

The Quarterly News Bulletin of Dolphin (P.G.) Institute of Biomedical & Natural Sciences, Dehra Dun-248 007 {Accredited by NAAC, Recognised by UGC U/s 2 (f), Local Chapter NPTEL}

Volume: 08 Issue: 02 April - June, 2016

Dolphin Institute host three days... **Dolphin Alumni Meet Dolphinites Bring Laurels....**

Symposium on "Advances in Zoology ... Hands-on-training on Plant Tissue .. **Bidding Farewell**

Guest Lectures Academic Achievements (Toppers) Conference, Workshop Hands....

Over 350 species of birds migrate... **Training & Placement Cell Faculty & Students Corner**

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Scientific Advancements Breakthrough in DNA Sequencing of... New Method can Kill Cancer Cells in...

Workshop cum Hands-on Training on HPLC & Column Chromatography



Address by Chief Guest

Departments of Chemistry & Pharmaceutical Chemistry jointly organised two days 'Workshop cum Handson Training on

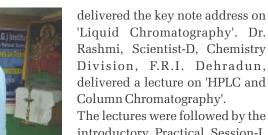
& Column HPLC Chromatography', on 6th and 7th May, 2016. 37 participants from various Colleges, Universities and Industries from Uttarakhand attended the training. The event was divided into four lectures and three practical sessions.

On day 1, the inaugural address



Chairman giving award

was delivered by Dr. Arun Kumar, Director, DIBNS. Dr. Ravi Bhushan, Professor of Chemistry, IIT, Roorkee, and the Chief Guest of the day released the 'Training Manual for the Workshop'. He



introductory Practical Session-I. which was conducted in laboratories of Chemistry and Pharmachemistry Departments under the guidance of Dr. Deepak Kumar and Dr. Raju.

On day 2, Mr. C. P. Singh, Senior Manager, IPQA Laboratories, delivered a lecture on 'HPLC & its Applications', which was followed by Practical Sessions-II & III in which participants were trained on handling of HPLC instrument and working of Column Chromatography. Thereafter Dr. Abdul Farukh, Professor, H.N.B.G. (Central) University, Srinagar had his lecture on 'Applications of Biostatistics'. A questionnaire



Training Manual released by Chief Guest & Guest of Honour

was also circulated among the participants to have their feedback on the gains of the hands-on-training.

Shri Arvind Gupta, Chairman, delivered the valedictory and encouraged participants with inspiring words. He also felicitated the winners of the questionnaire Mr. Mahesh Singh (Doon PG College), Ms. Neetu Rajoria & Mr. Sunil Negi (Microbiology Dept., DIBNS) with certificates and prizes. The workshop concluded with Vote of Thanks by Mr. Rohit Verma, Organising Secretary of the workshop.

Entrepreneurship Development Workshop on START-UP India conducted at Dolphin Institute

A six days workshop on 'Entrepreneurship Development Programme' in association with Industries Association of Uttarakhand & Drug Manufacturing Association, Uttarakhand was conducted by the Entrepreneurship Development Cell, Dolphin (PG) Institute of Biomedical & Natural Sciences, Dehra Dun from 25th to 30th April 2016.

Dr. Arun Kumar, Director while welcoming the young participants deliberated upon the 'Startup India' programme of which the present EDP is a part. He delved in

details into the advantages of the EDP workshop in the present scenario especially after implementation

of Startup India.



view of the different programmes/lectures/ activities/field trips to

be held during the workshop. He also pointed out that this year this EDP has collaborated with Startup India Programme Dr. Sanjay Agarwal, Felicitating the Guest of Honour launched by Prime

Minister's Office.

Speaking on this occasion Chairman, Shri Arvind Gupta very well defined the term entrepreneur. He emphasized that country's economy can never recover till the young generation imbibes, inculcates the entrepreneurship quality within them.

Release of training manual

The Chief Guest of the morning, Dr. U.S. Rawat, Vice Chancellor, Sri Dev Suman University praised the sincere efforts of the Institute in organizing this workshop and skill development programme for the

upcoming entrepreneurs. He felt like Technology based Startup, that the State has tremendous Start-up India in the field of Forestry, potential in the form of its educated and well informed youth, but what is lacking is our education system.

Shri Pankaj Gupta, President Industries Association of Uttarakhand in his key note address linked Startup India with Standup India. He emphasized three things contribute to a country's economy, i.e., agriculture, industry and service. To this he added a fourth dimension, i.e., innovative economy.

Besides the lectures by eminent guest speakers on varied subjects

Quality of Entrepreneurship, MSME Schemes, Technology based Startup, Medicinal Plant based Start up, Accountancy & Book Keeping and Tissue Culture based techniques based start-up, and many more. The participants were taken for one day field visit to Dev Sanskriti University, Haridwar and Patanjali Food & Herbal Park. Participants were provided with certificates in the valedictory. It was presided by Dr. S. Sengupta Pandey, Jt. Secretary, Food & Supplies, Uttarakhand Govt.





From Chairman's desk...



"Healthy body has a healthy mind". This old saying indicates a relationship between our body and mind. Healthy body can be attained by a perfect exercise called Yoga. In Vedic Sanskrit, yoga (from the root yuj) means "to add", "to join", "to unite", or "to attach" in its most common literal

Yoga is most important for everybody's life to maintain a balance between physical and mental discipline. Weight loss, a strong and flexible body, glowing beautiful skin, peaceful mind, good health whatever you may be looking for, yoga has it on offer. However, very often, yoga is only partially understood as being limited to asanas (yoga poses). As such, its benefits are only perceived to be at the body level and we fail to realize the immense benefits yoga offers in uniting the body, mind and breath. When you are in harmony, the journey through life is calmer, happier and more fulfilling.

