



CTRI News Letter

CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY-5 (A.P.)

Vol. 7 No. 3 NEWS LETTER OF CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY, Sept , 1985.

MAJOR EVENTS

The Annual Research Programme Review meetings were held during 12-14th August, 1985 at CTRI, Rajahmundry to discuss and finalise the research programmes to be implemented during 1985-86 season at the Institute and its Research Stations and Centre. Dr. T. P. Sriharan, Scientist S-3 (Entomology), ICAR, Dr. B. G. Jaisani, In-Charge Project Coordinator, AICRP on Tobacco, Scientists, Technicians, Officials of Tobacco Board and State Agricultural Department participated in the meetings. The inaugural speech highlighting the important achievements in various fields of research by CTRI during 1984-85 and about the new programmes to be taken up on priority was delivered by Dr. N. C. Gopalachari, Director followed by detailed discussions in various disciplines.

Release proposal of country cheroot tobacco variety HV 77-13 was presented by Dr. R. Lakshminarayana, Scientist S-2 (Plant Breeding), CTRI Research Station, Vedesandur, to the House in the plenary session of the Annual Research Programme Review meeting on 14th August, 1985. The variety was approved for release under the name 'Sendarapatty Special'.

Two variety release proposals (i. e.) G. 11/1 and G 8/1 (Viz. Hema and Kanchana) which were discussed in the previous year's technical programme meetings, were presented to the House once again alongwith the necessary data as desired by the house by Shri T. Sitaramachari, Officer-in-Charge, CTRI Research Station, Guntur. After a thorough discussion, the house has recommended to release the two varieties for endorsement by the AICRP workshop subject to production of bulk trials data conducted with the above varieties with 'Kanakaprabha' as control.



Inaugural speech by Dr. N. C. Gopalachari, Director.

RESEARCH HIGHLIGHTS

CTRI, Rajahmundry :

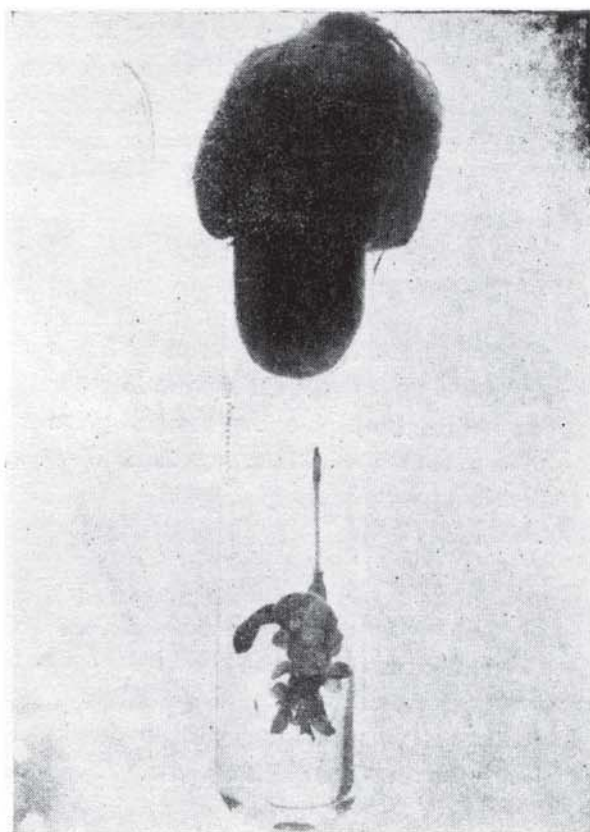
Gynogenic plant-lets of *Nicotiana nesophila* Jhnsi produced through embryo culture flowered under *in vitro*

conditions on Murashige and Skoog's (1962) medium supplemented with 3 mg-1 each of kinetin, Indole-acetic acid and Folic acid.

The variety DWFC is resistant to the leaf eating caterpillar *Spodoptera litura* and it is found to be dominant.



