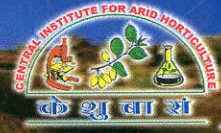




CIAH NEWSLETTER



ICAR-Central Institute for Arid Horticulture

Beechwal, Bikaner-334 006, Rajasthan

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Potato in Non-traditional Areas of Rajasthan



Sh. Arjun Ram Meghwal, Hon'ble Union Minister of State for Water Resources, River Development & Ganga Rejuvenation and Parliamentary Affairs, GOI, distributing potato seeds to farmers on 17.12.2017 at ICAR-CIAH, Bikaner.

From the Director's Desk.....



It is a matter of great pleasure to bring out the Institute's Newsletter and to present significant research achievements, activities and farmers' programmes undertaken by the Institute during July - December, 2017. To achieve the nutritional and income security and agro-ecological balance in hot arid and semi-arid regions of the country, the horticultural development in these areas has vital importance. To meet the needs of ever-increasing population and demand of raw materials for the horticulture-based industries are the major challenges. To mitigate these challenges, it is the need of the hour to develop novel technologies to produce the quality fruits and vegetables under the harsh climatic conditions of the hot arid and semi-arid regions. To achieve above goal, the ICAR-Central Institute for Arid Horticulture, Bikaner (Rajasthan) is fully dedicated since its inception. The Institute is working hard to develop needful horticultural crop production technologies for low water input, high stress and drought conditions. The introduction of potential crops/ varieties from iso-climatic regions, promising package of practices for commercial production and value addition of horticultural crops as well as production of quality seeds and planting material for farmers, etc. were some of the efforts of the Institute which are narrated in this newsletter in brief.

ICAR-CIAH Exhibition: Reaching to Farmers



Sh. Gajendra Singh Shekhawat, Hon'ble Minister of State, Ministry of Agriculture and Farmers' Welfare, GOI, visited ICAR-CIAH stall during National Fair at ICAR-CSWRI, Avikanagar on 08.12.2017. Prof. P. L. Saroj, Director, ICAR-CIAH, Bikaner is explaining about farmers' friendly technologies.

**(P. L. Saroj)
Director**

Research spectrum

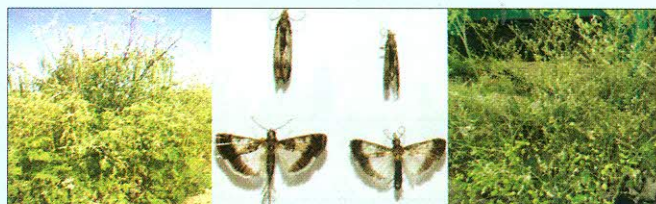
Evaluation of watermelon genotypes: The segregating material of watermelon introduced from United States were evaluated and purified. Among the introduced lines, AHW/BR-40 has been selected from EC-829545 for yield and total soluble solid content. The average fruit weight of AHW/BR-40 varied from 2.7-3.2 kg having green rind (1.2-1.5 cm thick) with dark narrow stripes. This line produced round shaped and red fleshed fruits having 14.2-18.3 cm diameter. It took 70-75 days to first harvesting from date of sowing and produced 4-5 fruits/plant having 11.8-13% TSS. Identified and homogenized a yellow fleshed line having non-lobed leaves (YF 5-2-6). It produced round fruits weighing 2.5-3 kg, rind thickness (1.0-1.3 cm), TSS (9-10%) and bear 3-4 fruits/plant. (**Dr. B.R. Choudhary**)