A global event on Yoga is celebrated every year called "International Day of Yoga" to spread the awareness about the benefits of yoga. United Nations General Assembly has declared 21st June as the "International Day of Yoga or World Yoga Day" on the initiation of India. The declaration came after the call for the adoption of June 21st as International Day of Yoga by Hon'ble Indian Prime Minister, Mr. Narendra Modi during his address to UN General Assembly on September 27, 2014 wherein he stated: "Yoga is an invaluable gift of India's ancient tradition". He went on to emphasize that the core of the philosophy behind yoga, as outlined in Patanjali's Yogasutra, was not just about exercise, but to discover the sense of oneness with yourself, the world and nature. "By changing our lifestyle and creating consciousness, it can help us deal with climate change," he

It is a form of fitness and activity that is suitable for any age group. Therefore, students you can also greatly benefit from the skill of yoga. Yoga can have great importance for you all. Besides, helping you to remain fit, some asanas like sun salutations or surya namaskars increase the blood flow to the brain, helping the brain to function better. Regularly practicing poses also helps youngsters to concentrate better and train the body to do things unconsciously.

Breathing exercises in yoga or pranayama are also very helpful to students. Regulated breathing is great to remove stress and tension from your mind. Controlled breathing also brings in the ability to concentrate and focus a much needed skill for students. Yoga is great for brain power. It can improve the creative faculties, ability to concentrate and retention capacity.

Yoga is a kind of therapy which eliminates many kind of illness. There is specific yoga for different purposes only the required one should be practiced. Practicing yoga in daily life regularly prevents our body from various diseases as well as cures fatal disease.

We should adopt Yoga as early as possible.

(Arvind Gupta)

Dolphin Institute host three days "State Strategic Plan Vision—2024" workshop with Bharat Scouts & Guides, Uttarakhand



The Bharat Scouts and Guides, Uttarakhand chapter along with Dolphin Institute conducted a three days workshop from 18th to 20th June 2016. The workshop was conducted for discussing the "State Strategic Plan-Vision 2024" in respect of the developing strategies for more active role of Bharat Scouts and guides in Uttarakhand. A total 37 Trainers and position holders from 13 districts of the State participated in the three days workshop.

The workshop opened with hoisting of the flag of the Scouts and Guides. Shri S.C. Gwal, Chief Commissioner, Bharat Scouts and Guides Uttarakhand in his

inaugural address apprised the participants with the achievements and the challenges faced by the organization in the State.

Shri Krishnaswamy, Jt. Director, Bharat Scouts and Guides National HQ emphasized on the crucial role being

played by the Bharat Scouts and Guides in the disaster relief by introducing the skill development programme based on local resources to reduce the migration of many local residents from the hill villages. These programmes will ultimately make the youth economically well off. He also suggested the establishment of 'Ham station/ wireless set' in the interiors of the State to assist the youth during natural calamities.

Shri V S Bisht, The State Organizing Commissioner, Bharat Scouts and Guides apprised the participants that the present workshop is part of the 'Asia Pacific Region Vision - 2024'

under which every country has to prepare its own Strategy and Vision as above. All the participants were divided into five sub groups with the task of drafting the State Strategic Plan- Vision 2024 and make a presentation in the workshop. These will be eventually part of the State strategy and action plan.

Shri Vipul Garg and Dr. Ritu Pandey from Dolphin Institute and Shri Ravindra Kala, Secretary Bharat Scouts and Guides, Shri Arun Rawat, Reshma Parveen, Vimla and Rahul along with other volunteers were note worthy contributors from Scouts & Guides, Uttarakhand chapter.



Dolphin Alumni Meet

Dolphin Alumni Association (Regd.) organized the Annual Alumni Meet (2015-2016) on 4th June, 2016. More than 150 Alumni attended the meet. Shri Arvind Gupta, Dr. Shailja Pant and Dr. Arun Kumar, patrons of Alumni Association graced the occasion with their presence. Outstanding alumni were felicitated by the Association for their contributions in respective fields.

The Alumni interacted with the present students of the institute. They shared their views and scope of



Receptive audience



the profession and future planning with the current students.

A cultural programme was organized by the organizing committee to entertain the present Alumni.

Members of the organizing committee, namely Shri Aditya Swarup, Dr. Deptee Warikoo, Dr. Manisha Nanda, Dr. Kapil Garg, Dr. Keerty Mathur and Mr. Ankit Johari were facilitated for the successful conduct of the meet.

Dolphinite bring laurels to the Institute



NISHANT GARG, B.PT. 2nd year made all of us proud on being selected as member

Indian Team (Men) for the World Inline Hockey Championship in Italy from 19th to 25th June 2016.

He brought laurels not only to the Institute but to the States of Maharashtra and Uttarakhand. Shri Arvind Gupta, Chairman of the Institute, Dr. Arun Kumar, Director, Dr. Shalija Pant Principal, Dr. Deepti Warikoo, HOD Physiotherapy Dept. along with faculty and students congratulate, Nishant on his achievements.



National Symposium on "Advances in Zoology & Applied Sciences"

Department of Zoology organized two days national symposium on "Advances in Zoology & Applied **Sciences**" on 7th & 8th April 2016 at the Institute. The major objective of this symposium was to provide platform and an opportunity to post graduate students, young researchers and faculty of the concerned area to interact with senior scientists and academicians and exchange views. The symposium covered the molecular and taxonomic aspects, faunal biodiversity assessment and formulation of conservation priorities and policies. The symposium led up gradation of



released the sovenier and abstract's book on "Advances in Zoology & Applied Sciences". The key note address was delivered by Dr. Ravi Prakash, Emeritus Scientist (CSIR) & Professor (Former Head and Dean), M.D. University, Rohtak (Haryana).

pointed out that the extinction of animals and plant species is an irreparable loss with potentially serious environmental and economic consequences for developing and developed countries alike.

Prof. P. C. Joshi, Department of Zoology and Environmental Science, Gurukul Kangri University, "Remote Sensing and its Application". While Dr. Anjum Rizvi, Scientist 'D', Officein-charge, Z.S.I. Dehradun delivered a lecture on DNA DNA bar-coding as an additional tool for taxonomist.

