ALL INDIA COORDINATED RESEARCH PROJECT ON CASHEW

PROCEEDINGS OF THE ANNUAL GROUP MEETING

OF

SCIENTISTS OF AICRP-CASHEW

13-14th December 2019

Venue : New Auditorium, Main Campus,
University of Horticultural Sciences,
Bagalkote, Karnataka

ICAR - DIRECTORATE OF CASHEW RESEARCH
PUTTUR-574 202, D.K., KARNATAKA

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ACKNOWLEDGEMENT

The Annual Group Meeting of All India Coordinated Research Project on Cashew was held at UHS, Bagalkot from 13 to 14 December 2019. AICRP research workers and progressive farmers have participated in this meeting.

I express my deep sense of gratitude to Dr. W.S. Dhillon, ADG (Hort.), ICAR for his kind advice in organizing this Annual Group Meeting of Scientists of AICRP on Cashew-2019. I place on record my thanks to the authorities of the ICAR, New Delhi for their support in conducting meeting.

I am thankful to Prof. K. M. Indiresh, the Hon'ble Vice Chancellor, UHS, Bagalkot for inaugurating the AGM Meeting 2019. My thanks are due to Dr. N. Basavraja for their active participation and guidance during the deliberations. I am thankful to Dr. N. Basavaraja, Director of Research, UHS, Bagalkot for chairing the Crop Improvement Session, Dr. D.R. Patil, ADR (MHREC), UHS, Bagalkote for chairing the Crop management and Dr. Y.K. Kotikal, Director of Extension & Professor of Entomology, UHS, Bagalkote for chairing the Crop Protection and Dr. S.I. Hanamashetti, Prof. of PMA, Vijayapur for chairing the Interactive Session. Special thanks to Dr. Vishnuvardhana, ADRE, Bangalore and AICRP on Cashew team, *viz.,* Dr. Ramachandra R.K., Dr. Naveen M Puttaswamy, Mr. Rajendra, Dr. N. Aswathanarayana Reddy, Dr. Subramanyam B. and Mr. Ramesh M. My thanks are also due to all the rapporteurs of different sessions.

I thank the members of various committees who have worked tirelessly for the successful conduct of this Annual Group Meeting and all the scientific colleagues from the Coordinating Centers for their participation and cooperation. My thanks are also due to Dr. Mohana G.S., Scientist-in-charge (PC Cell) & Smt. Reshma K, PA for the support extended in organizing this group meeting.

[M.G. NAYAK]
Acting Director &
Project Coordinator (Cashew)

Puttur
Date : 04.03.2020

PROGRAMME DETAILS

Venue: UHS, Bagalkot

Date: 13 – 14th December 2019

13.12.2019, 9.30 AM

INAUGURAL SESSION

Invocation	:	Invocation-ICAR Song by COH, Bagalkote students
Welcome	:	Dr. N. Basavaraja Director of Research, UHS, Bagalkote
Introductory Remarks	:	Dr. M.G. Nayak, Director(Acting), DCR, Puttur
Vote of Thanks	:	Dr. D. R. Patil Associate Director of Research and Extension, MHREC, Bagalkote
Rapporteurs		Dr. Mini Poduval and Mr. Vikas Ramkete

TECHNICAL SESSIONS

10.00AM

TECHNICAL SESSION-I		**CROP IMPROVEMENT**
Chairman	:	Dr. N. Basavaraja Director of Research, UHS, Bagalkote
Co-Chairman	:	Dr. Vishnuvardhana, Associate Director of Research and Extension, RHREC, GKVK, Bangalore
Rapporteurs	:	Dr. Nishant Deshmukh and Dr. R. T. Bhingarde

Presentation of Reports on Crop Improvement by Scientists of AICRP on Cashew

1.30PM – 2.30PM **Lunch break**

3.00 PM

TECHNICAL SESSION - II		**CROP MANAGEMENT**
Chairman	:	Dr. D. R. Patil Associate Director of Research and Extension, MHREC, Bagalkote
Co-Chairman	:	Dr. Kulapati Hipparagi, Professor & Head, Department of Fruit Science
Rapporteurs	:	Dr. Shamsudheen and Dr. Umamaheshwar Rao

Presentation of Reports on Crop Management by Scientists of AICRP on Cashew

5.00 PM – 6.30 PM

TECHNICAL SESSION - III	:	**CROP PROTECTION**
Chairman	:	Dr. Y.K. Kotikal Director of Extension, UHS, Bagalkote
Co-Chairman	:	Dr. Venkateshalu B. Head, Department of Entomology
Rapporteurs	:	Dr. S.K. Mukherjee and Dr. Jaya Prabavathi

14.12.2019 - 9.30 AM		**AGM CEREMONY**
Welcome	**:**	Dr. N. Basavaraja Director of Research, UHS, Bagalkote
Chief Guest's address	**:**	Dr. W. S. Dhillon, ADG (HS-I),ICAR, New Delhi
Presidential Address	**:**	Dr. K. M. Indiresh Hon'ble Vice Chancellor, UHS, Bagalkote
10.30 AM	**:**	Crop Protection Session (Contd.)

Presentation of Reports on Crop Protection by Scientists of AICRP-Cashew

11.00 AM-1.00PM		
TECHNICAL SESSION-IV	**:**	**Interaction between Development Departments, Research Centers and Farmers**
Chairman	**:**	Dr. S.I. Hanamashetti, Prof. of PMA, Vijayapur
Co-Chairman	**:**	Dr. Venkatesh N. Hubballi Director, DCCD, Kochi, Kerala
Rapporteurs	:	Dr. Jaleja Menon and Dr. Kabita Sethi

Discussion by participants of various development departments

1.00 PM – 1.30 PM		**Lunch break**
1.30 PM – 2.00 PM		**PLENARY SESSION**
Chairman	**:**	Dr. W.S. Dhillon, ADG (HS-II), ICAR, New Delhi
Co- Chairman	**:**	Dr. M.G. Nayak, Acting Director, DCR, Puttur
Rapporteurs		Mr. Vikas Ramteke
Presentation of PC Report	**:**	Dr. M.G. Nayak, Acting Director, DCR, Puttur
Presentation of Action Taken Report	**:**	Dr. Mohana G. S., Sr. Scientist(Gen. &Cytogen.) and Scientist-in-charge (PC Cell), ICAR-DCR, Puttur
Presentation of Rapporteur's reports	**:**	By Rapporteurs
Vote of Thanks	**:**	Dr. Mohana G.S., Scientist-in-charge, PC Cell, ICAR-DCR, Puttur

INAUGURAL ADDRESS

Dr. K.M. Indiresh
Hon'ble Vice Chancellor, UHS, Bagalkote

I am pleased to welcome you all to this Annual Group Meeting of AICRP on Cashew 2019. We are glad to host this event and are thankful to DCR, Puttur for giving us an opportunity to organize this meeting. I am excited to see such a diversified and resourceful gathering from core level scientists to decision makers and farmers under one roof. Indeed it gives me immense pleasure to be a part of this meeting where in scientists involved in developing technologies share their experiences with farmers as well as decision makers. Experiences of scientists coming from different states and ecological zones provides us with an insight to the different issues of cashew cultivation in various regions, on the other hand, they share their approaches and technologies adapted to address the issues. Diversified approaches form the perspectives of people from different backgrounds for cashew production is an enriching experience of cashew cultivation across the borders.