Sendarapatty Special (Single Plant)



In vitro flowering in a gynogenic plant-let of *Nicotiana nesophila* Jhnsi



Full-fledged field crop of Sendarapatty Special

A new virus disease on Burley 21 variety has been found in Jeddangi and Chintapalli areas. Preliminary studies indicated that this virus is sap transmitted and also by aphid vectors - *Myzus persicae* and *Aphisgossypii*. It resembles Tobacco Vein Mottle Virus. Further studies are in progress.

Seed treatment with Apron 35 SD plus two drenchings with Apron @ 0.02% was found very promising in controlling damping off. Another promising treatment is two sprays of Metalaxyl Z.280 F.W. @ 0.2% at 15 days interval

Soil application of Nematicur 5 G. @ 10 g/m² gave adequate control of Root-knot nematode, the root-knot index being 0.12 compared to 2.80 in untreated control. Next best was rabbing with paddy husk @ 8 Kg/M² where the root-knot index was 1.12.

Suckers, after topping in NLS tobacco can effectively be controlled without any adverse effect on the yield and quality of tobacco by application of Dodecanol at 4% once at the time of topping, which is cheaper than hand suckering. For Burley tobacco, 5% Dodecanol was found to be effective.

M/s. Agro Pumpsets & Implements Limited, Hyderabad has sanctioned an amount of Rs 3 lakhs for construction of 6 solar barns designed by CTRI, in the farmer's fields of East & West Godavari, Krishna and Prakasam districts on subsidy basis, in view of its highly economic nature and in reducing curing charges of flue-cured virginia tobacco substantially.

CTRI Research Station, Guntur :

Application of organic and inorganic nitrogen to supply 50% each of the total 100 Kg. N/ha has recorded highest cured leaf yield in HDBRG tobacco.

Application of FYM @ 15 t/ha or groundnut cake to supply 60 Kg N/ha or FYM @ 7.5 t/ha plus 30 Kg. N/ha as groundnut cake in addition to the inorganic nitrogen application at 45 Kg/ha are found beneficial for *Natu* tobacco growing areas of Guntur district.

CTRI Research Station, Kandukur :

Out of eleven mosaic resistant varieties/lines studied alongwith CTRI Special as control, variety Jayasri (MR), L-3734, L-2691-3, L-3686 and Godavari Special were found suitable for SLS conditions

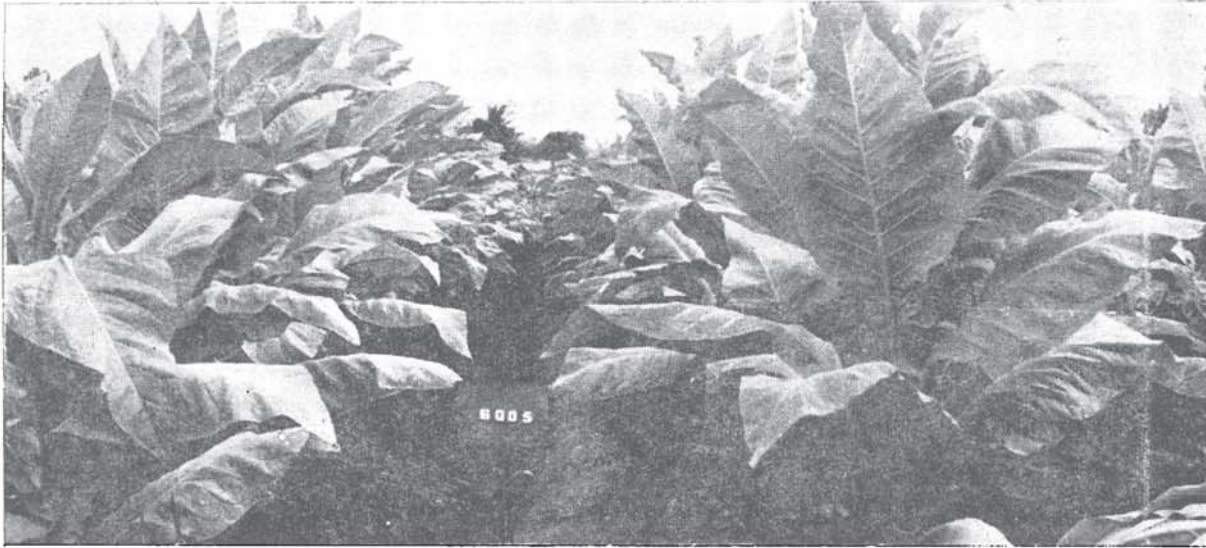
CTRI Research Station, Veda sandur :

For Cigar-filler tobacco, application of 37.5 Kg. N, 75 Kg. K₂O and 25 Kg MgO was found advisable for improvement of both yield and quality as evidenced by cigar burn.