On the second day Dr. V.P.Uniyal, Scientist 'E', Wild Life Instite of India, Dehradun highlighted the concept of identification of bioindicators for long term ecological monitoring of



biodiversity conservation. Dr. Pankaj



Welcoming Prof. Ravi Prakash

Tewary, Scientist 'D' & In-charge, RSRS, Shaspur stressed on the need to maintain germplasm bank of mulberry genotypes, evaluate and recommend suitable mulberry

reference to threatened species of squirrels and small cats. She gave attention on the importance of hair characteristics of mammals in identification of species of different



The Chief Guest distributing certificate to the participants

variety for the region, to formulate research projects on moriculture and on silkworm aspects and their implementation, to provide cultivation technology for mulberry varieties for plain and hills. Dr. Archana Bahuguna, Scientist 'D', Z.S.I., Dehradun spoke on "Ecological and wildlife forensic studies by trichotaxonomy and molecular tools-with special

groups of mammals in wildlife forensic as in case of identification of species from hair in Shahtoosh wool product, for brushes made from mongoose hair and wildlife parts and products of many species of mammals. Cash prize of Rs. 2000/- for the winners and Rs. 1500/- for the runner-ups were given for the poster and oral presentations among the participants.



Cheif Guest Dr. Rajendra Dobhal, DG UCOST addressing the participants

knowledge of the students on various frontiers of zoology, idea generation for research in the field of zoology by active discussion among the students and the academicians. Dr. Arun Kumar, Director of the Institute and an eminent Zoologist himself welcomed the guests and participants.

The symposium was inaugurated by Dr. Rajender Dobhal DG, UCOST and in his address he emphasized on the need of exploring the challenges in the biological sciences and to seek their sustainable solutions. He also



'Hands-on-training' on Plant Tissue Culture $(16^{th} May - 21^{st} May 2016)$

He focused on the emerging issues

of conservation biology and current

trends in global climate change. He

The Department of Biotechnology organized a six day training program on plant tissue culture. Twenty participants attended the program. Dr. Archana Vaishnava and Dr. Shalini, faculty Departmkent of Biotechnology acted as the resource persons for the training program.

The participants were given exposure on different techniques in plant tissue culture including sterilization, media preparation, seed culture, introduction to micropropagation techniques, callus induction etc.

Day 1): Overview of the hands-ontraining programme was provided by Dr. Archana Vaishnava. Followed by the basics of the organization of Plant tissue culture laboratory by Dr. Shalini. The participants were trained in preparation of stock solutions for Medium. Day 2): Dr. Archana Vaishnava delivered a lecture on Sterilization techniques followed by training on Sterilization Techniques. Further participants were trained in basal media preparation. Day 3): Dr. Shalini,



The trainers with Course Coordinators



Plant tissue culture training

Dept. delivered another lecture on Medium Composition followed by training on the seed culture. Day 4: Dr. Archana Vaishnava gave a second lecture on Types of Plant Tissue Culture, this was followed by training on culturing of explants and medium of micro propagation. Further the participants received training on Media preparation for callus induction. Day 5): A visit for trainees was arranged to Plant tissue culture lab of Forest Research Institute. Day 6): The participants were given an insight that how to analyze the observations and results of the different techniques learn't in previous days. The participants were also trained to inoculate explants for callus induction. The valedictory was conducted in the evening, wherein the certificates were distributed to the participants.

Bidding Farewell



Dolphin Students Welfare Committee organized Farewell parties on 3rd June 2016 for passing out students for the session 2015-2016, namely departments of Microbiology, Botany & Chemistry. The junior students performed a number of cultural & entertainment activities in the programme. The senior students of each department expressed their views and

experiences about the department and institute. Though, the students were feeling emotional but they all enjoyed a lot. On the occasion Chairman of the institute Shri Arvind Gupta, Principal Dr. Shailja Pant, Director Dr. Arun Kumar, Dean-DSWC Mr. Vipul Garg along with faculty, staff & students were present to bid farewell to out going Dolphinite's.

New Appointments in the Institute

Shri Sanjay Singh Negi joined in the Department of Agriculture on 18th June 2016 as Assistant



Professor. He is B.Sc. Agriculture from H.N.B Garhwal University and M.Sc. Agriculture (Horticulture) fruit science from UUHF, Bharshar.

Shri Sachin Devlal joined in the Department of Agriculture on 1st July 2016 as Assistant



Professor. He is B.Sc. from H.N.B Garhwal University & M.Sc. Agriculture (Horticulture) fruit science from UUHF, Bharshar.



Guest Lectures



 Dr Amit Pandey, Scientist F, Forest Pathology Division, FRI, Dehradun delivered the guest lecture on April 23, 2016 on the topic "Molecular techniques in Forest Pathology" in the Department of Forestry.



Dr. C.S. Pandey addressing the EDP Trainees

Dr. Tarun Mittal, Dermatologist & Aesthetic Laser Surgeon, Ashrey Skin Care Center & Laser Clinic, Dehra Dun delivered a guest lecture on April 18, 2016 on Superficial Fungal Infections in the Department of Microbiology in collaboration with Training & Placements.



Dr. Tarun Mittal, Dermatologist & Aesthetic Laser Surgeon, Dehradun delivering a guest lecture

Shri Amit Gupta, Alumnus Dolphin Institute (M. Sc. Microbiology 2010 Batch), presently working with Procter & Gamble India, as the Regional Microbiologist, Global Microbiology Delivery Organization participated as a guest speaker in an interactive session with PG students of the institute and shared his experiences. He also talked to the students about future prospects in Pharmaceutical, Food, Cosmetics and other industries. The talk was arranged by the department of Training & Placement cell and Microbiology on 23rd April 2016.



Mr. Amit Gupta, being welcomed by Dr. Ashok Singh

- Dr. Prosenjit Patra, Physiotherapist, ESI Hospital delivered a guest lecture on April 20, 2016 in the Department of Physiotherapy on Congenital Heart
- Dr. Shagun Agarwal, Associate Professor, IAMR Ghaziabad delivered a guest lecture on 30 April, 2016 in the Department of Physiotherapy on the topic Cyriax Manipulation.
- Dr. Prosenjit Patra, Physiotherapist, ESI Hospital delivered a guest lecture on April 21, 2016 in the Department of Physiotherapy on the topic Cardiac Myopathies.
- Dr. Vaibhav Agarwal, Associate Professor, HIHT, Dehradun delivered a guest lecture on May 31, 2016 in the Department of Physiotherapy on the topic Peripheral Nerve Injuries.
- Dr. Rashmi Dhingra, Deputy Director, UCPH, Dehra Dun delivered a guest lecture on April 07, 2016 in the Department of Pathology on "Anaemia- A silent killer among women and children" on the occasion of World health day.



