

# G. T. R. I. NEWS LETTER

Vol. 4 No. 4 NEWS LETTER OF CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY, DECEMBER, 1982

### RESEARCH HIGHLIGHTS

CTRI, Rajahmundry.

In light soils, aromatic tobacco variety Smyrna at a plant density of 2,00,000 plants/ha when planted during the first week of September resulted in the highest cured leaf yield of 1625 kg/ha.

Apart from CTRI SpI (MR) and Godavari SpI already released, mosaic (TMV) resistance has been incorporated into commercial varieties like Jayasri, 16/103, Sp Cross

and FCV Spl in addition to several other breeding lines. Field evaluation tests indicated that the mosaic resistant versions of Jayasri, 16/103 and Sp Cross are good yielders with absolute resistance.

An electrophoresis technique was developed and adopted for screening both male and female lines and the hybrids obtained from them. It was found that Jayasri and HR 62-9, when used as males showed prepotency because of genetic diversity. When Speight G-28 was used with Mc Nair-12, hybrid vigour is not achieved because of less diversity.

CTRI Research Station, Guntur.

Improved Natu tobacco lines II-435 and II-426 have shown tremendous promise over local varieties at all the locations of the trial.

Incidence of caterpillars (Spodoptera litura) during the month of November was very alarming in farmers' fields in Guntur district, but they could be effectively controlled by the methods of integrated approach

Dr. C. Dwarakanath, Chief Chemist, M/S Golden Tobacco Co. Ltd., Guntur, highly commended the pioneering efforts of the Institute in identifying Chintapalli area for high quality Burley tobacco production, His observations are reported here:

Chintapally - A potential tract for Burley production.

Or. C. Dwarakanath, Chief Chemist, M/S Golden Tobacco Co., Guntur,

The vast stretch of area at an elevation of about 2000 ft above mean sea level extending from Lambasingi to Paderu (Chintapally surroundings in Vizag district) offers potential for tobacco cultivation, particularly of air-cured varieties as raind fall is much assured, soil well drained, redloamy soil with optimum levels of organic carbon, available phosphorus and potash. The ideal weather and soil conditions can be taken advantage of for the production of tobaccos with very good quality and vields.

The research activities of C.T.R.I. in their Research Centre established there recently have given out clues that the air-cured tobaccos can be grown with success with all the desired quality parameters imbibed. Taking advantage of the research information, M/S Golden Tobacco Co. Ltd., with the advice and guidance of Dr. N. C. Gopalachari, Director and Sri K. Balagopal, Agronomist, have put through their exploratory trial in 1981-82 for Olor-10, a cigar filler variety of Puritorican origin which proved that this is ideally suited for the agro-climatic conditions of the region, in addition to providing a scope for improving the socio-economic prosperity of the region in due course of time.

The yields in the preliminary trial were normal with improved quality factors particularly in aroma and flavour, with the double fermentation technique adopted. The variety had attracted attention of the Delegation from the West Germany which visited India recently. This perhaps would bring the tobacco produced in line with the other tobaccos exported or likely to be exported in due course of time.

Having met with the initial success and favourable comments, M/s Golden Tobacco Co. Ltd., have pioneered in trying in addition to air-cured varieties, verieties in FCV with the collaboration of C. T, R. I. This being tried for the first time in this region, efforts are underway to assess the suitability and production of bright tobaccos. The early plantation has been excellent and certain varieties have exhibited good potential and promise, yields being high, they are being put to further tests and assessments,

### LAB-TO-LAND PROGRAMME

# C.T.R.I, Rajahmundry.

Farmers' Day Celebrations at Vattigedda-

The transfer of technology relating to management of White Burley tobacco nursery was done in the tribal village of Vattigedda of East Godavari district. The tribal participants consisting of 8 women and 2 men raised the nursery in an area of 0.75 ac. The Head of the Division of Agronomy of CTRI, Rajahmundry has distributed the required fertilizers and insecticides besides rendering technical advise for bringing up the nursery successfully. From the above said 0.75 acres of nursery seedlings sufficient to plant 125 acres of main field were obtained, Inspite of weather vagaries, the attention paid by the participants of the programme and the timely advises and supply of inputs have all culminated in a total success of raising the nursery. A total amount of Rs. 11,050 was realised. At a function arranged on 10th December, 1982 the Director, CTRI has handed over a cheque for the above amount and distributed the non-crop inputs like crowbars, mummaties and goats.

