



CHF NEWSLETTER

April-June, 2017

Volume 03, Issue 02

FOUNDATION STONE OF INDOOR SPORTS COMPLEX

Shri Sunil Kumar Singh, Additional Secretary & Finance Advisor, DARE/ICAR, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi Visited College of Horticulture and Forestry, Pasighat on 25th May, 2017 and laid the foundation stone of Indoor Sports Complex in the august presence of Prof. M. Premjit Singh, Hon'ble Vice Chancellor, Central Agricultural University, Imphal .



Laying of foundation stone of Indoor Sports Complex by Shri Sunil Kumar Singh, Additional Secretary & Finance Advisor, DARE/ICAR, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi in presence of Prof. M. Premjit Singh, Hon'ble Vice-Chancellor, CAU, Imphal.

VISIT OF ICFRE ACCREDITATION TEAM

Members of Accreditation Team Shri Surajit Dutta, IFS (Retd.) and Sh. Shivakumar, C.M., IFS, ADG (Edu. & R.B.), ICFRE, Dehradun visited College of Horticulture and Forestry,

Pasighat from 31st May to 1st June, 2017. Committee visited different departments and interacted with the faculties. Apart from these, committee members visited experimental fields and laboratories. They also interacted with Dean of the College, Heads of the Departments and Students.



Visit of ICFRE Accreditation team at College of Horticulture and Forestry, Pasighat.

INAUGURATION OF PLANT HEALTH CLINIC

In the nursery block of Khasi Mandarin where intensive work of multiplication of disease free planting material is going on, in the close vicinity of these premises a plant health clinic was established and inaugurated by Shri Sunil Kumar Singh, Additional Secretary & Finance Advisor, DARE/ICAR, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi in august presence of Prof. M.

Premjit Singh, Vice-chancellor, CAU, Imphal. A plant disease interferes with the normal structure and functions of crop and non-crop plants and may affect the yield and quality. Plant diseases can affect any part of the plant. They result from either abiotic or biotic agents. Abiotic agents include environmental stresses that arise from temperature and moisture extremes, nutritional deficiencies and toxicities, and injuries caused by chemical or mechanical means. While biotic disease agents include the fungi, bacteria, viruses, and nematodes. The clinic serves growers, backyard gardeners and nurserymen who have plant disease problems or other plant health issues. In general, plant health clinics work as 'human clinics'. Farmers bring plant samples to a plant doctor to get advice on plant health problems. Plant clinic helps to link



Inauguration of Plant Health Clinic by Shri Sunil Kumar Singh, Additional Secretary & Finance Advisor, DARE/ICAR, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi in presence of Prof. M. Premjit Singh, Hon'ble Vice-Chancellor, CAU, Imphal.

extension and input suppliers. Plant health clinic also enables researchers and extension workers from various sectors to provide direct help to the needy growers. The clinic also has a portable lab.

KRISHI MELA

College of Horticulture and Forestry, Central Agricultural University, Pasighat, Arunachal Pradesh actively participated in KRISHI MELA

– 2017 at Motihari, Bihar on 15th – 19th April, 2017. During the fair college put an informative stall for showcasing of the latest technologies. Apart from this, Dean, College of Horticulture



Hon'ble Union Minister, Ministry of Agriculture and Farmers Welfare Shri Radha Mohan Singh visiting CHF stall during Krishi Mela held at Motihari, Bihar.

and Forestry, Pasighat and faculties participated in various technical sessions and made aware to participating growers about the recent developments in disciplines of Horticulture and allied sectors.