The Department of Physics organized a guest lecture on April 04, 2016 on the topic 'Resent developments in Nanomaterials' for the PG students of Physics, Chemistry, Biochemistry and Biotechnology. The Speaker for



the lecture was Prof. Manbendra Mukherjee, who is presently working with Saha Institute of Nuclear Physics, Kolkata (WB).

Academic Achievements : College Toppers



36.67 W.A.P./8.55 G.P.A

M.Sc. Microbio.- 3rd Sem.

83.83 W.A.P./8.46 G.P.A

B.Sc. Agriculture- 5th Sem.



Kaiser Igbal Wani 83.33 W.A.P./8.45 G.P.A.

Tabassum Gowher

83.33 W.A.P./8.44 G.P.A

B.Sc. Agriculture- 7th Sem.

Ms. Vizole-Uwhuorie

410 W.A.P./500 G.P.A.





M.Sc. Zoology- 3rd Sem.



B. Chumei Phom 69.39 W.A.P./7.02 G.P.A

B.Sc. Forestry- 3rd Sem.



B.Sc. Agriculture- 1st Sem,





458 W.A.P./525 G.P.A



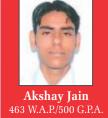
B.Sc. Forestry- 5th Sem.



Kanchan Dadwal 475 W.A.P./600 G.P.A

B.Sc. Forestry-7th Sem.





B.Sc. Forestry-7th Sem.



Pate Talo

505 W.A.P./600 G.P.A.

463 W.A.P./500 G.P.A.

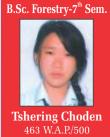
B.Sc. Forestry-7th Sem.

Samten Choigyal





B.Sc. Forestry-7th Sem.



Ritwika Mukhopadhyay

531 W.A.P./600 G.P.A.

B.Sc. Forestry-7th Sem.





Neelam Negi

B.Sc. Forestry-7th Sem.



B.Sc. Horticulture- 3rd Sem.

Conference, Workshop and Hands-on-training attended/participated/lecture delivered

Department of Pathology

- Aditya Swarup of Department of Pathology, attended a Conference organized by All India Medical Laboratory Technology Association, Chandigarh on 15th April, 2016 on the occasion of 'World Biomedical Laboratory Day'.
- Shri Aditya Swarup and Shri Ankit Johri, along with the students of B.Sc. Medical Lab Technology attended the "National Symposium on Biofuel: Indian Scenario" organized by Uttaranchal University, D.Dun on 29th April, 2016.

Department of Chemistry

- Dr. Suman Rawat participated in National Symposium on Biofuel: Indian Scenario, organized by Uttaranchal University in collaboration with UCOST, Dehra Dun on 29th April. An Abstract entitled "Comparative study on Antimicrobial activities of Sapium sebiferum and Betula cylindrostachys" by Suman Rawat and O.P. Sati (2016) has been published in Abstract book: 37.
- Dr. Suman Rawat, Mrs. Ankita Sati and Dr. Arti Tomar Participated in Seminar on "Herbal research

opportunities, challenges & Atherosclerosis" on 10th May 2016 beyond" on june 04, 2015 organized by the Management of Universities' Journal of Phytochemistry & Ayurvedic Heights (UJAPAH) at Vighyan Dham, UCOST, Dehradun.

Department of Agriculture

• Dr. C.S. Pandey, Head Department of Agriculture delivered lecture on bio-fertilizer in the entrepreneurship development programme on April 27, 2016 at the Institute.

Department of Biochemistry

- Dr. Gyanendra Awasthi delivered guest lecture on "Atherosclerosis: Pathogenesis and management of CAD (Coronary Artery disease) on 26th April 2016 at Jyoti Vidyapeeth Women's University, Jaipur.
- Dr. Gyanendra Awasthi delivered guest lecture on "Risk factors of



at Pt, L.M.S. Govt Post Graduate (Autonomous) college, Rishikesh -249201 Uttarakhand.

Department of Forestry

• B Sc Forestry II Semester Students completed 2 days Hands-ontraining on "Lantana camara handicraft" from Himalayan Environmental Studies and Conservation Organization (HESCO), Dehra Dun on 2nd -3rd May 2016.



 30 Students from B Sc Forestry VI Semester & M Sc Forestry IV Semester participated in the seminar on "Combat Desertification" organized by the Wildlife Institute of India, Dehra Dun on 17th June.



DSWC Activities

Blood Donation Camp

The Dolphin Students Welfare Committee organized a Blood Donation camp in the premises of the Institute on 15th June 2016 in collaboration with Amar Ujala on the occasion of the 'World Blood Donation Day'. Speaking on the occasion Shri Arvind Gupta, Chairman of the institute emphasized on the importance of blood donation since there is a great gap between the demand and availability of blood in different blood banks in our country. He also emphasized on the positive role the youth can play in this noble cause by donating blood to the right organizations. He also appealed to the Blood Banks at Dehra Dun to provide free blood to the needy



patients from BPL members of the society. During the camp 50 units of blood were donated by students and staff of the Institute to the blood bank of Shree Mahant Indresh Hospital. Principal, Dr. Shailja Pant, Dean- DSWC Mr. Vipul Garg, Mrs. Malti Sawhney, Mr. Sudhir Bharti along with faculty, staff & students from Dolphin Institute and from Shree Mahant Indresh Hospital Dr. Snigdha, Mr. V S Bhardwaj, and

others were present in the camp.