CTRI Research Station, Hunsur :

The newly evolved line FCH 6005 besides exhibiting superior characters of higher yield of 1600-1800 Kg/ha

of light bodied orange leaf is also showing tolerance to black shank and root knot. Being a light cast line it has easy curability. Increased leaf length greater than 40 cm. and lesser leaf spot intensity contributed to higher grade out-turn in this line. Location trials are being conducted in different areas.



Crop of improved line FCH 6005

CTRI Research Station, Pusa :

Highest yield of total cured and first grade leaf was obtained when irrigation in chewing tobacco of Bihar was given at 0.6 K. value.

Supplemental applications of Boron are essential for the tobacco grown in Dinahata region. Lines of *N. rustica* tobacco appear to be more sensitive to deficiency of this nutrient.

LAB-TO-LAND PROGRAMME :

CTRI Research Station, Dinahata :

Mulching with water hyacinth in Jati tobacco gave the highest total cured leaf yield as compared to the rest of the treatments and yield was lowest when soil was not covered with any mulching material. The variety 'Chama' was significantly superior to 'Podali'. Application of 100 : 50 : 50 Kg. NPK respectively per hectare was found better for quality.

A total number of 900 farm families have been allotted to CTRI under the III Phase of the programmes. Distribution of farm families are as follows :

CTRI, Rajahmundry	...	150
KVK of CTRI, Rajahmundry	...	150
CTRI Research Station, Guntur	...	100

CTRI Research Station, Veda sandur	...	100	Regional Research Laboratory, Hyderabad, from 5-7th August, 1985 and presented a paper entitled "Cytology & Genetics of Cellular Enation mutant in tobacco".
CTRI Research Station, Hunsur	...	100	
CTRI Research Station, Pusa	...	200	
CTRI Research Station, Din hata	...	100	

Bench mark survey for selection of the farm families has been completed in most of the locations. Necessary critical inputs worth not exceeding the limit of Rs. 500/- per year per family are being distributed and adoption of the improved technology in all the centres is reported to be in good progress.

Dr. N. K. Sanghi, Zonal Coordinator (LLP) Zone No 5, Hyderabad has visited the Institute on 23-24th August, 1985 and held discussions with the respective Team leaders of the Lab to Land Programme and inspected the villages in tribal agency tract and villages covered under Lab to Land Programme of the Main Institute and KVK Centres.

CONFERENCES & SYMPOSIA :

Dr. (Mrs.) U. Subhashini, Scientist S-2, Division of Genetics and Plant Breeding, CTRI, Rajahmundry, participated in the "National Symposium on Recent Advances in Developmental Morphology of Crop Plants" held at Andhra University, Waltair during July 3-5, 1985 and presented a paper entitled 'Tissue Culture for Morphogenesis in *Nicotiana* hybrid embryos.

Dr. S. Veerabhadra Rao, Scientist S-2 (Genetics & Cytogenetics), CTRI Research Station, Hunsur has attended the International Symposium on "Cytogenetic Research Achievements and Relevance" organised by the Indian Society of Genetics and Plant Breeding at the