STUDENTS' WELFARE ACTIVITIES

CHF STUDENT QUALIFIED ALL INDIA CIVIL SERVICE EXAM

One more feather added in CHF's cap after Ms. Henuka Rai an alumnus of College of Horticulture and Forestry, Central Agricultural University, Pasighat qualified Civil Services Examination-2016 conducted by UPSC, New Delhi. She secured All India Rank 931. Ms. Henuka Rai completed her graduation in Horticul-



Henuka Rai

ture in 2011 from College of Horticulture and Forestry, Central Agricultural University, Pasighat. She was a University Topper and Gold Medalist in CAU Imphal. She qualified ICAR-JRF for Post Graduation admission and completed her Master degree in Floriculture and Landscaping from India's premier institute Indian Agricultural Research Institute, New, Delhi. Presently she is pursuing Ph. D. in Floriculture and Landscaping from IARI, New Delhi. Dean, CHF, Pasighat congratulated her and wished for her bright future.

FAREWELL FUNCTION OF U.G. & P.G. STUDENTS

Students Welfare Cell organized farewell function to the Final Year U. G. and P.G. Students on 11th May, 2017. Dr. A. K. Pandey, Dean, CHF Pasighat graced the occasion as Chief Guest and gave the prizes of Student of the Year Award (s)-2017 to Ms. Tumpy Lollen and Mr. Arif-Ur-Rahman Chowdhury of B.Sc. Agri. 4th year. He also wished them for their very bright future. The outgoing students shared their experience of the four years journey in the college.



Dr. A.K. Pandey, Dean, CHF, Pasighat conferring Student of the Year Award.

HOSTEL LIBRARY

Student Welfare Cell of the college took an initiative to inculcate reading habit of students by introducing a library in the Boys' Hostel. The library consists of competitive books, refreshers, magazines to help the students prepare for



Dr. A.K. Pandey, Dean, CHF, Pasighat inaugurating Hostel Library in Boys' hostel.

various competitive exams. Dr. A.K. Pandey, Dean, CHF, Pasighat inaugurated the Hostel library in Boys' hostel on 13th May 2017. He praised the efforts taken by Student Welfare Cell and hoped it will be helpful for preparation of competitive exams beyond regular class hours.

SPECIAL NSS CAMP

The National Service Scheme (NSS) Unit of College of Horticulture and Forestry, Central Agricultural University, Pasighat organized Seven Days Special NSS Camp w.e.f. 6th-12th June 2017 at Sibbo Siang Colony under the theme of 'Youth for Clean Environment'. Shri



NSS Unit of College of Horticulture and Forestry, Central Agricultural University, Pasighat during Seven Days Special NSS Camp at Sibbo-Siang colony.

Ninong Ering, Hon'ble Member of Parliament (Lok Sabha) graced the occasion as Chief Guest during closing ceremony. He praised the efforts of NSS volunteers for doing noble work at Sibo Siang Colony. He also emphasized on moral and social values which can inculcate only through NSS activities. He appreciated that the NSS Unit of CHF Pasighat organized this meaningful programme. Dr. L. Wangchu Dean In-charge of CHF Pasighat also graced the occasion as Guest of Honour. He told that our NSS volunteers are committed to involve in number of social welfare works apart from their regular activities. Mr. Krishna Singh Tomar, Camp Coordinator and NSS Programme Officer informed to the gathering about report on seven days of NSS camps in which various activities like mass cleanliness, weeds cutting, *shramdan*, white washing of church, mass plantation of saplings, training on mushroom cultivation, vermicomposting, pig and poultry production, fish drying, dry flowers, floral craft and pickle making were undertaken. He informed that total 75 volunteers participated NSS camp and out of that two thirds were girls.