AHW/BR-40

YF 5-2-6

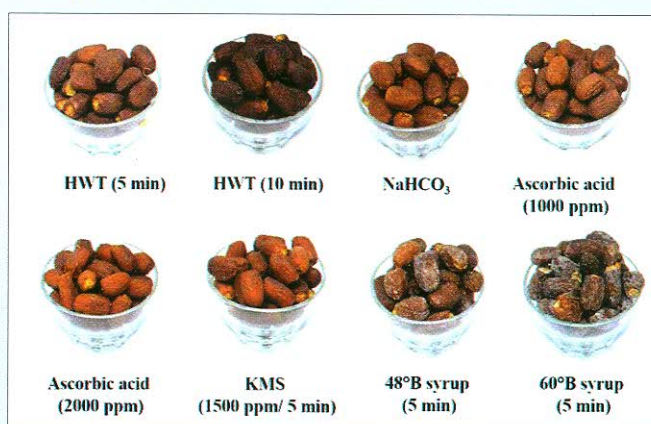
Incidence of leaf eating caterpillar, *Noorda blitealis* (Pyraustidae: Lepidoptera) in drumstick: Drumstick, *Moringa oleifera* is a famous vegetable crop used in southern Indian dishes due to its unique taste and medicinal properties. It has high remunerative commercial value and becoming famous among the farmers of Northern India too. During the study, the leaf eating caterpillar was observed on drumstick in hot arid region of north-western India (Thar Desert) and identified as *Noorda blitealis*. Previously, it is a sporadically serious pest of drumstick plant, especially in South India but recently, it became a serious pest of drumstick in North India also. Females laid creamy, oval eggs on leaves, which hatched in 2-3 days. The eggs were oval in shape and almost creamy in colour. They hatched tiny caterpillars, less than 3 mm in length. The body lengths of all instars larvae ranged between 3.5-16.6 mm. The young larvae fed voraciously on the foliage and strip the branches completely. Grown-up larvae pupate in the soil. Pupae were brownish and became darker after about four days, when adults were fully formed. The moths were medium sized, having forewings with rectangular, apex with erect outer margin and uniformly dark in colour with small white streak at the inner area of base.



The larvae fed on leaflets in a thin silken web on the lower surface. The leaves appear papery and get dried. If, left untreated, the whole tree is defoliated. Severe infestation occurs on new flush of the crop during April-May and August-October (**Dr. S. M. Haldhar**).

Reduction in browning during preparation and storage of dry dates (*chhuhara*)

A protocol was standardized for preparation of dry dates (*chhuhara*) from the *doka* staged date fruits of cultivar Medjool. However, the finished product appeared darker due to occurrence of various enzymatic and non-enzymatic browning reactions. Hence, an experiment was conducted to reduce the browning of the dry dates during preparation as well as storage. The different processing treatments imposed for reducing the browning reactions include addition of 2% sodium bicarbonate (NaHCO_3), Potassium Metabisulfate (KMS) @ 1500 ppm, ascorbic acid (1000, 2000 ppm), and sugar syrup (50, 60 °B). Among all the treatments, addition of ascorbic acid (1000 ppm) during hot water dip or post blanching dip with KMS (1500 ppm) for 5 minutes was found to be effective in reducing the browning reactions of dried dates (**Dr SVR Reddy, Dr R.S .Singh, Dr R.K. Meena, Dr S.R. Meena**).



Effect of environmental factors on development of mosaic disease in ridge gourd :

Seven ridge gourd genotypes (Thar Karni, Bikaner Local, AHRG-28, AHRG-54, AHRG-57, AHRG-67 and AHRG-69) were sown on 24th July, 2017 at experimental field during rainy season. Mosaic disease was noticed in ridge gourd to varying extent depending on genotypes and climatic conditions. During this season, mosaic disease was first appeared on 34th standard week of 2017 in the field. Weekly observations were taken on mosaic disease (per cent disease index) and meteorological data. It was found that range of minimum PDI (5.3-9.7%) of mosaic disease was at an average temperature (26.0-38.0°C), av. RH (52-73%) and av. rainfall (59.8 mm) on 34th standard week while maximum PDI (15.1-38.0%) was found at an average temperature (19-39°C), av. RH (16-51%) and rainfall (0.0 mm) on 41th standard week of 2017 in genotypes of the ridge gourd under study (**Dr. S. K. Maheshwari**).