The demand for cashew is increasing day by day and scope for improvement of cashew production is enormous. Support from different agencies, policies and schemes are all encouraging for expansion of area under cashew production. Further, scientific approaches and modern technologies have enhanced the productivity that are promising for the enhanced income of cashew growing farmers, thus encouraging farmers for cashew cultivation not only in traditional areas but also in non-traditional areas of cashew. Further the crop is proving itself as a climate smart crop and has indicated its suitability to varied climatic zones and cultivation practices. I wish the contribution of scientists and decision makers in this meeting who are the pillars for technology development for cashew in India. This will take Indian production to higher level. Once again I thank you all for making this meeting a fruitful event in framing the future research guidelines and recommending the right approaches for increasing the production of cashew crop in our country.

I understand that the adoption of following aspects could enhance the cashew cultivation among farmers.

1. Adapting varieties suitable for different regions
2. Deployment of bold nut types for cultivation
3. Adaption of high density production (HDP) system to increase productivity
4. Intensifying the TSP and SCSP schemes of cashew
5. By dissemination of technologies for management of pest and diseases
6. Research approaches for minimal invasive production practices for the crop

PROJECT COORDINATOR'S REPORT

Dr. M.G. NAYAK

Director (Acting), ICAR-DCR and Project Coordinator, AICRP-Cashew

Respected President of today' s function, Chief Guest of the Session, the Guests of Honor and distinguished delegates, scientists from UHS Bagalkot and AICRP-Cashew, invitees, media persons, ladies & gentlemen.

I would like to express my sincere gratitude to all the dignitaries on the dais, delegates and invitees for making it convenient to be here for the Annual Group Meeting of AICRP on Cashew. I take this opportunity to express my gratefulness to Dr. A.K. Singh, DDG (Hort.) ICAR New Delhi for permitting us to host this Annual Group Meeting of AICRP on Cashew – 2019 at UHS, Bagalkot.

On this occasion, I am happy to present the Project Coordinator's Report. An independent All India Coordinated Research Project on Cashew was established in the year 1986 with its headquarters at the National Research Centre for Cashew at Puttur, which has been renamed as ICAR-Directorate of Cashew Research during the year 2009. At present, AICRP on Cashew has 14 centers spread across the country in east coast, west coast and plain regions. In fact, the Project Coordinator and the Scientist in charge, PC cell have visited all the centers along with the QRT team and reviewed the progress of those centers during the year.

The centers of AICRP on Cashew along with other centers working on cashew have so far developed and released 34 high yielding cashew varieties for commercial cultivation in different agro-eco-regions. Last year, a bold nut hybrid H-130 with the yield potential of more than 2 t/ha has also been released by the ICAR-Directorate of Cashew Research, Puttur. The production potential of these varieties and hybrids is very good and they have played a significant role in improving production of raw cashew nut in the country. The AICRP centers are working on crop management aspects such as nutrient requirement, irrigation and high density planting systems. They also work on management aspects of pests such as TMB and CSRB in addition to their enumeration with respect to seasonal variations and made significant achievements.

I would like to emphasize some of the salient results of the work done during the year.

CROP IMPROVEMENT

The total germplasm accessions conserved at various centers is 1557. As for as evaluation of germplasm accessions are concerned, during the year, 27 new accessions for yield and yield attributing characters have been collected by different centers. Further, 110 accessions are in various stages of characterization and evaluation. A new trial on evaluation of promising bold nut, bigger size apple types and high yielding cashew genotypes was initiated at Bapatla, Bhubaneshwar, Jhargram, Vridhachalam, Goa, Madakkathara, Pilicode, Vengurle, Jagdalpur and Kanabargi centers during the year. In the multi-location trial–III which aims at evaluation of promising hybrids, H-662 showed highest cumulative yield (37.82 kgs in

7th harvest) at Vengurle center and H14 at Vridhachalam center. In the trial on performance of released varieties, BPP-8 at Darisai, Ullal-4 at Hogalagere, Vengurle-7 at Jhargram, Priyanka at Pilicode, VRI-3 at Vridhachalam were found to be superior.

In the trial on hybridization and selection,12 new hybrid combinations were tried at Bhubaneshwar and 17 at Goa. Further, 12 hybrids seems to be promising at Bapatla center, one at Bhubaneshwar, two hybrids showed consistent performance at Goa. In addition to these, evaluation of 18 promising hybrids is under progress at Vengurle. Further, rapid clonal hybrid evaluation trial which aims at bringing desirable characters from promising germplasm accessions is under progress at Bhubaneshwar, Madakkathara, Vridhachalam and Vengurle centers.

CROP MANAGEMENT

In the trial on nutrient management for yield maximization in cashew, recommended dose of fertilizers with FYM and foliar spray of major and minor nutrients gave best results in Bubhaneshwar and in Hogalagere. In drip irrigation trial, irrigation at 80% cumulative pan evaporation was found to be the best in Hogalagere center. In the high density planting – observation trial, it was found that BC ratio goes on decreasing as the years advance in high density (4m x 4 m) and the reverse is true in case of normal planting (8 m x 8m) .

The intercrop Crossandra at Bapatla, Tomato at Darisai, Pumpkin at Jhargram, Amaranthus at Madakkathara, Coriander at Paria, Bhendi at Vridhachalam, Yardlong bean at Vengurle centers gave highest net returns in the intercropping experiment. In organic management trial, 100% N as vermicompost and biofertilizers gave highest nut yield in Bapatla center. Whereas recommended dose of fertilizer with 10 kg FYM gave highest benefit ratio in Bhubneshwar, Darisai, Vridhachalam and Hogalagere. However, in Vengurle center, 100% N as vermicompost and biofertilizer combination gave highest net returns. Further, the trial on ultra high density planting is under progress in in Bapatla, Bhubaneshwar, Jhargram, Madakkathara and Vengurle centers.