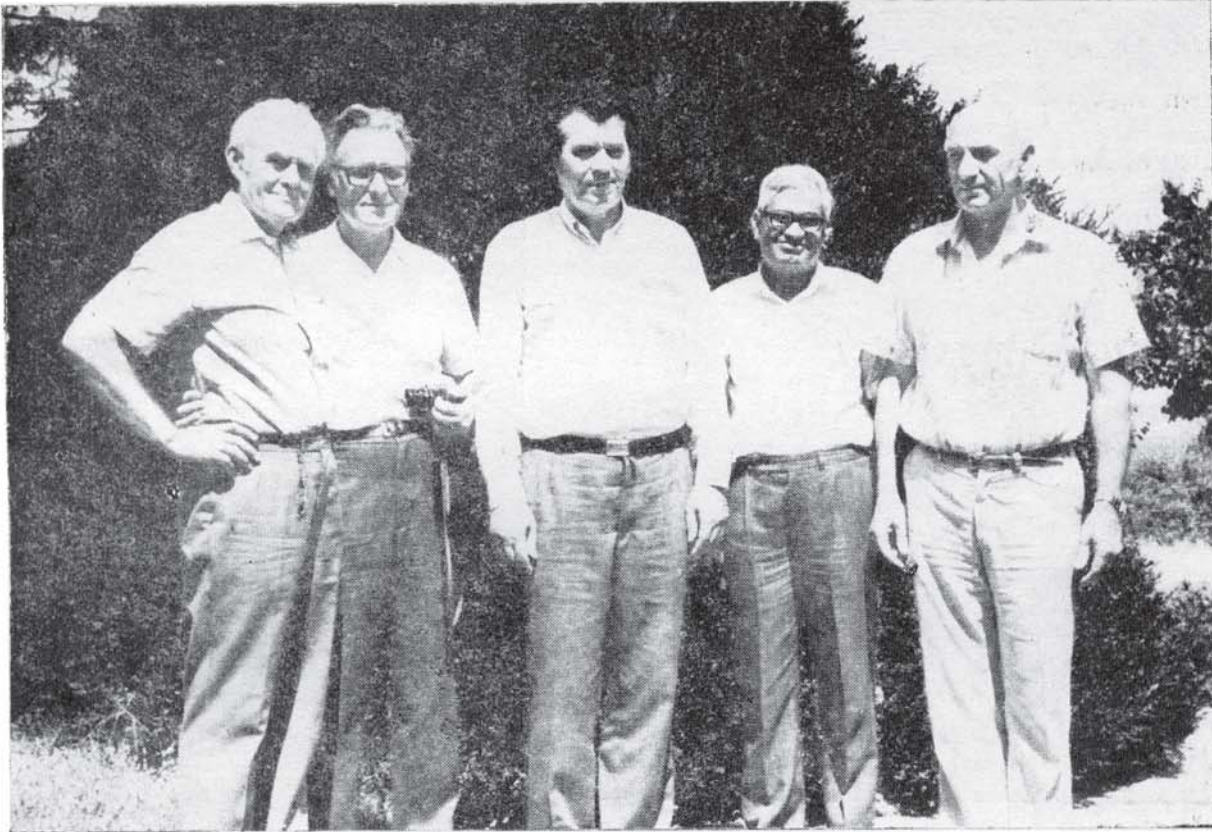
Sri V. V. Ramana Rao, Scientist S-2 (Plant Breeding), Division of Genetics & Plant Breeding, CTRI, Rajahmundry has attended the XVI Andhra Pradesh State Seed sub-committee meeting held at Hyderabad on 26th August, 1985.

Dr. S. N. Tripathi, Officer-in-Charge, CTRI Research Station, Din hata, has attended the 16th All India Tobacco Development Council meeting held at Hyderabad on 3-4th September, 1985.

Dr. S. N. Tripathi, Officer-in-Charge, and Sri B. L. Singh, Scientist S-1, CTRI Research Station, Din hata, attended the training camp organised by the State Department of Agriculture, West Bengal and addressed the farmers on improved methods of tobacco cultivation on 13th and 21st September, 1985 at Burirhat and Sitai respectively.

Sri A. B. Sastry, Scientist S-3 (Plant Breeding) Division of Genetics and Plant Breeding CTRI, Rajahmundry delivered a seminar talk on his visit to Bulgaria on a study tour covering general aspects of tobacco at the Institute on 16th September, 1985.

Dr. S. N. Tripathi, Officer-in-Charge, CTRI Research Station, Din hata has attended a crop seminar on 'Production of Potato, Cabbage, Cauliflower and Tobacco organised by "Indo-British Fertilizer Education Project" on



Sri A. B. Sastry is seen with Dr. Z. Gorgiev, Director, CTRI, Plovdiv (Extreme right) and other scientists of the Institute during the former's visit to Bulgaria.