Students of Dolphin awarded by Red Cross Society

International Red Cross Society (Uttarakhand Chapter) organized a painting and essay competition on the subject "Everywhere for everyone" at our college on 6th and 7th May 2016. Four students of the institute, namely Kumar

Ashukarn, Pranshi Aggarwal and Rahul Gupta and Deepak participated in the painting competition and won the prizes. They were felicitated by Shri



Ravinath Raman, DM, Dehra Dun at a function held at MKP (PG) College, Dehra Dun on 8th May on the occasion of International redcross day.

Four Scout Rangers from Dolphin Institute selected for **Bharat Scouts & Guides International Event-2016**

Bharat Scouts & Guides is organizing an international meet in October 2016 at Pune (Maharastra) in which Scouts and Guides from 29 countries shall be participating along with participants from India. Four girl students (Scout Rangers) of Dolphin Institute, Dehradun are selected to attend the above meet namely, Ms. Anjali Singh









(B. Sc. M.M. 3rd Year), Ms. Diksha Gupta (B. P.T. 1st Year) & Ms. Shreya (B. Sc. M.M. 1st Year), Ms. Pooia

Semwal (B. Sc. Biotech 2nd Year).

Youth Red Cross (YRC) started at Dophin **Institute with 40 seats**

Red Cross Society of India-Uttarakhand chapter affiliated Dolphin (P.G.) Institute, Dehradun with Youth Red Cross from the session 2015-2016. Red Cross

Society, Uttarakhand allotted 40 seats for our institute under Youth Red Cross. With this honor we became the first self financed institute in Uttarakhand to get

affiliation from Red Cross Society of India. This would open door for the students to participate in various social and welfare activities for the less privileged members of the society.

Dolphinites participated in International Day against Drug Abuse

Student of Dolphin Institute participated in 'International Day Against Drug Abuse' organized by Uttarakhand Police & the local Administration at Gandhi Park, Dehra Dun, Uttarakhand on 26th June 2016. Volunteers from civil defense, policemen and school/college students held an awareness rally while dignitaries shared their views on the impact of drug abuse and suggested preventive measures.

Shree Harish Rawat, Chief Minister inaugurated the event following which a group of artistes presented a street play on the issue. He later flagged off the rally with students and volunteers carrying banners and raising slogans against drug abuse. The students of Dolphin institute displayed the slogans like "Life can take you higher than drugs, no drugs save life, say no to drugs and alcohol,



respect yourself, be drugs free, make health your new high in life not drugs, don't let drugs control, your life" etc.

Shree Rawat emphasized that It is important to involve women in this campaign so that they can create a healthy environment in the family and surroundings. The state

government is determined to stop the activities of drug peddlers", he

The CM directed the police officials to take strong steps to crack down on drug peddlers in the state. Any policeman putting sincere efforts for the campaign would be rewarded,

Mr. Vipul Garg, Dean- Student's Welfare said that Dolphin institute has very clear vision that Drugs are extremely dangerous for a civilized and healthy society and the illegal trade of drug must be stopped somehow. District officials and students from different educational institutes were present at the function.

Scout Training Camp organized at Dolphin Institute



The Institute in collaboration with Bharat Scouts & Guide, Uttarakhand organized a three day training camp for the newly selected 20 Rangers (Boys) & 20 Rovers (Girls) from 9 to 11th May 2016. State level Trainers Shri Ravindra Kala & Shri Uniyal trained the selected scouts and guides about preparing notes, camp organization, camp fire, hill

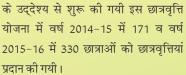
climbing, putting a machan, crisis management and other basics for rangers & rovers. Various tasks were assigned to each participant to uplift their personality and to serve the

All trainees expressed their confidence in cultural and sports activities held on the last day of training camp.



महामाया माँ बालासुन्दरी देवी छात्रवृत्ति योजना के सहयोग से मिली अप्रत्याशित सफलता

डॉल्फिन (पी.जी.) इन्स्टिट्यूट देहरादून द्वारा 3 वर्ष पूर्व आर्थिक रूप से अक्षम मेद्यावी छात्राओं के लिए महामाया माँ बालासन्दरी देवी छात्रवृत्ति योजना शुरू की गयी थी।। बालिका शिक्षा और महिला सशक्तीकरण को प्रोत्साहित करने



छात्राएं, महिमा जुयाल व भावना चौधरी को वर्ष 2015-16 में 12वीं कक्षा में यह छात्रवृत्ति प्रदान की गयी। परिणामस्वरूप कक्षा 12 में महिमा जुयाल ने 98 प्रतिशत व भावना चौधरी ने 96 प्रतिशत अंक प्राप्त किये



और उन्हें दिल्ली स्थित लेडी श्री राम कॉलेज में स्नातक प्रथम वर्ष में प्रवेश भी मिला है। डॉल्फिन इन्स्टिट्यूट के चेयरमैन श्री अरविन्द गुप्ता ने महामाया माँ बालासुन्दरी इसमें के.वि. नं. 1 हाथीबड़कला में अध्ययनरत देवी छात्रवृत्ति योजना ट्रस्ट की ओर से महिमा जुयाल व भावना चौधरी को शुभकामनायें दी एवम् उनकी पढ़ाई भविष्य में भी सुचारू रूप से चलती रहे इसके लिए संस्थान की ओर से यथासम्भव सहायता का आश्वासन दिया।



Honb'le Chief Minister sharing dais with DM & SSP, Dehra Dun during the meeting



Educational Tours



Department of Agriculture

Students of B.Sc. Ag. II Semester visited Forest Research Institute, Dehra Dun on April 13, 2016 to get hands-on- training on vegetative propagation methods in different horticultural crops by Mr. S.P. Singh, Scientist FRI.

Students of B.Sc. Ag. IV Semester visited Institute of Cooperative Management, Dehra Dun on April 18, 2016 and were exposed to different cooperative and finance schemes being provided by the State government.

- Students of B.Sc. Ag. IV Semester visited Regional Sericulture Station, Selaqui, Dehra Dun on March 28, 2016 and learned silkworm rearing techniques.
- Students of B.Sc. Horticulture II Sem visited labs and field centers of Center for Aromatic Plants (CAP) on April 5, 2016.