CROP PROTECTION

L-Cyhalothrin (0.6 ml/litre) found to be more effective compared to other insecticides against TMB, Shoot tip caterpillar, Apple and nut borer, leaf miner in Bapatla, Bhubaneshwar, VridhachalamJagdalpur and Madakkathara. However, Thiomethoxam (0.2g/l) was found to be effective in Hogalagere center and Carbosulfan in Paria center. As for as CSRB is concerned, Chloropyriphos (10ml/l) was found to be effective in Bhubaneshwar, Vridhachalam and Jagdalpur. However, Imidachloprid (2ml/l) was effective in Bapatla center and neem oil swabbing in Madakkathara center. In Hogalagere, and Vengurle centers, Fipronil gave the best results. During the year, a new trial to manage TMB has been initiated with region specific botanicals at Paria, Pilicode, Bapatla, Bhubaneshwar, Hogalagere,Madakkathara, Jagdalpur, Vengurle and Vridhachalam

TRANSFER OF TECHNOLOGY

The coordinating centers of AICRP are also involved in transfer of technology activities and have produced more than Rs.3.61 lakh cashew grafts during 2018-19 which were distributed to cashew farmers, government and non-government organizations. Frontline demonstration plots have been laid out by different centres to disseminate the recent production techniques with backup of necessary technical guidance. It is worth mentioning that the Centres of AICRP on Cashew have conducted 49 training programmes on different aspect of cashew cultivation and management practices in which around 1000 farmers have participated.

I sincerely hope that all scientists of AICRP-Cashew will be earnestly implementing the approved technical programmes for their centres as well as, the decisions that are taken in this Annual Group Meeting. I would like to express my deep sense of gratitude to the Hon'ble Deputy Director General (Hort.)Dr. A.K. Singh and Dr. W.S. Dhillon, Assistant Director General (Hort. Science) for their continued guidance and support from the Council.

I also wish to thank Dr. K.M. Indiresh, Vice Chancellor, UHS Bagalkot and Dr. N. Basavaraj, Director of Research, UHS Bagalkotfor kindly agreeing to host this Annual Group Meeting here and all his colleagues for extending necessary support for organizing this Group Meeting. Thanks are also due to all the guest and experts who are supporting me in different ways.

Before I conclude my report, I would like to thank all my scientist colleagues of the coordinating centres of AICRP on Cashew; Directors of Research, Deans and other University authorities for extending cooperation for the effective functioning of the AICRP work in their respective centres. The financial assistance and timely help extended by Director, DCCD-Cochin Dr. Venkatesh N. Hubballi in conducting cashew extension and development activities is gratefully acknowledged. I sincerely acknowledge the cooperation and technical support received from my colleagues at DCR, Puttur particularly Dr. Mohana G.S., Senior Scientist & Scientist-in-charge of PC Cell and Mrs. Reshma K., Personal Assistant which has enabled me to smoothly run the day-to-day work of the Project Coordinator's Cell.

Thank you

ACTION TAKEN REPORT ON THE DECISIONS OF AGM-2018

Action taken report on major recommendations of the Annual Group Meeting held at OUAT, Bhubaneswar, Odisha was presented by Dr. Mohana G.S., Sr. Scientist (Gen. & Cytogen.) & Scientist-in-charge, PC Cell, ICAR-DCR, Puttur.

CROP IMPROVEMENT

Recommendations		Action Taken
General Recommendations :		
1.	All the centers should collaborate with biotechnology departments of university for marker assisted breeding in cashew.	Efforts have been done at Jhargram,, Madakkathara, Jagdalpur, Vengurle and Vridhachalam centers for marker assisted selection and DNA fingerprinting studies **Pilicode** Could not be done this time as technical personnel were not available in the laboratory in the station for doing the work. It will be done in the coming year
2.	While selecting any genotype for the breeding purpose, innovative thinking is required.	Followed at Bapatla, Jagdalpur, Jhargram, Madakkathara, Pilicode, Vengurle and Vridhachalam by considering traits such as the per sq m yield, compact nature of the plant, tolerance to pest and diseases, apple characteristics, easy separation of nut from apple etc. while selecting genotypes
3.	All the centers are not required to maintain cashew field gene banks. It is suggested to maintain one each at west coast region, east coast region and plain region.	Centers such Jagdalpur, Jhargram, Madakkathara, Pilicode, Vengurle and Vridhachalam have either agreed or supplied germaplasm accessions to RCGB, ICAR- DCR, Puttur. Further it has been decided that, for east coast, OUAT will be the center and for plain regions, it will be in Hogalagere
4.	Germplasm collection should focus on salient horticultural traits.	This has been followed at Bapatla, Jagdalpur, Jharagram, Madakkathara, Pilicode, Vengurle and Vridhachalam by focusing on horticultural traits like early flowering, dwarfness, better apple size and apple quality
	Centre -wise Recommendations	
	Bapatla Centre **Gen1. Germplasm-CECC** • Spacing of 6m x 6m should be followed instead of 4m x 4m • Small nut varieties (<5g) should be	This is followed

	removed from the evaluation • Conclusion should be given clearly.	
	Bhubaneswar **Germplasm trial** • Core collection should be identified • Outliers of PCA should be used for breeding purpose	• Core collection has been identified and maintained for future use • Outlier genotypes were used for hybridization programme, 2018-19. The hybrid nuts couldn't harvest due to occurrence of cyclone "FANI" on 03.05.2019
	Hybridization and selection trial • 100% nut set observed in crosses made should be checked for the data accuracy. • Graphical representation of data should be proper. • Higher sex ratio (0.46) observed in hybrid BH-26 should be checked. • Hybrid BH-26 data should be pooled and proposed for release.	• Data has been checked and reported accordingly in Annual Report • Care has been taken for proper graphical representation of data • Sex ratio has been checked and reported accordingly in Agenda Report, 2019 • Data recording on mean annual nut yield (kg plant-1) for the fruiting season 2018-19 couldn't be completed due to occurrence of cyclone "FANI" on 03.05. 2019. Partially recorded yield data is presented in the report.
	Darisai centre • Emphasis should be given for production of planting material and area expansion. • Awareness programmes for farmers should be conducted to increase the success of establishment of grafts in the field.	• In Main centre at ZRS, Darisai the area under cashew cultivation has been expanded from 4.0 acres to 7.5 acres in 2018-19. • ZRS, Darisai is organizing monthly cashew gosthi on production, processing and marketing for the benefit of tribal and non-tribal farmers.
	Hogalagere **Germplasm trial** Higher shelling percentage reported should be checked. **MLT-5** Data should be analyzed statistically. **Hybridization and selection trial** Wind breaks should be provided for the field experiment.	• Rechecked and corrected • Attended (observations were analyzed statistically and are presented in the summary report) • Provided