30th September, 1985 and gave a talk on 'Recent advances in production technology of tobacco'.

Sri T. Sitaramachari, Officer-in-Charge and Sri U. Umamaheswara Rao, Scientist S-2, CTRI Research Station, Guntur have participated in the Zonal Research Advisory Council meeting on Rabi cropping sponsored by the Andhra Pradesh Agricultural University, Lam, Guntur.

Dr. Dilip Monga, Scientist S-1 (Plant Pathology) CTRI Research Station, Dinhat, underwent two months training course at NAARM, Hyderabad.

Trainees & Visitors :

Sri Y. V. Suryanarayana, Asst. Librarian, CTRI, Rajahmundry trained recently at DRTC, Bangalore is developing a software package of 'Bibliographic data base of tobacco literature and its retrieval on TDC-316 computer system' in this Institute. The package consists of software for i) creation of bibliographic data base of tobacco literature (i. e.) articles on tobacco appeared in various journals, ii) creation of inverted files for journal caden, author names and descriptors etc. and iii) searching the data base with queries consisting of combination of different types of data elements.

CTRI Research Station, Hunsur :

Training course on production technology of flue-cured Virginia tobacco in Karnataka was concluded. The

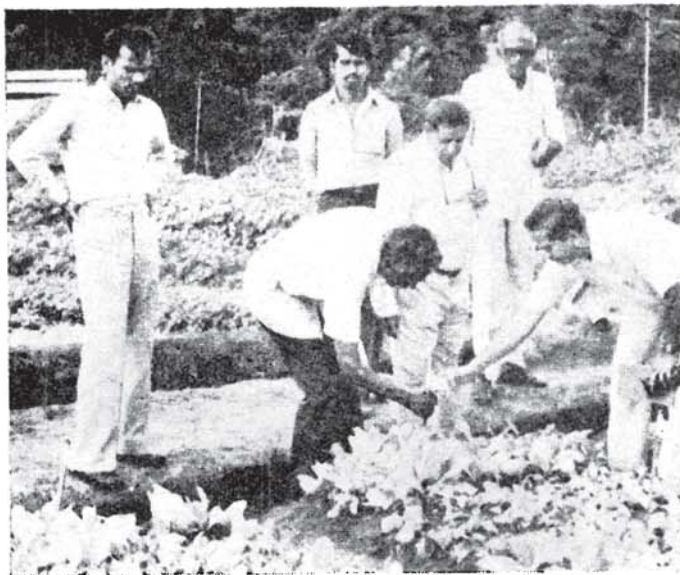
second phase on harvest and curing was conducted from 29th July to 3rd August, 1985 and the third phase on plant position grading from 22-29th August, 1985. In addition to the 24 Auction Grading Inspectors who participated in the first phase conducted earlier, the Tobacco Board sponsored 9 additional participants for the II & III Phases.



Practical session of the III Phase on plant position grading



Sri B.N. Betkeru, IAS., Director (Auctions) Tobacco Board distributing certificates in the valedictory function to the trainees on completion of Training Course on production technology of flue-cured Virginia tobacco.