3RD INTERNATIONAL DAY OF YOGA

The College of Horticulture and Forestry, Cen-



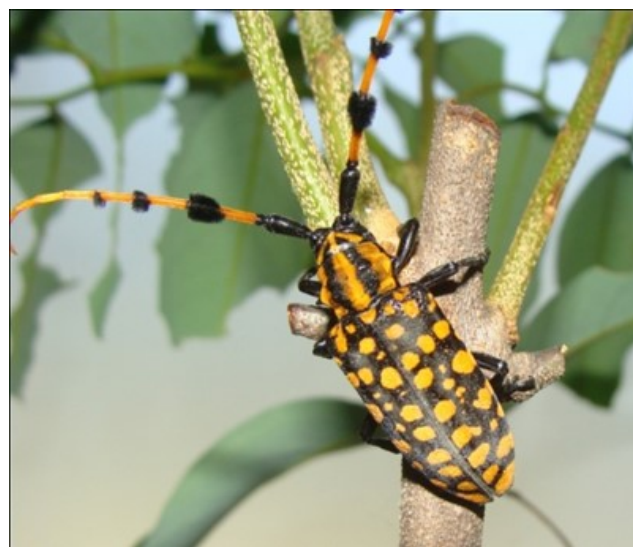
Staff and students of CHF participating the 3rd International Day of Yoga.

tral Agricultural University, Pasighat Arunachal Pradesh and its National Service Scheme Unit celebrated Third International Day of Yoga on 21st June, 2017 at ATIC building. Dr. B. N. Hazarika, I/c Dean , CHF, Pasighat graced the occasion as Chief Guest. He informed that Yoga practice helps to develop the body and mind bringing a lot of health benefits. Ms. Maria, Yoga Expert was invited as Yoga instructor. She demonstrated various tips on yoga to the staff, students and family members. She told that Health is not a mere absence of disease. It is a dynamic expression of life – in terms of how joyful, loving and enthusiastic you are.

RESEARCH

NEW INVASIVE BEETLE THREAT TO LITCHI

Probably it may be the first report by CHF scientists in the country about evidence of an invasive beetle from neighbouring countries infesting litchi plants in Arunachal Pradesh. A study, carried out by M.M. Kumawat and his colleagues from the College of Horticulture and Forestry, Central Agricultural University,



Longhorn beetle, *Aristobia reticulata* (Voet)

Pasighat, said litchi trees in the Northeast were severely damaged by a longhorn beetle, *Aristobia reticulator* (Voet), a stem borer. The study has been published in the March edition of *The Coleopterists Bulletin*. Recently, litchi trees in the Northeast were severely damaged by a stem borer, *Aristobia reticulator* (Voet). This is the first report of heavy incidence of this borer in litchi trees in India, which was earlier reported from China.

The pest might have crossed from neighbouring China and Myanmar, where it causes heavy damage to litchi plantations. Beetles were observed feeding on bark, thereby girdling stems, branches, and soft twigs, while larvae tunnelled inside the stem. Of 382 trees examined in the survey from litchi orchards, 338 (88.5 per cent) were damaged by this pest. The survey was done in East Siang district. Dead trees and damaged branches with exit holes and feeding tunnels were observed and recorded. Among the affected trees, 14.8 per cent trees were heavily infested with more than 10 borers per tree. Older trees were severely affected by this pest, and sometimes more than 10 borers were recorded from a single tree. The beetles were selective in feeding and preferred only tender and succulent branches approximately a year old, while thick, hardy branches were found least damaged.

TRAINING

COMMERCIAL POULTRY PRODUCTION

Dr. A.K.Pandey, Dean, College of Horticulture & Forestry, CAU, Pasighat inaugurated a Vocational Training programme “Commercial Poultry Production” on 25th January, 2017. The training was three months duration from January 25 to April 24, 2017 under funding of Director of Extension Education, Central Agricultural University, Imphal. All together eleven

candidates from Arunachal Pradesh, comprising of eight men & three women were registered for the training programme.



Dignitaries and participants during valedictory function of training programme “Commercial Poultry Production”.

The training module included identification of appliances and equipments used in poultry production, handling of birds, selection of hen by score cards, culling of birds, identification of feeds and its ingredients, preparation of brooder house, administration of medicine and vaccination, brooding of chicks and chick management, dressing of birds for hygienic meat production, practical broiler rearing, entrepreneurship of poultry farming, record keeping, preparation of schemes etc. The college distributed certificates to the successful candidate at the end of the training.