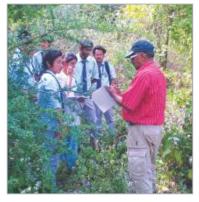
Department of Botany

- Study tour to Lab and Field Center of CAP (Center for Aromatic Plants) Selaqui, by M.Sc. Botany II Semester on 22/04/2016.
- Study tour to Conservation Farm NAVDANYA, Selaqui, Dehra Dun by M.Sc. Botany II and IV Semester on 23/04/2016.
- Study tour to FRI Museum and Botanic Garden, Dehra Dun by M.Sc. Botany II Semester, IV Semester, B.Sc.Ag. VI Semester students and Eco-club members on April 29, 2016.
- Academic field visit to Ecorestoration site at Hanthipaun, Mussoorie hills, Dehra Dun by M.Sc. Botany II Semester Students on May 5, 2016.

Department of Forestry

• B. Sc. IV Semester Lacchiwala Forest on 2 April 2016 to study riverian succession and documentation of present flora.

- B. Sc. II Semester visited Center for Aromatic plants, Selqui on 5 April to study post harvest processing of aromatic & medicinal plants
- B. Sc. II Semester visited Forest meteorology Observatory, FRI Dehra Dun on 8 April to study the working of instruments used for meteorology.
- B. Sc. IV Semester students visited Wood Produtcs Division, FRI Dehra Dun on 13 April to study the determination of wood's strength properties, wood seasoning & Wood preservation.
- B. Sc. VI Semester students visited Mussoorie Forest Range on 16 April to get acquainted with the techniques to fight forest fire.
- B. Sc. IV Semester students visited Fungarium & Molecular Pathology Lab, FRI Dehra Dun on 27 April to study the various diseased specimens of Forest trees, visit to national type culture of Forest pathology and familiarization with molecular techniques.
- M. Sc. II Semester students visited Indian Institute of Remote sensing, Dehra Dun on 3rd May to study different instruments and methodologies used in applying practical aspects of Remote Sensing and GIS.
- M. Sc. II Semester students visited Forest Survey of India, Dehra Dun on 5th May to study different instruments and methodologies on used in applications of Remote Sensing and GIS forestry.



Health/Physiotherapy Camp

One day Physiotherapy Camp was organised by the Department of Physiotherapy on 29th May 2016 at Mata Bala Sundari Shrine, Manduwala, dehra Dun. Dr. Vivek Chauhan, Dr. Deepti





Warikoo, Dr. Sunil Bhatt, Dr. Jaishree Karnwal along with students of the department actively participated for assessing and treating the patients. No fee was charged and was part of the social responsibility of the Institute.

Observing International Yoga Day at our Institute

'Yoga Shivir' was organized in the premises of the Dolphin Institute on the occasion of the 2nd International Yoga Day on 21st June, 2016. It was organized by Dolphin Student's Welfare Council (DSWC). Shri Arvind Gupta, Chairman of the Institute, faculty, staff & students participated in the yoga shivir.

Shri Arvind Gupta in his address said that Yoga is the symbol of the rich Indian culture and it is a huge experience of knowledge gained by





the Rishis & Munis of the ancient India to maintain them physically,

mentally and spiritually. He further told that almost all the diseases can be controlled by yoga and widespread use of yoga will change the scenario of all the Health industry. He appealed to the students to include

yoga in their day to day life so that this will be helpful the students to keep the stress at bay and will be strong enough to face the challenges of life

On this occasion Shri N.K. Joshi Sports Officer, Shri Vipul Garg Dean DSWC, Shri Gaurav Bhatia, Shri Sudhir Bharti. Shri Pankaj Gusain alongwith students were present.

World Immunology Day Celebrated at Dolphin Institute

The department of Biochemistry celebrated celebrated World Immunology Day on 29th April 2016 in collaboration with the Indian Immunological Society of India. The faculty members and students of various departments took active part.

Dr. Shailja Pant, Principal in her inaugural address, discussed the basics of immunology. She said that without comprehanding the science of Immunology, no branch of life sciences can be understood. Dr. Arun Kumar, Director, discussed the applications of immunology in various fields, such as the diagnosis and therapy. He said that immunology could be applied to various field in life sciences and lots of mysteries remained to be explored in this field. Dr. Gyanendra Awasthi, Head, Biochemistry, and Member, of Indian Immunological Society delivered the lecture on Immunological Techniques and discussed about applications of ELISA (enzyme-linkedimmunosorbent assay) and Radioimmunoassay (RIA) in the field of clinical science.

Two invited lectures were delivered by faculty with background in the field of immunology, namely, Dr. Sovan Bagchi, Professor & Head, Department of Biotechnology, on 'Immunotherapy' and Dr. Ashwani Sanghi, Assistant Professor, Department of Biochemistry, on 'Hybridoma Technology' on this occasion. The quiz competition and poster presentation were held. Department Biotechnology scored 1st position in the quiz, followed by the Department of Microbiology and 3rd position was secured by Pathology Department. Ms. Pooja of



Dr. Gyanendra Awasthi addressing the students

Biochemistry Department stood 1st in poster presentation followed by Fauzia of the same Department.

During the valedictory function, Shri Arvind Gupta, Chairman, Dolphin Institute congratulated the winners of various competitions. He said that the institute would actively encourage research in the field of Immunology. Prizes were distributed by Dr. Arun Kumar, Director of the institute. On this occasion, Dr. Ashwani Sanghi, Dr. Shiv Sharan Singh, Dr. Aditya Swarup and Mr. Ankit Johari etc. participated actively in organizing the event.

World Health Day

On the occasion of 'World Health Day' on 7th April 2016, Department of Chemistry in collaboration with India Book of records and Indo-Vietnam Medical Board organized a talk by Dr. Suman Rawat, Faculty in the institute and a certified diabetes educator. She presented myth-busting

facts in an hour long session on "Diabetes Type I & II Cure in 72 hours" during the seminar.

The speaker shared simple but effective techniques with the audience to cure and reverse diabetes. Even after 69 years of independence India is still deeply trapped in the vicious cycle of western medicine, emphasized the speaker. The aim of the seminar was to help in reversing Diabetes, Heart Diseases, High Blood Pressure and High cholesterol. At the end of seminar, scientific evidence based DVD "Diabetes Type I & II Cure in 72 hours" was distributed among the participants for their better understanding.