Besides the above, 50 farm families have been selected in the same village for transfer of technology relating to White Burely tobacco cultivation and supply of necessary inputs was also done,



Dr. N. C. Gopalachari, Director distributing crowbars, goats to the tribals of Vattigedda during Farmers' Day Celebration on 10th December, 1982

Three tribal farmers from Atchiayyapalem village under Lab to Land programme were deputed to undergo training for three weeks in 'Bee-keeping' at the Central

Beekeeping Observatory Station, Vijarai, West Godavari district of Andhra Pradesh.



Healthy and vigorous seedlings produced by the tribals at Atchayyapalem in an extent of one acre nursery under the II Phase of Lab to Land Programme.



Mrs. Ram Sukumari Devi, M. L. A. of Bihar appreciated the technique of Tobacco + Sugarcane developed by the CTRI Research Station, Pusa during her visit on 25th November, '82,



Delegates of World Bank Project, Tanzania discussing crop performance with Scientists of CTRI Research Station, Hunsur.

# **CONFERENCES & SYMPOSIA**

- Dr. N. C. Gopalachari, Director gave a lecture on 'Solar energy for curing' Virginia tobacco' in the symposium on 'Energy Conservation' under the auspicies of UGC (FIP) organised by the Chemistry Dept. of Smt. K. R. College for women, Rajahmundry on 11th November. '82. The Director has explained with the help of slides, the salient features about the Solar barn which was developed by him and presented data showing its efficiency and economy in curing. He also spoke on the various applications of solar energy in agriculture and industry.
- Dr. K. Nagarajan, Scientist S-3 and Head, Division of Plant Pathology attended the following symposia.
- (1). Role of Potash in crop resistance against pests and diseases held at Faculty of Agriculture, Annamalai University, Annamalainagar, Tamil Nadu on 7th & 8th October, 1982.
- (2) Symposium on diseases of Plantation Crops conducted by the Indian Phytopathological Society at Manasa Gangothri, Mysore University, Mysore on December 27-29, 1982.
- Dr. D. V. Subbarao, Scientist S-2 and Head Agricultural Statistics attended the Sixth conference of Agricultural Research Statisticians at New Delhi from 6th to 8th October, 1982,
- Dr. N. C. Gopalachari, Director has attended the meeting of the Regional Committee No. 5 held at Bhubaneswar, Orissa on 24th & 25th November, 1982.
- Dr. N. C. Gopalachari, Director has attended District Rabi 82-83 Conference on 8th November, 1982 at Samalkot organised by the Jt. Director of Agriculture, Kakinada.
- Dr. N. Krishnananda, Scientist S-1 (Entomology) has participated in the International Conference on Warehousing from 3rd to 6th November, 1982 at Vignan Bhavan, New Delhi.

### TRAINEES & VISITORS

CTRI, Rajahmundry.

A batch of 20 refresher trainees of Village Development Officers accompanied by Sri N. Krishnamurty from VDO's Training Centre, Samalkot.

Six officer trainees of M/S ITC Ltd , (ILTD Division) on 'Tobacco.Storage & Pest Control'.

CTRI Research Station, Guntur.

Shri S. S. Mtoto and Shri S. Kapombe, T. C. C.Ltd., Tanzania, East Africa.

Shri Salahuddin Ahmed, General Manager, Bangladesh Leaf Tobacco Company, Dacca-2.

Shri A. K. M. Shafi, Assistant Manager, Bangladesh Leaf Tobacco Company, Dacca-2.

Five Agmark Officers accompanied by Senior Marketing Officer, Guntur.

CTRI Research Station : PUSA

- Dr. Maharaj Singh, D. D. G. (Edn), I. C.A.R., New Delhi, visited the CTRI Research Station, Pusa and recorded the following remarks in the Visitors Book.
- "The Laboratories are well equipped and maintained. The field photos and premises look good and well kept; staff appears to be enthuaistic and well informed. On the whole one gets an impression of a dynamic and coheaive research development team".