NURSERY MANAGEMENT IN HORTICULTURAL CROPS WITH SPECIAL REFERENCE TO FRUIT CROPS

The vocational training programme “Nursery Management in Horticultural Crops with Special reference to Fruit Crops” was inaugurated by the Dr. A.K. Pandey, Dean, College of Horticulture, CAU, Pasighat on 25th February. The training was held from February 25 to May 25, 2017 with a view to educate unemployed youth on nursery management in fruit crops. Five tribal youth including 03 female candidates were selected for the training. The vocational training aimed to train them on various propa-

gation techniques of fruit crops, nutrient and water management and plant protection in nursery management etc. The trainees were given hands on training on cutting, budding,

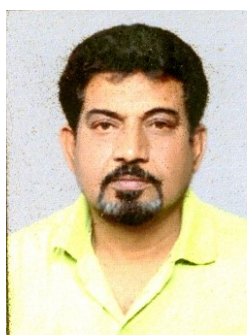


Dr. A.K. Pandey, Dean, CHF, Pasighat inaugurating vocational training programme "Nursery Management in Horticultural Crops with Special reference to Fruit Crops".

layering, grafting and other methods of propagation of fruit crops.

OBITUARY

Dr. Rajesh Kumar Singh, Subject Matter Specialist – (Horticulture), Ph.D Pomology, Krishi Vigyan Kendra, College of Horticulture & Forestry, Central Agricultural University, Pasighat, Arunachal Pradesh left for heavenly abode on dated 13th May, 2017 at his home town, Varanasi, Uttar Pradesh. He was a thorough gentleman with good personality with a mind to help every needy who come across his way. He joined Krishi Vigyan Kendra, College of Horticultural & Forestry, Central Agricultural University on 14th May, 2012. Whole CAU and CHF family paid floral tributes and prayed to god to give strength to bereaved family.



HUMAN RESOURCE DEVELOPMENT

1. Dr. L. Wangchu, Associate Professor, Department of Fruit Science attended International Conference on Contemporary Issues in Integrating Climate-The Emerging Area of Agriculture, horticulture, Biodiversity, Forestry; Engineering Technology, Applied Science and Business Management for Sustainable Development (AGROTECH-2017) held at Kalimpong Science Centre, Kalimpong, West Bengal, India, on 11th – 12th May, 2017.
2. Dr. N. Lyngdoh, Assistant Professor, Department of Tree Improvement attended two days National Symposium on Current Trends in Research in Biotic Systems held on 29th-30th June, 2017 at North East Hill University Shillong.
3. Dr. Raghubir Kumar Patidar, Assistant Professor (Nematology), Department of Plant Protection attended the 26th Annual Workshop of AICRP on Biological Control of Crop Pests at DRYSPUHF, Solan from 12th – 24th May, 2017.
4. Dr. Shivani Dobhal, Assistant Professor, Department of Tree Improvement participated in 7th Symposium and Annual General Meeting of DNA Society of India on the theme "Importance of DNA Fingerprinting, Cataloguing and Utilization of the Bioresources of the North-East India from 16th – 17th May, 2017 held at Institute of Advanced Study in Science and Technology, Vigyan Path Garchuk, Guwahati, Assam.
5. Dr. Bhanu P. Mishra, Assistant Professor, Department of Social Science and Dr. Sanjeev Kumar, Assistant Professor, Department of Silviculture and Agroforestry attended 11th Annual Review Meeting of Mission for Integrated Development of Horticulture programme

at CCS, HAU, Hisar, Haryana held on 12th -13th May, 2017.