Dr. Suman Rawat addressing the participants

Dr. Shailja Pant, Principal, released the copies of the book "The last days of Diabetes" authored by Dr. Biswaroop Roy Chowdhary, who has shared scientific techniques with readers by which a person can be cured of diabetes and other lifestyle diseases. Dr. Chowdhary was available online to answer queries of audience and media across all the 69 locations through video conferencing.

Simultaneously, Department of Pathology organized a Guest lectures on the occasion of the World Health Day on "Anaemia- A silent killer among women & children" by Dr. Rashmi Dhigra, Deputy Director, UCPH, Dehra Dun.

Word **Environment Day**



Dr. S.P.S. Khushwaha planting the sapling

On the occasion of World Environment Day-2016, Department of Botany organized one day Seminar on 'Illegal Trade in Wildlife' on 3rd June, 2016. Dr. S.P S. Kushwaha, Former Head, Forestry and Ecology Division, Indian Institute of Remote Sensing, Dehra Dun, was the Chief Guest and Keynote speaker for the seminar. The topic of his lecture was 'Wildlife Management and Geospatial Technology'. Dr. Arun Kumar, Director, while welcoming the guests and students spoke in details about the world wide urgent need of Wildlife conservation in view of the alarming rise in the illegal wildlife trade across the Globe.

and allergen-free. The breakthrough

also provides insights into geocarpy

- a unique reproductive process of

the groundnut, oil biosynthesis and

allergens. The findings have been

published in the 'Proceedings of the

National Academy of Sciences

'(PNAS), USA (http://www.pnas.org/

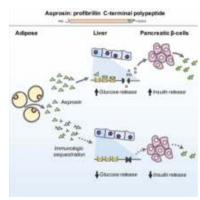
content/early/2016/05/25/1600899



Scientific Advancements

Asprosin, A Fasting-Induced Glucogenic Protein Hormone

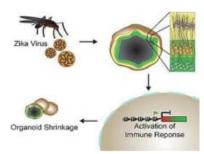
Hepatic glucose released into the circulation is vital for brain functioning and survival during periods of fasting, and is modulated by an array of hormones that precisely regulate plasma glucose levels. Asprosin, the C-terminal cleavage product of profibrillin, is secreted by white adipose, circulates at nanomolar levels, and is recruited to the liver, where it activates the G proteincAMP-PKA pathway, resulting in rapid glucose release into the circulation. Therapeutically,



targeting it may be beneficial in type II diabetes and metabolic syndrome (Cell, 165(3): 566-579, 21 April

Zika Virus may cause Microcephaly by **Hijacking Human Immune Molecule**

In May, researchers at the University of California determined that Zika virus activates immune receptor TLR3, which in turn inhibits brain cell development and survival, causing the organoids to shrink. The study also shows that inhibiting this mechanism reduces brain cell damage, hinting at a new therapeutic approach to mitigating the effects of prenatal Zika virus infection (http:// ucsdnews.ucsd.



edu/pressrelease/zika_virus_may_c ause_microcephaly_by_hijacking_ hum an immune molecule).

Breakthrough in DNA Sequencing of Groundnut

improved groundnut

varieties with enhanced

traits such as increased pod

and oil yield, drought and heat

tolerance and greater disease

resistance. Other significant

varieties this could help develop

They feel that this promises the development of

A team of 51 scientists from nine countries including India, China, the USA and Australia, and the International Crops Research Institute for the Semi-Arid

Tropics (ICRISAT), have decoded the complete DNA sequence of the ancestor of groundnut, the diploid A-genome (Arachis duranensis).

Common Plant Could **Help Fight Zika Virus**

Jerouen Paul Lumabao, a 10th grader at Daniel R. Aguinaldo National High School in Davao City, Philippines, discovered that extract of leaves of the garden croton or San Francisco plant (Codiaeum variegatum) could kill larvae of a mosquito that helps spread the viruses that cause Zika, Chikungunya and Dengue fever. The research may help public health officials develop a way to slow the spread of these deadly diseases. It also may give homeowners hints about how to home-brew their own mosquito-killing cocktail (societyforscience.org/article/comm on-plant-could-help-fight-zikavirus).

113.full) on May 31, 2016. include aflatoxin-free, nutrition-rich **Bioo, The High-Tech Houseplant, Charges Smartphone With Plant Power**

Bioo based on precision technology from Arkyne Technologies, Barcelona, Spain, is embedded within the potted plant. The magic happens inside the

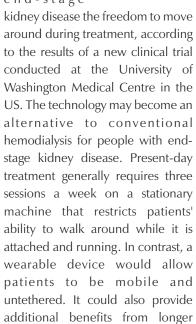
plant pot, where energy created by the plant's biological elements expelled after photosynthesis is transferred for use in the form of electricity. A USB wire, biological nanowires and an anaerobic chamber make up the system that powers Smartphone

(techtimes.com/articles/151655/20 160419/bioo-charges-phone-plantpower).



Wearable Kidney may Help Replace Dialysis

A wearable artificial kidney may be a viable dialysis technology that can give people with

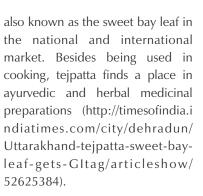


sessions or more frequent days of dialysis. The clinical trial of a prototype for such a device was performed with seven patients. The patients were treated with the device for up to 24 hours. The US Food and Drug Administrationauthorised trial was conducted to determine the safety and efficacy of the device. The device effectively cleared the blood of waste products, like urea, creatinine and and phosphorus, while also removing excess water and salt (timesofindia. com/Article.aspx eid = 31808 & articlexml = Wearable-kidney-may-helpreplace-dialysis-0406).