### **HONOURS & AWARDS**

Dr. N. C. Gopalachari, Director was honoured with the highly prestigious National level title "Samsad National Professor (India)" by the Director-General, Viswa, Unnyayan Samsad, West Bengal., an organisation registered and recognised by the west Bengal Government and World Parliament.

# **APPOINTMENTS & TRANSFERS**

Sri Vijayakumar Dobhal, has been appointed as Scientist S-1 (Plant Breeding) at CTRI Research Station, Dinhata w. e. f. 30-10-1982.

- Sri V, Narayanacharyulu has been appointed as Jr. Clerk at CTRI, Rajahmundry w. e. f. 30-10-1982.
- Smt. P. V. S. Bharati has been appointed as Jr. Clerk at CTRI, Rajahmundry purely on provisional basis w. e. f. 10-11-1982.
- Sri K. G. Subedar, Technician T-1-3, CTRI, Rajahmundry has been promoted to the post of Tech T-II-3 w. e. f. 10-12-82.
- Sri S. Krishna Murty. Tech. T-I-3, CTRI Research Centre, Devarapalli has been promoted to the post of Tech, T-II-3 w. e. f. 10-12-82.
- Sri S. Arulswamy. Tech. T-I-3, CTRI Research Station, Vedasandur has been promoted to the post of Tech. T-II-3 w. e. f. 10-12-82.
- Sri D. N. Ray, Jr. Clerk, CTRI Research Station, Dinhata has been promoted as Sr. Clerk w. e. f. 5-10-82.
- Sri (S. A. Rahiman, S. S. Gr. II, CTRI, Rajahmundry has been promoted as S. S. Gr. III w. e. f. 20-10-82.

Sri Das Gowda, S. S. Gr. I, CTRI Research Station, Vedasandur has been promoted as S. S. Gr. II w. e. f. 6-12-82.

- Kumari S, Tamilrasi, S. S. Gr. I, CTRI Research Station, Vedasandur was relieved on 30-11-82 to join in the post of Jr. clerk S. C. B. R, I, Coimbatore.
- Sri C. P. Thomas, Administrative Officer, CTRI, Rajahmundry has been promoted as Sr. Administrative Officer, at C. M. F. R. I., Cochin and relieved of his duties at the Institute on the 27–12–82 A. N
- Sri D. S. Sastry. Asst. Administrative Officer, CTRI Research Station, Kandukur has been promoted as Administrative Officer at C. I. C. R., Nagapur and relieved of his duties at Kandukur on the 28-12-82 A. N.

# **RETIREMENTS & RESIGANTIONS**

Sri A. K. Mukherjee, Tech. T-II-3. CTRI Research Station, Dinhata has resigned from Council's service w. e. f. 1-12-82 A. N.

Sri Annamalai, S. S. Gr. II, CTRI Research Station, Vedasandur retired from Council's service w. e. f. 31-12-82.

Sri Ch. V. Satyanarayana, Jr. Clerk, CTRI, Rajahmundry has resigned from Council's service w. e. f. 4-10-82.

# PAPERS PUBLISHED

Solanesol from tobacco - A review,

B. V. Kameswara Rao, P. S. N. Murthy and N. C. Gopalachari

(In cultivation and utilization of medicinal plants, Edited by ATAL, CK and KAPUR, BM. p-375-90, Jammu-Tawi, RR Labs, 1982. 877p).

Note on reactions of Nicotiana species and varieties to important diseases in India.

K. Nagarajan and T. S. N. Reddy

Indian J. Agric. Science 52 (2): 791-5, Nov. 1982.

 Pheromonal control of insect pests of agriculture in India - Problems and prospects.

Rao, K. N.

Pesticides 16 (9): 1-4, Sept. 1982.

 SERRICORNIN - A synthetic sex pheromone of cigarette beetle (Lasioderma serricorne F) as a potential tool for monitoring and control of the pest in tobacco godowns.

Krishnanda, N.

Paper presented at International Warehousing Conference, New Delhi, Nov. 3-6-1982.
Edited and Compiled by SRI A. HARANATH