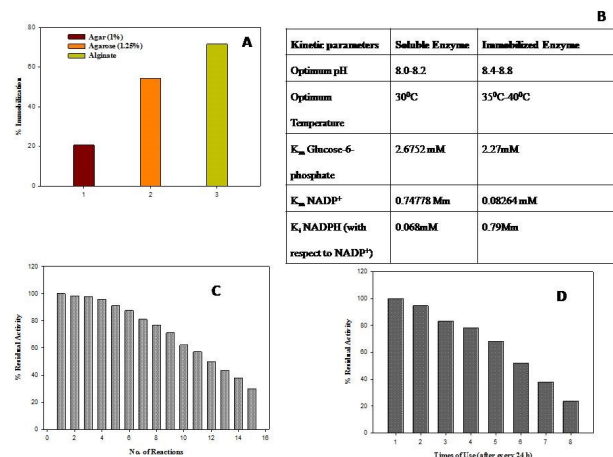
6. Dr. R.K. Singh, Librarian participated in the National Conference of Agriculture Librarians & User Community on Libraries Beyond Borders: Navigating Towards Global Dissemination organized on 4th – 6th May, 2017 at CCS Haryana Agricultural University, Hisar.

NEWS

GLUCOCOSE-6- PHOSPHATE DEHYDROGENASE IMMOBILIZATION: A STEP TOWARDS BIOSENSOR DEVELOPMENT

Immobilized enzymes have been used extensively in the fields of food industry, materials processing, textiles, detergents, biochemical and chemical industries, biotechnology, and pharmaceuticals. Studies on immobilization of glucose-6-phosphate dehydrogenase have been less extensive than those for other industrially applicable enzymes. Immobilization of glucose-6-phosphate dehydrogenase has been carried out for the formation of biosensors for the estimation of glucose, ATP, phosphate, and so on. An attempt for immobilization of purified glucose-6-phosphate dehydrogenase from pigeon pea on different matrix has been made at Department of Basic Sciences and Humanities, College of Horticulture & Forest-

ry, Pasighat. Maximum immobilization was achieved when alginate was used as immobilization matrix. As compared to soluble enzyme the alginate immobilized enzyme exhibited enhanced optimum pH and temperature. The alginate immobilized enzyme displayed more than 80% activity up to 7 continuous reactions and more than 50% activity up to 11 continu-



ous reactions. The research findings have also been published in The Protein Journal published by Springer, New York, USA.

- A. Immobilization of enzyme on different matrices
- B. Comparative analysis of soluble and immobilized enzyme
- C&D: Stability studies of immobilized enzyme.



DISTINGUISHED VISITORS

Sl. No	Name	Date of Visit
1.	Prof. M. Premjit Singh Hon'ble Vice Chancellor, Central Agricultural University, Imphal, Manipur	May 25, 2017
2.	Shri Sunil kr. Singh Additional Secretary & Finance Advisor, ICAR, New Delhi	May 25, 2017
3.	Shri C. Roul Additional Secretary (DARE) and Secretary (ICAR), New Delhi	May 24, 2017
4.	Dr. J. S. Sandhu DDG (Crop Science) ICAR, New Delhi	May 24, 2017
5.	Shri A. Barua Commissioner & Secy. Dept. of Agriculture, Govt. of Assam	May 24, 2017
6.	Sh. Surajit Dutta IFS (Red.) Dehradun	May 31- June 1, 2017
7.	Shri Shivakumar C.M. IFS, ADG (Edu. & R.B.), ICFRE, Dehradun	May 31 – June 1, 2017
8.	Shri K. K. Mittal Addl. Chief Secy. and APC Govt. of Assam	May 24, 2017
9.	Dr. A.K. Tripathi Director, ATARI Guwahati	May 24, 2017

Editors

Dr. A.K. Pandey
Dr Arunkumar Phurailatpam
Dr. Y. Oken Singh

Word Processing & Designing

Mr. Ripon Dam
Mr. Jayanta Kakoti

College of Horticulture and Forestry
Central Agricultural University, Pasighat-791102, Arunachal Pradesh
Phone No. : 0368 2224887; Fax No.: 0368 2225066; Mobile No. : +919436053047
E-Mail: chfdeanpsg@gmail.com, deanhorti-esg-arn@nic.in
Website : www.chfcau.org.in