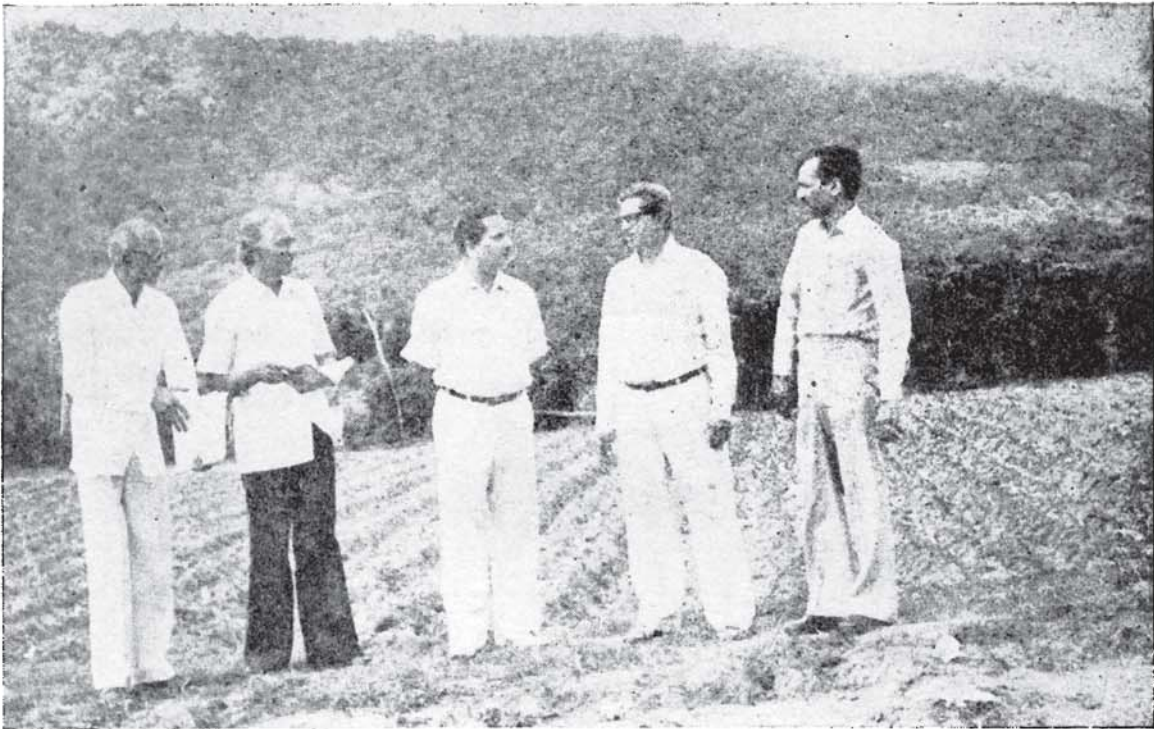
Dr. M. V. Rao, Deputy Director General (CS), ICAR examining the nematode infected tobacco seedlings at White Burley tobacco Research Centre Chintapalli

Visitors :

Dr. Chandrasekhar Kurdikere, Agronomist, Dr. Nanje Gowda, Nematologist and Sri Gajanan, Soil Scientist from AICRP (T) Centre, Agricultural Research Station UAS, Shimoga.

CTRI Research Station, Dinhat :

Sri B. C. Biswas, Deputy Director of Agriculture, Commercial Crop, Calcutta and Sri K. K. Dey, Agricultural Development Officer, West Bengal.



Dr. M. V. Rao, Deputy Director General (CS) held discussions with Dr. N. C. Gopalachari, Director and other Officials at Chintapalli Research Centre.



Distribution of fertilizers to the Lab-to-Land farmers of Rajupakala (Visakhapatnam District) by Dr. N. C. Gopalachari, Director.

APPOINTMENTS

The following scientists of this Institute and its stations have been appointed to the posts shown against each on five yearly assessment :

Sri K. D Singh, S-2, to S-3 w.e.f. 1-1-84.

Sri S. Sitaramayya, S-1, to S-2 w.e.f. 1-1-84.

Dr. N. Krishnananda, S-1, to S-2 w.e.f. 1-7-84.

Sri G. S. B. Prasannasimha Rao, S-1, to S-2 w.e.f. 1-1-84.

Dr. R. Lakshminarayana, S-1, to S-2 w.e.f. 1-1-84.

Sri Md. Ilyas Ahmed, S-1, to S-2 w.e.f. 1-7-84.

Dr. M. M. Shenoi, S-1, to S-2 w.e.f. 1-7-84.

Sri T. Sitaramachari, S-1, to S-2 w.e.f. 1-7-82.

Sri N. S. Murty (Stat.) S-1, to S-2 w.e.f. 1-7-82.

Dr. Ch. Sreerama Murthy, S-1, to S-2 w.e.f. 1-7-82.

Sri A. S. Krishnamurthy, 'S' to S-1 w.e.f. 1-7-81.