Studies on food value and nutritional yield of horticultural crop-plants of the desert :

To understand the potential food value and nutritional yield of horticultural crop plants (native vegetable) of the desert grown under khejri based production system, a systematic studies was done at their marketable stages. The marketable stages tender quality fresh produces were analysed and revealed that moisture content (%) was higher in lasoda fruits (89.8) followed by ker fruits (77.81), khejri sangri (76.41), kumat

seed (64.0), khimp pods (62.70) and flower buds of phog (49.26). At marketable stages, the dry matter content (%) was higher in phog (50.74) followed by khimp (37.30), kumat (36.00), sangri (23.59), ker (22.19) and lasoda (10.2). The produces containing maximum carbohydrate(%) were phog (57.41) followed

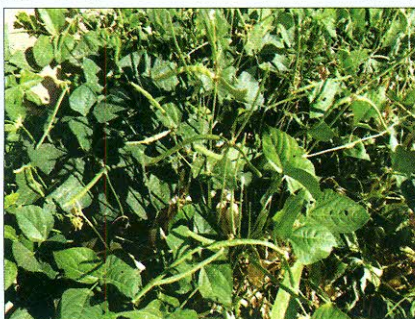


PHOGALA : Dry buds of flowers of phog plant

by sangri (52.6), ker (49.8), lasoda (48.8), kumat (30.4) and khimp (20.83). The percent protein content was highest in kumat (32.2) followed by phog (18.4), sangri (18.2), ker (13.2), lasoda (8.6) and khimp (2.18). The total fat content (%) was maximum in kumat (8.3) followed by lasoda (5.9), phog (5.81), ker (5.2), khimp (2.84) and sangri (1.4). The percent crude fibre content was maximum in khimp (25.18) followed by lasoda (25.1), sangri (22.7), phog (15.75), ker (14.5) and kumat (12.6). The calcium content (%) was higher in kumat (3.78) followed by sangri (3.7), khimp (2.56), ker (2.44), lasoda (2.26) and phog (2.11). Phosphorus content (%) was highest in khimp (1.31) followed by kumat (0.43), phog (0.42), ker (0.32), sangri (0.30) and lasoda (0.23). The amount of total ash (%) was higher in ker (6.10) followed by sangri (4.80), khimp (4.32), kumat (4.10), lasoda (3.90) and phog (1.30). The above nutritional values were on dry weight basis of the different produce (Dr. D. K. Samadia and Dr.

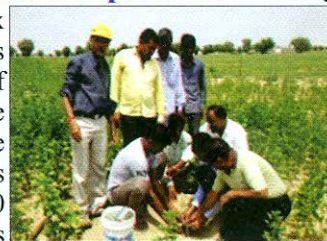
Performance evaluation of cowpea genotype AHCP-I : In

traditional mixed cropping system of the hot arid region, cowpea is grown for grain production but tender and premature pods of cowpea are used for vegetable purpose also. During the rainy season of 2017, purified cowpea line AHCP-I-4-1 was studied for seed enhancement and crop performance. The ten years stored seeds were sown and 78.25 % germination was recorded among them. It was semi-spreading type and plants were of 113.27- 131.41 cm height at 90 DAS. It was early maturing and took 44.2 days for first flowering, 50% flowering occurred 52.5 DAS and first harvesting of tender pods was started at 60.8 DAS. The light-green coloured tender pods to use as vegetable were of 12.66-16.37 cm length, 0.52-0.59 cm diameter and 2.03-2.42 g weight. The mature pods were of 14.28-17.31 cm length, 0.62-0.71 cm diameter and 3.03-3.98 g weight and each pod had 8.67 - 10.43 seeds. The dry weight of 100 seeds ranged from 11.23-13.45 g. Average yield of tender pods per plant were 257.62 - 324.57 g and seed yield was found 14.21 -16.37 g per plant. (Dr. A. K. Verma and Dr. D. K. Samadia)



Extension Programmes / Activities

- **Front line demonstrations/ adaptive trials:** During July - Dec., 2017, six frontline demonstrations of improved variety of khejri, bael, ber, ridge gourd (Thar Karni) were conducted on farmers fields. In addition, 20 method demonstrations about improved agro-techniques of arid fruits and vegetable production were given to visiting farmers/ extension functionaries or during farmer's field visits/ interaction.



- **Farmer's trainings:** During the reported period of time, the three training programmes were organized at 11 JMD, Bharu Khera village on 22.08.2017, at 8 JMD, Sarahrupayat village (Sh. Lal ji Yadav farm) on 28.08.2017 and at Smt. Rashmi Gupta Krishi Farm, Kanasar village of Bikaner on 29.09.2017.



