should be irrigated preferably in the evenings.

Leaf diseases

Winter/Summer season is favourable for occurrence of Powdery mildew disease, Corynespora leaf spot disease and Birds eye spot disease. A detailed article about these diseases is given in page 2.



White washing

From the second year of growth till the canopy covers, application of lime on the brown stem portion from the bud union up to the first fork is advised in order to protect the stem from sunburn.

Copper sulphate need not be added in the preparation of lime solution. Application of lime is more effective than application of china clay.

Pruning

Branching of the rubber plants up to a height of 2.5 m should not be allowed. As the tapping commences at a height of 1.25 m in budded trees, any branching below this height will create difficulty for tapping. Hence branches up to this height should be pruned off close to the main stem, using sharp knives.

Fire break

As the plantations are more prone to fire damage in summer season, precaution be taken against it from the beginning of the summer season itself. A fire break (fire belt) should be provided around the plantation



for a width of 5-7 meters by clearing off all plants and dried leaves in this area. As the defoliated leaves may keep on accumulating in the

fire break it has to be regularly removed and the area kept clean.

Mulching



plants using dried recommended be to prevent loss of base, to increase ent and to control be done at a dis- m the base of the

the trees for the rainy and till now, it should des are used they should be carefully removed to prevent any damage so that they can be reused next year.

Shade in nurseries

To prevent drying of polybag plants during the severe summer season, nurseries should be provided with partial shade with plaited coconut leaves which allows partial sunlight for the growth of the plants.

Tapping

If the crop production during the summer season is found to be economical, no tapping rest is needed during this period and tapping may be continued once in three days.

Download mobile App 'Rubber Kisan'

Daily price of natural rubber (NR), weekly, monthly and yearly average prices, cultural practices to be adopted in rubber cultivation, information on the meetings and training programmes of the Board, news on rubber, addresses of Board's offices etc. are available in the App.

The application developed in association with National Informatics Centre (NIC) is available in Google Play Store and can be downloaded by typing 'Rubber Kisan'.



TRAINING PROGRAMMES OF THE RUBBER BOARD

The following training courses will be conducted at the Rubber Training Institute during January 2022

1. Short term training on Rubber Cultivation for Estate sector: 03-05 Jan 2022 (Offline)

Estate managers, nursery owners, interested persons from plantation sector can apply for this course. The course content includes modern developments in planting materials, planting techniques, fertilizer recommendations, pest and disease management, tapping techniques and primary crop processing. Medium of instruction is English. The fee prescribed for this course is Rs.4500-- + GST 18%

2. Online training on bee keeping in rubber plantations : 10 Jan 2022

This one day course imparts training on beekeeping to farmers/SHG members for additional income generation. Rubber growers, farmers, RPS, SHG members can apply for this course. Fees prescribed for this course is Rs.100/- + GST 18%

3. Online training on Good Agricultural practices for Sustainable rubber production : 18 Jan 2022

Training is on enhancing production, productivity and reducing cost through Good Agricultural Practices in rubber plantations. Farmers and persons from estate sectors can apply for this course. The fee prescribed for this course is Rs.100/-+18% GST

4. Training on Latex Harvest Technology: 24-25 Jan 2022 (Offline)

Topics include latex harvesting, different types of tapping knives, modern tapping methods, application of stimulating agents, LHT and CUT. Rubber growers and interested persons from plantation sector can apply. The fee prescribed for this course is Rs.1000/- + 18% GST

5. Online Training on manuring in rubber : 28 Jan 2022

This one day course content imparts knowledge on fertilizer recommendation, discriminatory fertilizer application and manuring in rubber. Farmers, Estate managers, nursery owners, interested persons from plantation sector can apply for this course. Fees prescribed for this course is Rs.100/- + GST 18%

6. Online Training on Intercropping in Rubber: 31 January 2022

The objective of this 4 day training programme is to impart knowledge on plantation management for reducing cost of production. The course content includes aspects on rubber cultivation, management principles, materials management and human resource management. Planters, RPS members and other interested persons can participate in this course. The fee prescribed for the course is Rs.1000/day + 18% GST + 1% flood cess extra.

SC/ST participants are eligible to get 50% concession in course fee on production of caste certificate. For board & lodging Rs.300/- per day per participant will be charged extra. Payment may be made by direct remittance to our account with Central Bank of India, RB, Kottayam, IFS Code CBIN0284150 A/C No. 1450300184.

For details contact 0481 2353127, 2353326, 2351313, 2353325.

Fax No. 0481 2353187 .

DAILY NATURAL RUBBER PRICE - DECEMBER 2021 [Price/Rs/Qtl]

DATE	Domestic					International	
	Kottayam			Kochi		Bangkok	
	RSS-4	RSS-5	60%LATEX	RSS-4	RSS-5	RSS-3	RSS-4
01-12-2021	19000	18800	13845	19000	18800	14876	14809
02-12-2021	18900	18600	13950	18900	18600	14849	14782
03-12-2021	18700	18400	13950	18700	18400	14726	14659
04-12-2021	18600	18300	Holiday	18600	18300	Holiday	Holiday
05-12-2021	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday
06-12-2021	18500	18200	13845	18500	18200	Holiday	Holiday
07-12-2021	18500	18200	13845	18500	18200	14565	14498
08-12-2021	18400	18100	13845	18400	18100	14392	14326
09-12-2021	18300	18000	13845	18300	18000	14324	14256
10-12-2021	18100	17800	13735	18100	17800	14366	14298
11-12-2021	17900	17600	Holiday	17900	17600	Holiday	Holiday
12-12-2021	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday
13-12-2021	17900	17600	13630	17900	17600	14544	14476
14-12-2021	17900	17600	13630	17900	17600	14628	14560
15-12-2021	17850	17550	13580	17850	17550	14742	14674
16-12-2021	17600	17300	13525	17600	17300	14659	14590
17-12-2021	17500	17200	13525	17500	17200	14683	14614
18-12-2021	17500	17100	Holiday	17500	17100	Holiday	Holiday
19-12-2021	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday
20-12-2021	17300	16800	13315	17300	16800	14445	14376
21-12-2021	17100	16600	13210	17100	16600	14316	14248
22-12-2021	17000	16600	13105	17000	16600	14229	14162
23-12-2021	16800	16500	12995	16800	16500	14193	14125
24-12-2021	16600	16300	12890	16600	16300	14164	14097
25-12-2021	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday
26-12-2021	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday	Holiday
27-12-2021	16300	16000	12785	16300	16000	14046	13979
28-12-2021	16200	15900	12575	16200	15900	14155	14087
29-12-2021	16200	15900	12575	16200	15900	14158	14091
30-12-2021	16300	15950	12470	16300	15950	14144	14077
31-12-2021	16400	16000	12415	16400	16000	Holiday	Holiday
Average	17590	17265	13352	17590	17265	14438	14371