Sri R. Subba Rao, 'S' to S-1 w.e.f. 1-7-81.

Sri C. V. Raghavaiah, S-1, to S-2 w.e.f. 1-7-83.

Dr. Ramendra Sinha, Scientist Gr. S-3 and Officer-in-Charge, CTRI Research Station, Pusa has been granted the scale of Rs. 1800-2250 on five yearly assessment, as personal to him, w. e. f. 1-1-1984.

The following technicians have got merit promotions on assessment as shown against each :

Sri I. Jagadish Chandra, T-II-3 to T-4 w. e. f. 1-1-85

Sri A. Haranath, T-II-3 to T-4 w. e. f. 1-7-85

Sri M. Sathiraju, T-2 to T-I-3 w.e.f. 1-1-85.

Sri T. K. Mohammed Ibrahim, T-2 to T-I-3 w. e. f. 1-1-85

Sri P. K. Ghosh, T-2 to T-I-3 w.e.f. 1-1-85.

Sri M. Venkatarao, T-1 (Driver) to T-2 w.e.f. 1-1-85

Sri V. Raja, T-1 (Tester) to T-2 w.e.f. 1-7-85

Sri Md. Bajuddin, T-1, to T-2 w. e. f. 1-1-85.

Sri G. Annamachari, Supdt. (A&A) of this Institute, has been appointed as Asst. Accounts Officer, at CPCRI Regl. Station, Vital w. e. f. 22-8-85 (2) Sri K. S. Michayelu, S. S. Gr. II has been appointed as Jr. Clerk w. e. f. 2-8-85 (3) Smt. K. Savitri, has been appointed as Jr. Clerk w. e. f. 12-8-1985, on compassionate grounds. (4) Kum. Y. Ramabai, has been appointed as Tech. T-II-3 w. e. f. 19-8-85. (5) Sri P. V. V. V.

Prasad has been appointed as S. S. Gr. I w. e. f. 4-9-85, on compassionate grounds.

The following supporting staff have been promoted to the post (s) as shown against each :

Sri L. K Subbe Gowda, S. S. Gr. I to Gr. I w. e. f. 5-7-85.

Sri K Lakshminarayana, S. S. Gr. I to Gr. II w. e. f. 4-7-85.

Sri B. Appa Rao, S. S. Gr. I to Gr. II w. e. f. 2-7-85.

Sri G Adinarayana, S. S. Gr. I to Gr. II w. e. f. 2-7-85.

Sri B. Lovaraju S. S. Gr. I to Gr. II w. e. f. 2-7-85.

Sri P. S. S. Prakasarao S. S. Gr. I to Gr. II w. e. f. 2-7-85.

G. Vasudevamurthy, S. S. Gr. I to Gr. II w. e. f. 24-9-85.

Srr. Yeluri Subrahmanyam, S. S. Gr. I to Gr. II w. e. f. 23-9-85.

Sri R. L. Ramachandra Rao, S. S. Gr. I to Gr. II w. e. f. 24-9-85.

Transfers :

Sri Chironjilal, Sr. Administrative Officer, has been transferred from CTRI, Rajahmundry to IARI, New Delhi

and has been relieved of his duties on the AN of 16-8-85 at this Institute. (2) Sri S. V. Ramana, Sr. Clerk has been transferred from CTRI Research Station, Veda sandur to CTRI, Rajahmundry w. e. f. 30th September, 1985 FN.

Retirements :

Sri A. Narasimhamurthy, Superintendent stands retired from Council's service voluntarily w. e. f. 30th September, 1985.

Sri Sannasetty, S. S. Gr. II, CTRI Research Station, Hunsur, stands retired from Council's service on invalidation w. e. f. 9-8-1985

PAPERS PUBLISHED

Briquettes from organic wastes as fuel for curing Virginia tobacco.

Gopalachari, N. C.

Changing Villages 7 (3), 1985.

Grade index for flue cured Virginia tobacco.

Gopalachari, N. C.

Indian Tob. J 16 (2) : 13, July-Sept. 1984.

LATEST C. T. R. I. PUBLICATION

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