- **Farmer's school:** Two farmers' school were conducted on 'improved production technologies of snapmelon (variety-AHS-82) in collaboration of ATMA, Bikaner (Raj.) during the *kharif* season 2017-18 at the field of Amar Chand Mali, 4 KHM, Khinchiya village and Smt. Rashmi Gupta farm, Kanasar village of Bikaner district



Field view of farmers' school conducted on snapmelon (AHS-82)

- **Organization of Technological Exhibitions :** During July - December 2017, the following technological exhibitions of the Institute were displayed/organized on the occasions of:
 - The "Field Day Programme on Magra Sheep" organized by CSWRI, ARC, Bikaner at Kotda village of Bikaner district on 07.09.2017.
 - "District Level Agriculture and Animal Science Fair" organized by ATMA, Bikaner and RAJUVAS, Bikaner at RAJUVAS Campus, Bikaner on 06.10.2017
 - "Kisan Mela on Groundnut" organized by CSWRI, RRS, Bikaner at its campus on 07.10.2017.
 - "Farmers Interaction Meet" organized by Techno-serve Company at Mankrasar village of Dungargarh Tehsil, district, Bikaner on 11.12.2017.
 - Participated and displayed the technological exhibition of the Institute during "National Sheep and Wool Fair" organized by ICAR-CSWRI, Avikanagar, Tonk on 08.12.2017.

- **Visit and interaction/ meetings at the Institute :** More than 500 farmers, students and agricultural supervisors, officers, professionals, teachers, scientists/ trainees, etc. were visited and interacted at the Institute.
- **Visit to farmer's fields and interaction/meetings:** Thirty farmers' fields were visited and interacted. More than 16 Research-Extension-Farmers-Interface meetings were held and some Farmer's Interest Groups /Commodity Interest Groups/ Self-Help Groups were also organised.
- **Activities for empowerment of farm women:** To empower / educate the farm women about arid horticultural crop production > 200 farm women were visited, interacted and exposed to modern arid horticultural crop production technologies, value addition techniques of arid fruits and vegetables during their visits, exhibitions and off campus interactions, etc. (Dr. S. R. Meena, Dr. D. K. Samadia, Dr. D. K. Sarolia and Sh. R. C. Balai).



Activities under MGMG scheme in adopted villages:

During July-December, 2017, various activities were carried out in adopted villages like visits/village surveys (23), interface meeting/ Goshthies group discussion (21), conducting farmers' trainings / schools (03), FLDs demonstration (03) of improved technologies, advisory work (>50) for the farmers/clients, providing technological literature, and input support (seeds and planting materials of arid fruits and vegetables), organising days and weeks for technological awareness, etc.

Organization/Celebration of days/ weeks/fortnights.

Swachhh Bharat Abhiyan (Campaign): The *Swachhh Bharat Abhiyan* (Campaigns) were held in the Institute as well as out of the Institute time to time. All the employee/staff of the Institute worked very hard to clean the inside and outside of the Institute. The employees of the Institute went in different local schools and surrounding areas and created awareness and interest among the students and local peoples about the programme/ campaign of the *Swachhh Bharat Abhiyan*.



The employees of the Institute doing cleaning and creating awareness and interest among the students of the schools and local peoples about the "Swachhh Bharat Abhiyan".

Organization of World Soil Health Day: The Institute organized World Soil Health Day on 05.12.2017 during which 110 farmers, scientists and dignitaries were participated. Dr. Vishwnath Meghwal, MLA, Khajuwala and Sansadiya Sachiv, Govt. of Rajasthan was the Chief guest of the programme. During the programme, the lectures and discussions were held on components & importance of soil health in crop production and productivity. On the occasion, the soil health cards prepared by the Institute were distributed among the farmers.



Dr. Vishwanath Meghwal, MLA, Khajuwala and Sansadiya Sachiv, Govt. of Rajasthan in distributing the Soil Health Cards to the farmers in presence of Sh. Narayan Chopra, Mayor, Bikaner city and Prof. (Dr.) P. L. Saroj, Director of the Institute during the organization of the World Soil Health Day on 05.12.2017.