	Jagdalpur • Efforts should be made to get land for conducting experiments.	Bold nut experiment, Gen. 6, Gen. 5, Gen. 1, Hort. 4 and Hort. 3 have been shifted to new experimental location at Lamker. Multilocation trial–V has been conducted in SG CARS, Jagdalpur. Next year Ent. 1. and botanical pesticide experiment will be laid out at Lamker.
	Jhargram centre • Newly developed F_1 progenies should not be included in the germplasm collections. • Jhargram-2 should be tried at Tura center. **MLT-5** • Data of CD, CV and SEm± should be checked. • Correlation and regression should be worked out for nut weight with RH and temperature. **Hybridization and selection** BPP-8 should be mentioned as check in the Tables.	• The newly developed F1 progenies have not been included in the germplasm collection. • Tura centre did not contact for grafts. • It has been checked and corrected. • This has been done. • This is done in all the reports.
	Madakkathara **Germplasm trial** • Trial should be continued with collection of germplasm.	Identification and collection of germplasm from varied agro-ecological zones based on specific horticultural traits was initiated.

	Paria **Germplasm trial** • Germplasm collected (No.2) should not be included in the dwarf category. **MLT-6** • Photographs should be included in the presentation.	• Cashew rootstock sown and germplasm will be collected and grafted in upcoming season. • Followed.
	Pilicode centre **MLT-5 :** Data should be presented in the table while giving presentations in AGM. • Cashew apple evaluation should be done only for the varieties of the center.	• Will be complied with and Graphs and tables with data will be presented. • Cashew apple evaluation has been done for varieties suited for the region and germplasm collected by the centre.
	Vengurle **Germplasms trial :** Newly developed F_1 progenies should not be included in the germplasm collections. **Hybridization and selection** • Data of Nanoda *x A.microcarpum* should be checked and the cross should be subjected for molecular analysis to confirm the parentage.	• Noted and followed • Data of Nanoda x *A. microcarpum* is checked, verified and found correct. For molecular analysis, the grafts of H-2917, Nanoda and *A. microcarpum* were prepared and submitted to the In-charge, Biotechnology Department, DBSKKV, Dapoli for molecular analysis to confirm the parentage. The report is received and same parentage is confirmed.
	MLT-III : H-662 can be proposed for release if it shows 10% higher yield advantage over highest yielding varieties and other verified features.	H-662 has not recorded 10% higher yield advantage over highest yielding recent released varieties (V-7, V-8 & V-9) and also not observed the specific features in said hybrid during investigation period. Hence, not propose for release.
	Vridhachalam **Trial on CNSL free types:** Genotypes should be collected from ICAR-DCR at the earliest for initiating the trial. • MLT-2 and MLT-5 trials should be concluded.	Scion sticks were collected and grafted and trial will be initiated during December 2019 Concluded
	Tura centre • Initiative should be taken for evaluation and release of Baramashi type. • Training and awareness programmes for farmers for production of planting material should be conducted.	• The grafted plants of Baramashi cashew genotype are being produced for trial. • Two training & awareness programmes were organized. A total of 30 cashew growers participated.

CROP MANAGEMENT

General Recommendations :		
1.	For organic cultivation trial, all the AICRP centres are advised to prepare report on benefit-cost ratio (B:C) by taking the help of soil scientist at ICAR-DCR, Puttur.	This has been followed by Bapatla, Bhubaneshwar, Jhargram, Madakkathara and Vridhachalam centers
2.	The statistical analysis of data can be done using DMRT tool for better comparison of treatments under organic management experiment.	This is done by Bapatla, Bhubaneshwar, Jhargram, Madakkathara, Vengurle and Vridhachalam centers
3.	All the AICRP centres are directed to submit the pooled data of organic experiment to the DCR, Puttur and the experiment will be validated in the next year.	The pooled data is submitted to DCR, Puttur by Vengurle center. Bapatla, Bhubaneshwar, Jhargram, Madakkathara and Vridhachalam centers will send the data after concluding the trial.
4.	The selection of intercrops should be regional specific and the risk of introducing new pest and disease from intercrops to cashew should be taken care well in advance.	This is followed by Bapatla , Bhubaneshwar, Jhargram, Madakkathara, Vengurle and Vridhachalam centers
5.	Care should be taken to protect the experimental plots by proper fencing to check the attack of wild animals and other pest	This is followed by Bapatla, Bhubaneshwar, Jagdalpur, Jhargram, Madakkathara, Vengurle and Vridhachalam centers. They have done either by fencing or by deep trenches.
6.	The experimental data should be statistically analysed. The effect of intercrop on main crop yield should be reflected.	This is followed in Bapatla , Bhubaneshwar, Jhargram, Vengurle and Vridhachalam centers
7.	Newly joined scientists of different centres of AICRP are suggested to undergo training at ICAR-DCR, Puttur on cashew research and extension activities.	So far, we have not received requests from any center except Madakkathara. DCR is ready to give training to willing scientists of different centers.

8.	The experimental plants should be annually pruned and trained for canopy management for recording biometrical observations.	This is followed in Bapatla , Bhubaneshwar, Jagdalpur, Jhargram, Madakkathara, Vengurle and Vridhachalam centers.
9.	The centres allotted with UHDP experiment should start the experiment in the upcoming season. In this regard, the planting material should be multiplied and preserved to take up planting in coming seasons.	At Bapatla and Bhubaneswar, the land preparation is under progress and grafts are ready. The trial will be taken up soon. The trial has already been initiated at Jhargram Madakkathara and Vengurle.
	Centre-wise Recommendations	
	Bapatla • The implementation of proper and recommended pruning techniques for rejuvenation should be adapted in future.	Adapted
	Bhubaneswar • The organic cultivation experiment can be concluded and recommended to come up with publications	The organic cultivation experiment has been concluded and final recommendation will be given after presentation at AGM-2019
	Darisai The planting material of promising varieties should be multiplied and supplied to the farmers. In this regard, training and orientation of technical staff should be provided and an exposure visit to Jhargram station is also recommended .	Implemented
	Hogalagere The SEm±, CD, CV values should be removed from cumulative yield. The results can be represented in two way table for spacing and nutrient trial. For all experiments, the yield parameter should be recorded after 3 days of nut drying without any apple residues.	Followed
	Jagdalpur Training on cashew apple utilization to tribals is recommended.	Training proposal has been submitted to DCCD, Kochi. Under SCSP programme (DCR, Putttur) tribal women will also be trained on cashew apple utilization.

	Jhargram The possibilities of using legumes as intercrop can be explored.	During July 2019, out of 5 crops are taken as intercrop, 4 are leguminous i.e. Cluster bean, Soyabean, Cowpea and Black gram.
	Kanabargi The performance of high yielding trees in organic experiments can be verified in subsequent years.	Data on yield and other parameters are verified and submitted.
	Paria The possibilities of laying out the boldnut and high yielding experiment can be explored.	The trial is not allotted to this center as the number of grafts produced was less. It can be allotted during next planting season.
	Vengurle The nut size of V-4 on organic experiment trial should be verified.	Nut size of V-4 recorded in different treatments under organic experiment trial is re-checked, verified and found correct.
	Vridhachalam The cost benefit ratio (C:B) on intercropping trial need to be verified.	Verified.

CROP PROTECTION

General Recommendations		
1.	The diameter instead of stem girth while collecting the data on Post extraction Prophylaxis experiment on CSRB should be mentioned.	This is followed in Bapatla, Bhubaneshwar, Jagdalpur, Madakkathara, Vengurle and Virdhachalam centers
2.	The occurrence of the insect pest recorded over years in respective centers and the insect pest occurring now with change of age of the trees in the plantation and changing climatic conditions to establish the changing scenario of the pests in cashew should be compiled. Newly appearing pests need to be recorded.	**Bapatla:** During the survey conducted in Devarapalli and Nallajerla mandals of West Godavari, Andhra Pradesh. Rugose Spiraling Whitefly (RSW) observed on cashew crop where the crop is adjacent to coconut and oil palm gardens with high RSW infestation Bhubaneshwar: Newly occurring pest i.e. red banded thrips have been reported. Data on occurrence of insect pests and new ones is being recorded regularly at Madakkathara, Jagdalpur, Vengurle and Vridhachalam centers
3.	Screening of germplasms to locate tolerant / resistant types to major pests of the region should also be done in new MLTs upto ten years age of the plant for foliage pests and these plants should be maintained with prophylactic method recommended for CSRB to record the rate of protection from CSRB infestation.	This is followed in Bapatla, Bhubaneshwar, Jagdalpur, Madakkathara, Vengurle and Virdhachalam centers
4.	While collecting the data on pests, apart from environmental conditions crop age, crop stage should be mentioned	Followed by Bapatla, Bhubaneshwar, Jagdalpur, Madakkathara, Vengurle and Vridhachalam centers
5.	While presenting the data insect pests of regional importance (Major and Minor)	Followed by Bapatla, Bhubaneshwar, Jagdalpur, Madakkathara, Vengurle and

	should be given.	Vridhachalam centers
6.	An experiment with botanicals to control TMB NSKE, Deshi Cow urine, Local botanicals, Standard Check (Lamda Cyhalothrin) and untreated check should be initiated as a new trial in all the centres.	The treatment details have been finalized in consultation with DCR entomologist and the experiment will be initiated this season at Bapatla, Bhubaneshwar, Jagdalpur, Madakkathara, Vengurle and Vridhachalam centers.
7.	For control of CSRB entire orchard should be considered and the trees are to be divided into three categories Trees with trunks without branching from the base. Branches are above 1.0-1.5 m above the ground; Trees trunk with branching close to the ground level and free from CSRB infestation; Trees trunk with branching close to the ground level and with CSRB infestation Application of plaster of paris followed by painting up to 1m in the month of October / November (After cessation of rain) should be followed. About 100 plants of almost same age group should be selected under each category.	This is followed at Bapatla, Bhubaneshwar, Jadalpur, Madakkathara, Vengurle and Vridhachalam centers.
8.	Branching should not be allowed below 1m height of the plants in any newly raised to prevent CSRB infestation in future plantations, particularly in tribal areas.	This is followed in Bapatla, Bhubaneshwar, Jagdalpur, Madakkathara, Vengurle and Vridhachalam centers
9.	For correlation experiment, data of several years should be used.	This is being followed in Bapatla, Bhubaneshwar, Jagdalpur, Madakkathara, Vengurle and Vridhachalam centers.
10.	Pest forecasting modules should be developed by taking into consideration data of previous years.	The work is already being done by Vengurle center. At Bapatla, Bhubneshwar, Bapatla, Madakkathara and Vridhachalam, the work will be initiated

	Centre-wise Recommendations:	
	Bapatla/Bhubaneshwar • In screening of germplasm to locate tolerant / resistant types to major pests of the region trial the centers were suggested to identify the accessions less susceptible to the pests by comparing previous year's data**.**	Followed by the Bapatla and Bhubaneshwar centers.
	Jagdalpur In Evaluation of insecticides for the control of Tea Mosquito Bug and other insect pests trial, the centre was suggested to recheck the data of leaf minor damage in the Buprofezin treatment and also in trial Influence of biotic and abiotic factors on the incidence of pest complex of cashew.	Noted and followed the recommendations in the insecticidal spray and data recording.
	Madakkathara The Centre was suggested to re-check the data in their experiments and plan experiment according to the limitations of their state in consultation with the DCR.	The data will be rechecked with the assistance of an expert and planned in consultation with DCR.

6th QRT recommendations and the Action Taken Report

Sl. No.	Recommendations	Time Frame	Action Taken
1.	In addition to National Repository of Cashew Germplasm at ICAR-DCR, Puttur, two field gene banks, one in plains (Hogalagere, Karnataka) and another in NEH region (Lembucherra, Tripura) need to be established.	2020-2023	We have already communicated these to the centers concerned and the proposal will be prepared
2.	The new high yielding cashew hybrids (H-130, H-126) need multi-locational testing for faster promotion.	2019-2020	This is already initiated in AICRP Centers
3.	Development of Cashew Nut Shell Liquid (CNSL) free varieties for using tender cashew nuts for vegetable purpose need to be taken up at selected centers of AICRP on Cashew (Vengurla, Bapatla, Jagdalpur).	2019-2021	This is already initiated at the Vengurle center. In other centers, it will be initiated during next year.
4.	Breeding for bold nut, high shelling percentage and high yielding varieties should be initiated	2019-2022	This is also already initiated in AICRP – Cashew

RECOMMENDATIONS OF AGM – 2019

The major recommendations of the Annual Group Meeting of AICRP-Cashew held during 13th to 14th December 2019 at UHS, Bagalkote are presented below.