Other days/ weeks/fortnights organized are as follows:

- Organization of Agriculture Education Day at the Institute on 03.12.2017
- Fortnightly *Swachhh Bharat Abhiyan* was carried out in the Institute from 27.07.2017 and onward.
- The Communal Harmony Campaign and the Fund Raising Week" (Under NFCH, New Delhi.) was organized from 19-25 November, 2017.
- The Institute observed the "Parthenium Awareness Week" from 16-22 August, 2017.

Visit of VIPs/ Higher Dignitaries to the Institute

- Dr. T. A. More, Former-Vice Chancellor, MPKV, Rahuri-visited the Institute on 17-18 July, 2017.
- Dr. P. S. Naik, Former Director, ICAR-IIVR, Varanasi (U.P.) visited the Institute on 17-18 July, 2017.
- Dr. W. S. Dhillon, ADG (Hort.-I) ICAR, KAB-II, New Delhi visited the Institute on 17-18 July, 2017.
- Dr. Balraj Singh, Vice Chancellor, Agriculture University Jodhpur (Rajasthan) visited the Institute on 28.10.2017.
- Dr. O. P. Yadav, Director, ICAR-CAZRI, Jodhpur visited the Institute on 28.10.2017.
- Hon' ble Union Minister of State for Water Resources, River Development & Ganga Rejuvenation and Parliamentary Affairs, Government of India, Sh. Arjun Ram Meghwal visited the Institute on 17.11.2017.
- Dr. Vishwnath Meghwal, MLA, Khajuwala and Sansadiya Sachiv, Govt. of Rajasthan, visited the Institute on 05.12.2017
- Sh. Satya Prakash Acharya, BJP President, Bikaner city visited the Institute on 05.12.2017
- Sh. Sahi Ram Dusad, BJP President, Rural Area, Bikaner; on 05.12.2017
- Sh. Narayan Chopra, Mayor, Bikaner city on 05.12.2017

Important Meetings held

- IRC meeting : IRC Meeting was held during 12-13th July, 2017 under the Chairmanship of Prof. (Dr.) P. L. Saroj.
- RAC Meeting: RAC Meeting was held during 17-18 July, 2017 at the Institute Under the Chairmanship of Dr. T. A. More, Ex-Vice Chancellor, MPKV, Rahuri (Maharashtra).
- Hindi Workshop was held in the Institute on 29.06.2017.

- Scientific Probation Confirmation Meeting was held in the Institute on 12.09.2017
- Technical Assessment Committee Meeting was held in the Institute on 19.09.2017
- IJSC Meeting was held at the Institute on 28.09.2017
- Meeting of IJSC was held at the Institute on 06.12.2017

Visits/meeting/programmes attended by the Director of the Institute.

Prof. (Dr.) P. L Saroj, Director of the Institute, attended/participated in the following meetings/ programmes during July - December, 2017.

- Participated in the Director's Conference and exchange the views at new Delhi on 15 - 16 July, 2017.
- Participated in the Workshop related Dry Research and Management at New Delhi on 21st July, 2017.
- Participated and Chaired the programmes related to Kisan Gosthi and Sankalp se Sidhi at CHES, Vejalpur, Godhra in which around 550 farmers participated and Inaugurated newly constructed Guest House at CHES, Vejalpur, Godhra, Gujarat during 17th-20th August, 2017.
- Participated in the third meeting of FAIR (Forum of Institution in Rajasthan) organized by Principal Secretary (Agril.), Govt. of Rajasthan, Jaipur during 8th - 9th September, 2017.
- Attended a Selection Committee Meeting as a Member for the selection of Associate Professor at University of Banda Agriculture and Technology, Banda during 13th - 15th September, 2017.
- Participated and presented EFC/SFC documents in meeting held at ICAR, New Delhi on 18th September, 2017.
- Attended a Assessment Committee Meeting of Scientist as a Nominee of ICAR, New Delhi at Indian Institute of Soil and Water Conservation, Dehradun on 21.09.2017
- Attended meeting as member of Assessment Committee of Scientists at ASRB, New Delhi on 22.09.2017.
- Attended the meeting as member of Assessment Committee of Scientist at ASRB, New Delhi on 27.09.2017.
- Attended the meeting as member of Assessment Committee of Scientist at ASRB, New Delhi on 06.10.2017.
- Participated in a Kisan Mela as Special Guest at CSWRI, Avikanagar on 08.12.2017.
- Participated as Guest of Honour in the AICRP-IFS and Chaired the Technical Session at Durgapura, Jaipur on 2nd - 3rd November, 2017.