CROP IMPROVEMENT

General decisions/recommendations to all the centres

1. All the Centres are requested to acknowledge and recognize the role of ICAR while releasing variety/technology etc.
2. While presenting the results the mean, CV, S.Em and CD values should be included to quantify the results.
3. Different species of cashew other than *Anacardium occidentale* may be collected for further crop improvement programme.
4. In rapid polyclonal hybrid trial, minimum training and pruning should be done along with observation on precocity of flowering.
5. Season of flowering and precocity of flowering should be recorded in trial on evaluation of promising bold nut and high yielding cashew genotypes.
6. In all the experiments sex ratio should be calculated by dividing no. of bisexual flowers/ total no. of flowers.
7. Year wise incremental values for growth attributing characters should be present and correlated with weather parameters to draw suitable conclusions.
8. The GPS location should be recorded while collecting germplasm
9. Modern technology tools should be used in breeding programmes (like gamma irradiation etc.).
10. The cashew varieties should be grouped on the basis of flowering and fruiting times across the country.

CROP MANAGEMENT

General recommendations

1. The trials which have completed 10 years with 6 harvest data may be concluded.
2. While reporting the cost economics for intercropping trails, the selling price of intercrops need to be given.
3. Each centre should include weather data in their presentation.
4. Presentation and quality of slides needs to be improved.
5. The presentation should include the latest photographs.
6. All the data should be statistically analysed and statistical parameters should be included.
7. The ICAR contribution should be properly acknowledged.
8. A new trial on pruning response of varieties developed at AICRP Centres was proposed by Dr. Mohana G.S., PC Cell I/c and it was accepted by the house. The trial details will be formulated by ICAR-DCR and circulated to AICRP Centres for initiating the trial during 2020.

CROP PROTECTION

General recommendations:

1. The seasonal incidence data of current year and previous year level of incidence for the important pests to be compared and presented in the results.
2. Develop a common IPM package for pest complex in cashew.
3. Some newer molecules of insecticides to be included in the experiment.
4. The CSRB control trial, two way table and Chi-square data to be given and presented.
5. The correlation and regression analysis of seasonal incidence of pest with environmental factors to be presented.
6. The botanicals to be applied before reaching ETL instead of schedule based sprays with minimal period of interval between the sprays.
7. The regression model is to be developed based on ten season's data and to be tested for its feasibility.
8. Include botanical pesticide formulation of Ajith Paul in new botanical trial as one of the treatments.
9. Yield data should be recorded and presented in the tables.

TECHNICAL SESSION I: CROP IMPROVEMENT

Chairman	:	Dr. N. Basavaraja, Director of Research, UHS, Bagalkot
Co- Chairman	:	Dr. Vishnuvardhan, Associate Director of Research & Extension, UHS, Bagalkot
Rapporteurs	:	1. Dr. R.T Bhingarde, Jr. Cashew Breeder, RFRS, Vengurla 2. Dr. N. A. Deshmukh, Scientist, ICAR-RC for NEH Region, Umiam, Meghalaya

Center wise recommendations

Bapatla

- It is suggested to verify the data related to cashew apple weight, nut weight, shelling percentage and nut yield per tree.
- Yield data should be present year wise along with cumulative yield.
- In dwarf genotype collections, the unique characters related to its dwarfness shall be mentioned.
- In CNSL free trial, the local CNSL free germplasm should be used as a check.
- It is suggested to avoid the repetition of old results; photographs and indicate date and year.

Bhubaneswar

- It is suggested to take the help of DCR Puttur for identification of core collection using advanced techniques and further utilization in rapid polyclonal hybridization programme.
- Rejuvenate the damaged cashew germplasm block by following recommended techniques.

Darisai

- It is suggested to present results with good photographs in regards to vegetative and yield parameters with proper labels.
- Year wise date should be presented.

Hogalagere

- Photographs should have scientific scale.
- It is suggested to verify the data related to nut weight and shelling percentage.
- Analysed results of the experiment should be present by following suitable statistical tools.
- Evaluation of promising bold nut and high yielding cashew genotype trials should be laid out at the centre.

Jagdalpur

- Instead of mentioning late season variety it is suggested to mention the time/month of flowering and fruiting.
- Conclude the varietal screening trial on cashew apple RTS & Jam by evaluating post harvest qualities.

Jhargram

- Use appropriate graphs while presenting the results.

- To study the relationship of nut weight with weather parameters, consider *in-situ* soil moisture status.

Madakkathara

- The evaluation trial should be conducted upto 6 harvests before conservation of germplasm and continuation or conclusion of trials.

Paria

- Good quality photographs should be included in the presentations.
- Exploration in cashew growing area and recording of GPS locations while collecting germplasm is required.

Pilicode

- Give concrete recommendation on evaluation of promising bold nut and high yielding cashew genotype trials.
- Compile the data of dwarf germplasm (PLD-50) along with check variety and present in next AGM.
- Recommended to conclude the varietal screening trial on cashew RTS & Jam

Vengurla

- In germplasm trial, verify the data on annual nut yield and cumulative yield.
- Collect only unique germplasm and conclude the trial after six harvests if the performance of genotype is not found promising over existing varieties.
- Verify the data of H-3043 for nut size.

Vridhachalam

- Conclude the results of existing germplasm trial and start new germplasm collection and evaluation.
- Submit the report of trial on MLT-III to DCR Puttur.
- Start the rapid polyclonal hybridization programme at an earliest.
- The CNSL free germplasm trial should be maintained properly.

Tura

- Record the season of flowering and fruiting during germplasm evaluation.
- It is suggested to shift the experiments to Tripura centre, and Tura centre will conduct only trainings.

Kanabargi

- Conduct exploration for germplasm collection with clear objectives.
- Cashew nut shell liquid should be one of the important parameter in cashew trials.

Programmes allotted to different Centers of AICRP on Cashew for the year – 2020-21

Programmes		Centres
Gen.1.	Germplasm collection, conservation, evaluation, characterization and cataloguing.	Bapatla, Bhubhaneswar, Darisai, Hogalagere, Jagdalpur, Jhargram, Madakkathara, Paria, Pilicode, Vengurle, Vridhachalam, Kanabargi, Tura and Goa.
Gen.1a.	Evaluation of germplasm accessions for CNSL content	Bapatla, Vengurla and Vridhachalam
Gen. 3.	Varietal evaluation trial	
	Multilocation trial–III (earlier MLT–2002) (Planted during 2003) (Experiment above 10 years may be concluded)	Vengurla and Vridhachalam.
	Multilocation trial–V (performance of released varieties) (To be concluded after 6 harvests)	Hogalagere, Jagdalpur and Vridhachalam.
	Multilocation trial–VI (Special MLT)	Darisai, Paria, Kanabargi and Tura
Gen. 4.	Hybridization and selection	Bapatla, Bhubhaneswar, Goa, Hogalagere, Jhargram, Vengurla and Vridhachalam
	Rapid polyclonal hybrid evaluation trial	Bapatla, Bhubhaneswar, Madakkathara, Vengurla and Vridhachalam
Gen. 5.	Characterization of germplasm for cashew apple (Experiments above 10 years may be concluded)	Bapatla, Jagdalpur, Pilicode and Vridhachalam
Gen. 6	Evaluation of promising bold nut, bigger size apple types and high yielding cashew genotypes	Bapatla, Bhubaneswar, Jagdalpur, Jhargram, Kanabargi, Madakkathara, Pilicode, Goa, Vengurle and Vridhachalam

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TECHNICAL SESSION II : CROP MANAGEMENT

Chairman : Dr. D.R. Patil, ADR (MHREC), UHS, Bagalkote
Co- Chairman : Dr. Kulapathi Hipparagi, Professor & Head (Fruit Science), COH, Bagalkote
Rappouteurs : 1. Dr. Shamsudheen Mangalassery, Sr. Scientist, DCR, Puttur
2. Dr. K. Umamaheswara Rao, Jr. Horticulturist, CRS, Bapatla

Under crop management there were total 9 projects. The scientists of different centres of AICRP on Cashew presented the progress report on various crop management projects. Eleven centres presented their reports. Observation and comments on centre wise presentation is given below.

Center wise recommendations

Bapatla

- In the high density planting, early yield is the main advantage; therefore data on yield should be recorded right from the initial years.
- The data on shelling percentage need to be rechecked in organic management of cashew trial.
- Closer spacing of 4 x 4 m can be followed in scion bank.
- In slides, along with the University logo, the ICAR logo also needs to be included.

Bhubaneshwar

- For the trials on nutrient management for yield maximisation, the data should be reported with statistical parameters. The BC ratio and the percentage of TMB incidence also need to be included.
- For the trial under ultra high density planting, make uniform plot size, and consult Vengurla and Jhargram centres for guidance.
- Action needs to be initiated to allot land for planting reference varieties for DUS testing.
- The centre requested to include one intercropping trial.

Darisai

- Photographs of organic management trial are to be included in the presentation.

Hagalagare

- A crop management experiment should not be more than 10 years, with maximum of 6 harvests.
- CV should be mentioned in %.

Jagdalpur

- Appropriate action is required to avoid experimental error in high density planting. The ultra high density planting will be a viable option for Bastar region due to shallow soil.
- In water application using drip system, the treatment imposition should be carefully be done to correctly apply the water as per the treatment.

Madakkathara

- The height of cashew trees under UDP should be maintained at 1.5 m.
- In farmers field the inter crops such as vegetables are not popular. The popular intercrops may be takenup for feasibility evaluation.

Paria

- While presenting and reporting, photographs are required and statistical analysis of the data also need to be performed.

Jhargram

- Severe gummosis has been observed in trees and care needs to be taken to manage.

Vengurla

- Cost of all the materials used in organic farming trials should be included in benefit cost calculation, even if it is produced in the farm.

Vridachalam

- Follow the common treatment details suggested for all the centres in all trials.

Kanburgi

- Organic farming trails may be continued for one more year.
- In spacing trials, while calculating the cost economics, the yield per unit area basis needs to be taken.

Programmes allotted to different AICRP Cashew centers for the year – 2020-21

Programmes		Centres
Hort.1.	Nutrient management for yield maximization in cashew.	Bhubhaneswar, Hogalagere and Paria
Hort.2.	Fertilizer application in high density cashew plantations	Hogalagere
Hort.3.	Drip irrigation trials	Hogalagere and Jagdalpur
Hort.4.	High density planting - observational trials	Bapatla, Jagdalpur, Jhargram and Vridhachalam.
Hort.6.	Intercropping in cashew	Bapatla, Darisai, Jhargram, Kanabargi, Madakkathara, Paria, Vengurla and Vridhachalam
Hort.7.	Organic management of cashew	Bapatla, Bhubaneswar, Darisai, Hogalagere, Jhargram, Kanabargi, Madakkathara, Vengurla and Vridhachalam
Hort.8.	Spacing cum Fertilizer Trial	Darisai, Paria, Kanabargi and Tura.
Hort.9.	Evaluation of production potential of newly developed variety Jhargram-2 at different spacings.	Jhargram and Darisai
Hort.11.	Ultra high density cum Drip irrigation	Bapatla, Bhubaneswar, Jhargram, Madakkathara, Paria and Vengurla

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TECHNICAL SESSION III : CROP PROTECTION

Chairman : Dr. Y. K. Kotikal, Director of Extension &Professor of Entomology, UHS, Bagalkot.
Co-Chairman : Dr. Venkateshalu, P&H, Dept. of Entomology, COH, Bagalkot
Rapporteurs : 1. Dr. S.K. Mukherjee, Entomologist, CRS, Bhubaneswar
2. Dr. S. JayaPrabhavathi, Jr. Entomologist, RRS, Vridhachalam

Totally 9 number of AICRP on Cashew centres presented the results of Crop Protection and all the experiments have been successfully conducted.

CENTRE WISE RECOMMENDATIONS:

Bapatla

- The data has to be transformed appropriately, before statistical analysis.
- The transformed data has to be mentioned in the table.
- The dose of the Azadiractin (1%) may be used at 1 ml/lit.of water.
- Research activities have to be focused on major insect pests compared to minor pests.
- Correlation studies for natural enemies should be carried out.