HRD Activities

Organization of Winter School

The Institute organized a ICAR sponsored Winter School on "Doubling Income through Advance Approaches for Fruit and Vegetables in the Arid Region" during 28th October, 2017 to 17th November, 2017. Honorable Vice Chancellor, Dr. Balraj Singh, Agriculture University, Jodhpur

(Rajasthan), was chief guest and Dr. O. P. Yadav, Director, ICAR-CAZRI, Jodhpur was the special guest of the inaugural function of the winter school. Prof. (Dr.) P. L. Saroj, Director of the Institute was the Course Director. A total number of 20 professors/associate professors/ assistant professors/ scientists and SMS from 08 states of the country were participated (as trainees) in this winter school. Dr. B.D. Sharma, Head, Division of Crop Production and Dr. M.K. Jatav, Sr. Scientist of this Institute worked as Course Coordinators. The winter school successfully completed on 17.11.2017. Hon'ble Union Minister of State for Water Resources River Development & Ganga Rejuvenation and Parliamentary Affairs, Government of India, Shree Arjun Ram Meghwal Ji was the chief guest of the closing ceremony of the winter school. Prof. (Dr.) P. L. Saroj, Director of the Institute introduced and explained all about the winter school to the Honorable Union Minister of State.



Hon'ble Union Minister of State for Water Resources, River Development & Ganga Rejuvenation and Parliamentary Affairs GOI, Sh. Arjun Ram Meghwal distributing certificates to trainees in the presence Prof. (Dr.) P. L. Saroj, Director, ICAR- CIAH, Bikaner on the occasion of closing ceremony of the 21 days ICAR Winter School.

The Hon'ble Union Minister of State, Sh. Arjun Ram Meghwal highly appreciated the programmes of this winter school as well as the technologies developed by the Institute. He hoped that the technologies of this Institute will be a boon to achieve the dream of Government of India on "Doubling the farmers Income by 2022". In addition to officials, more than 100 farmers, students, dignitaries participated in the closing ceremony. Hon'ble Union Minister of State, Shree Arjun Ram Meghwal distributed the potato seeds of suitable varieties for processing as well as table purpose as introduced and evaluated by the Institute for non-traditional areas of the hot arid regions of the country.

Participation/attending the training programmes / seminar / symposium/ workshops, etc.

- Dr. M. K. Berwal attended 21 days ICAR Sponsored winter school training programme on "Genomic, proteomic and Metabolomic applications in crop improvement" at Department of Biotechnology, Junagadh Agricultural University, Junagadh, Gujarat during September 4-24, 2017
- Dr. B. R. Chaudhary attended 3rd International Conference on Bioresources and Stress Management held at Jaipur from 8-11 November, 2017.

- Dr Vijay Rakesh Reddy, S. participated in a National Workshop on “Development of Road map for Agricultural knowledge Management in India” organized by ICAR-Directorate of Knowledge Management Unit, New Delhi from 27-28 September 2017.
- Dr Vijay Rakesh Reddy, S. attended an international event “World Food India-2017” organized by Ministry of Food Processing Industries, GOI at New Delhi from 3-5 November 2017.
- Dr Vijay Rakesh Reddy, S. attended a winter school on “Technological innovations in processing and by-product utilization of agricultural produce” from 4-24 December 2017 at ICAR-CIPHET, Ludhiana.
- Dr. S. R. Meena attended Regional Workshop organized by State Institute of Agriculture Management at Durgapura, Jaipur on "Skill Development in Agriculture" on 18.08.2017.

Personalia

Awards/Prizes/Recognition

- Dr Vijay Rakesh Reddy, S. received the prestigious *Jawaharlal Nehru Award* for outstanding Doctoral thesis research in agricultural and allied sciences during 89th foundation day of ICAR on 16th July 2017.



Hon'ble Union Agriculture and Farmers' Welfare Minister, Sh. Radha Mohan Singh giving the prestigious Jawaharlal Nehru Award for Outstanding Doctoral Thesis Research in Agricultural and Allied Sciences to Dr Vijay Rakesh Reddy, S. of the Institute.

- Dr. B. R. Chaudhary, received First prize in General Knowledge Competition during Hindi Chetna Pakhwada held by ICAR-CIAH, Bikaner from 14-30 Sept. 2017.
- Dr. B. R. Chaudhary was awarded with Young Scientist Award by Society for Scientific Development in Agriculture & Technology, Meerut (U.P.) during International Conference on Global Research Initiatives for Sustainable Agriculture & Allied Sciences held from 02-04 December, 2017 at MPUAT, Udaipur.
- Prof. (Dr.) P. L. Saroj, Director of the Institute, participated as a Chief Guest during valedictory function on Training Programme on Horticulture at CAZRI, Jodhpur on 21.11.2017.
- Prof. (Dr.) P. L. Saroj, Director of the Institute, participated as a Guest of Honour during AICRP-IFS Group Workers Meeting and Chaired the Technical Session at Durgapura, Jaipur on 2nd - 3rd November, 2017.

Popularization and commercialization of technologies : Success and Feedbacks

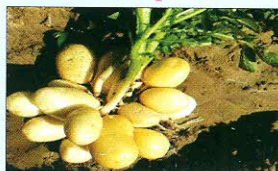
Introduction of potato cultivation in non-traditional areas of the hot arid region: Cultivation of potato crop was limited to the kitchen garden before the initiation of FLDs in this area by ICAR- CIAH, Bikaner. In total, 15 farmers were selected and Front Line Demonstrations of improved varieties of potato were conducted on their fields. More than 100 farmers were trained about modern production technologies of potato cultivation. Most of the farmers from selected areas are now cultivating potato on commercial scale. Potato is giving more profit than traditionally grown crops in these areas and getting the highest price of potato produced in Bikaner market. In addition, some experiments were also conducted at farmers field to evaluate the different potato cultivars including processing varieties during 2016-17. Farmers were selected and eight potato varieties seed were distributed to them included Kufri Kyat, Kurri Garima, Kufri Chipsona, Kufri Pukhraj, Kufri Frysona, Kufri Surya Kufri Jyoti and Kufri Badshah replicated three times in randomized block design. Tuber yield varied significantly from variety to variety at different locations of Bikaner district. The maximum mean tuber yield, was significantly higher in Kufri Frysona (364.64 q/ ha) followed by Kufri Chipsona (337.45 q/ ha) and Kufri Garima (304 q/ha/ ha) while minimum yield was observed in Kufri Pukhraj (204.78 q/ha) and Kufri Jyoti (220.89 t/ ha). While Kufri Khyati and Kufri Surya gave 257.13 and 276.93 q/ha potato yield. Similarly, dry matter content was also assessed and it was found that the highest dry matter content was 22.22% in Kufri Frysona and minimum in Kufri Khyati (15.09%) at 90 days of harvesting. It is also pertinent to mention that the appearance of the tuber though varies with the variety but it was very shining with golden yellowish colour and was better than its recommended areas of Indo-Gangetic plains. Based on the tuber yield, size of tuber, dry matter content and appearance of tuber; it is suggested that potato varieties like, Kufri Chipsona-4 and Kufri Frysona are suitable for processing while Kufri Garima and Kufri Jyoti are table types for cultivation under sprinkler system in hot arid region of Rajasthan (**Dr. M. K. Jatav and Prof. P. L. Saroj**).



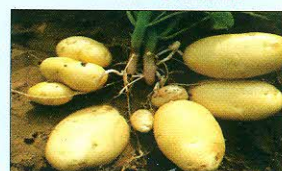
Kufri Chipsona



Kufri Garima



Kufri Frysona



Kufri Khyati

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Sh. P. P. Pareek

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