Hogalagere

- The data has to be transformed appropriately, before statistical analysis.
- Neem oil (2%) + Pongamia oil (2%) combination trial may be included in new botanical trials.
- Correlation studies for natural enemies should be carried out.

Paria

- Recheck the efficiency of carbosulfan treatment against TMB.

Vengurla

- The tabulated results have to be presented for all the experiments.
- The natural enemies population should be recorded even if the TMB population is low.
- The CSRB incidence has to be recorded in ultra high density plantations and high density plantations.

Kanabargi

- Get the assistance of scientists of RHREC, Dharwad for conducting experiment on Crop Protection.

Programmes allotted to different AICRP Cashew centers for the year – 2019-20

Programmes		Centres
Ent.1. Chemical Control of pest complex in cashew.		
Expt 3. Evaluation of insecticides for the control of TMB and other insect pests		Bapatla, Bhubhaneswar, Hogalagere, Jagdalpur, Jhargram, Kanabargi, Madakkathara, Paria, Vengurla and Vridhachalam.
Ent. 2. Control of Cashew Stem and Root Borers		
Expt. 2. Curative trials		Bapatla, Bhubhaneswar, Hogalagere, Jagdalpur, Jhargram, Madakkathara, Vengurla and Vridhachalam.
Ent. 3.	Influence of biotic and abiotic factors on the incidence of pest complex of cashew	Bapatla, Bhubhaneswar, Hogalagere, Jagdalpur, Jhargram, Madakkathara, Paria, Vengurla, Vridhachalam and Kanabargi.
Ent. 4.	Screening of germplasm to locate tolerant / resistant types for major pests of the region	Bapatla, Bhubhaneswar, Hogalagere, Jagdalpur, Jhargram, Vengurla and Vridhachalam.

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TECHNICAL SESSION –IV : INTERACTION BETWEEN DEVELOPMENT DEPARTMENTS & RESEARCH CENTRES

Chairman	:	Dr. S.I. Hanammshetti, Retd. Professor (PMA), Vijaypur
Co-Chairman	:	Dr. Venkatesh N. Hubballi, Director (DCCD), Kochi
Rapporteur	:	1. Dr. Jalaja S. Menon, Horticulturist, CRS, Madakkathara 2. Dr. Kabitha Sethi, Jr. Horticulturist, CRS, Bhubaneshwar

The technical session (farmers - scientists interaction) started with the introductory remarks by the Chairman, Retd. Professor (PMA), Vijaypur. The session was co-chaired by Dr. Venkatesh N. Hubballi, Director (DCCD), Kochi. The general recommendation emerged out of the session are as follows:

Mr. Bala Reddy, a farmer from Bagalkot, eagerly waiting to lay out cashew plantation has raised his concerns. The forum suggested a detailed analysis of soil and has delivered varietal and management tips. Another farmer, Mr. Shivanandha Sullad cultivating 500 plants of VRI-3, has requested an elaborative recommendation for varieties. Mr. Prabhu Mugalallai, a farmer cultivating cashew in Kamatagi, is getting good yield in the Zone III.

In regard to the apprehension of farmers, the chairman, Dr. S.I. Hanamashetti commented that the University should initiate varietal evaluation trial for each zone especially Zone III (Bijapur, Bagalkot areas of Karnataka). Dr. M.G. Nayak, Director, DCR, Puttur, has suggested to take up a trial on evaluation of newly released varieties at each centre and recommendation should go to the line department.

The Director of Research, Dr. N. Basavaraj, UHS, Bagalkot, recommended that new AICRP trials allotted to Kanabargi will be laid out and evaluated at Bagalkot campus since there is lack of farm land at Kanabargi, AICRP centre.

The Director, DCCD, Dr. Venkatesh Hubballi, pointed out the need to study the varietal performance in each agro climatic zone of all the states. He has also announced that the DCCD has enough funds to support for area expansion, nursery upgradation and technology transfer. He also suggested that there is lot of scope for area expansion in Gujarat. He emphasised that the change in climate scenario has made cashew as a future crop of Karnataka. But, at many times the development support given to Karnataka State Government by DCCD is not being fully utilized. Hence, the gap should be covered with suitable interventions.

The Vice Chancellor, Dr. Indiresh K.M., has revealed that the Government of Karnataka has taken decision to expand area under cashew as it is a climate smart crop and suitable to dry tracts, especially Southern parts of Karnataka. Support to supply of quality planting material is also a major concern. Hence, the University will work in tune to the Government policy for income generation of cashew farming community.

PLENARY SESSION

Chairman : Dr. W.S. Dhillon, ADG(HS-II), ICAR, New Delhi
Co- Chairman : Dr. M.G. Nayak, Acting Director, DCR, Puttur
Rapporteur : Dr. (Mrs.). Kabita Sethi, Jr. Horticulturist, CRS, Bhubaneswar

The chairman of the session invited rapporteurs for presentation of proceedings of different technical session of the Annual Group Meeting-2019.

Following suggestions came from Chairman and Co-chairman of the session

- Chairman has opined that all the centre are requested to work hard in the coming years for reaching the expected productivity as well the production across the country.
- The chairman expressed the opinion on each of the technical sessions based on the proceedings with respect to crop improvement sessions on germplasm collections. He has emphasized to collect the genotypes based on the GPS location details including the collector name and date. With respect to hybridization related experiments the Co Chairman has emphasized to use the male parents based on good traits like bold nut, large kernel, compact trees, clustering characters etc and on the multi-location trials he informed to conclude the experiments which have more than ten years or six harvests.
- With respect to crop management experiments, Chairman has emphasized on statistically analyzed data as well as cost of cultivation of inter crops in the cashew to be included in the presentation.
- With respect to crop protection experiments chairman said that the yield data and its reduction due to various biotic stresses need to be presented, IPM modules for pest complex need to be considered in the management of biotic stresses.
- The technologies generated from the various concluded experiments should be demonstrated in the farmer's field in collaboration with the extension functionaries like KVK's of the SAU and State Department of Agriculture and Horticulture.
- The best centre award was given to Cashew Research Station, Jagdalpur, Chhattisgarh.
- The meeting ended with vote of thanks given by Dr. Mohana G. S., In-charge PC Cell, DCR, Puttur

PHOTOGRAPHS OF AGM – 2019 OF AICRP-CASHEW

Lighting of lamp by the dignitaries

Dignitaries on the dias

Release of Publications

Audience present

Best Centre Award to SGCARS, Jagdalpur

Participants of the AGM-2019

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