end-stage

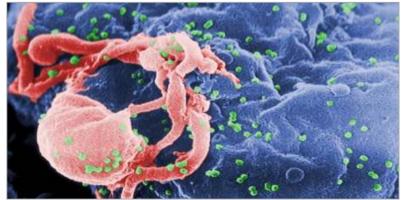
Uttarakhand Tejpatta Gets GI Tag

The famed Uttarakhand tejpatta, a popular spice used extensively in the hilly cuisine, has been awarded a geographical indication (GI) certificate by the Chennai-based Geographical Indications Registry, making it the first product indigenous to the state to have made it to the GI list which features 261 products from across the country. Over a thousand metric tonnes of tejpatta (Cinnamomum tamala) is produced in the state every year, mainly in the districts of Nainital, Chamoli, Tehri, Bageshwar, Almora, Pithoragarh, and Champawat. Grown at a height of 1,000 to 2,200 metres, tejpatta from Uttarakhand is



Scientists Remove HIV DNA from Living Tissue, are One Step Closer to Cure

At present, HIV treatment relies on various antiretrovirals, and while these do prevent the human immunodeficiency virus from replicating, they do not serve as a cure. Worse, when antiretroviral therapy is interrupted, the virus replication rebounds. When this happens, the patient is put at risk of developing acquired immune deficiency syndrome (AIDS). If doctors could one day eliminate HIV from human genomes, the disease could finally be cured. In the study, Khalil and his team at Temple University, Philadelphia, Pennsylvania, studied the CRISPR



DNA from both rats and mice, and found that it successfully cuts out the virus in more than half of the cells. technique's ability to remove HIV complicated procedure even when cure/56403).

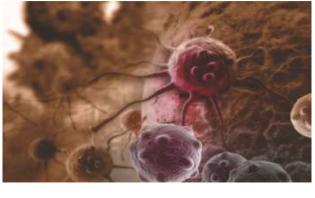
used on human patients (http://christiantimes.com/article/hi v-aids-cure-news-scientists-According to Khalil, the process was remove-hiv-dna-from-living-tissue-"very simple" and would not be a are-one-step-closer-to-

New Method can Kill Cancer Cells in Two Hours

Researchers at the University of Texas have developed a new, noninvasive method that can kill cancer cells in two hours, an advance that may significantly help people with inoperable or hard-to-reach tumours as well as young children stricken with the deadly disease. The method involves injecting a chemical compound, nitrobenzaldehyde, into the tumour and allowing it to diffuse into the tissue. A beam of light is then aimed at the tissue, causing the cells to become very acidic inside and, essentially, "commit suicide". Within two hours, up to 95 per cent of the targeted cancer cells are dead or are estimated to be dead.

Matthew Gdovin hopes that his noninvasive method will help cancer patients with tumours in areas that have proven problematic for surgeons,

such as the brain stem, aorta or spine. It could also help people who have received the maximum amount of radiation treatment and can no longer cope with the scarring and pain that go along with it, or children who are at risk of



developing mutations from radiation as they grow older. The findings were published in the Journal of Clinical Oncology (thehindu.com/scitech/health/new-method-can-killcancer-cells-in-two-hours-shows-



New Species of Terrifying Tomato Appears to Bleed

The species, Solanum ossicruentum, is a type of bush tomato from northern Australia. These tomatoes are only a couple of centimeters (about an inch) wide and they grow within a shell of spikes. These spikes probably help the fruits latch onto the fur of passing mammals to spread the plant's seeds elsewhere. Two minutes after being cut open, the white flesh of an immature fruit turns red. After five minutes of air



exposure, the bush tomatoes bloody colour becomes even darker (student.societyforscience.org/articl e/new-species-terrifying-tomatoappears-bleed).

Over 350 species of birds migrate to India, says Government of India

More than 350 species of bird migrate to India even as there has been a decline in the number of some of these migratory birds due to various reasons, including pollution of wetland by domestic sewage.

"Although no specific assessment is conducted by the Ministry (Environment) with respect to species of migratory birds visiting India, literatures published by experts, including scientific institutions, suggest that about 370 species of birds migrate to India out of which 175 species undertake long-distance migration using Central Asian flyway area which also include Amur falcons, Egyptian vultures, plovers, ducks, storks, ibises, flamingoes, jacanas, pochards and others," Environment Minister Prakash Javadekar said in Rajya Sabha.

Bionic Leaf Turns Sunlight into Liquid Fuel

Scientists at the Harvard University have developed a bionic leaf 2.0 that uses solar energy to split water molecules and hydrogen-eating bacteria to produce liquid fuels, that surpasses the efficiency of photosynthesis seen in fastest growing plants. Earlier, artificial photosynthesis was used for watersplitting. The system can be used to generate usable fuels (huffingtonpost.co.uk/entry/scientist s-develop-bionic-leaf-that-turnssunlight-into-liquid-fuel).



Bar-headed Goose, Anser indicus, a common migratory bird in India

Identifying Ancient Trees from Their Amber



According to a study conducted by a Swedish team, analyses of a yellowish fossil may point to a previously unknown type of tree. There are electrical forces that hold atoms together in the amber. Researchers can map these bonds and compare them to the ones that form in modern tree resins under heat and

pressure. These bonds differ from one tree species to another. In this way, scientists can identify the type of tree that produced the resin. This discovery may shed new light on ecosystems that existed millions of years ago (student.societyfor science.org/article/identifyingancient-trees-their-amber).

Training & Placement Cell

Though this is the period when mostly students are busy in preparing for the University exams and completion of their syllabus and course contents. However, the Training and Placement cell has still been quite active in either

arranging the placement interviews in the premises of the companies or in successfully arranging campus placement interviews.

Altogether six industrial houses interviewed our students between April to June 2016. The detailed list is provided below. Of these Nectar Lifesciences, Derabassi, Punjab which came for Campus Placement in the Institute selected eight students, while Jubilant life Sciences Ltd., Punjab and GMP Pharma Industries, Dehra Dun one each

from M.Sc. Biotechnology,

Chemistry and Microbiology. List of the Industries who interviewed the students between

Aprii-june, 2016.	
Name of Industry	Date
Sharon Biomedicine Ltd. U.K.	12 April 2016
Sharon Biomedicine Ltd. U.K.	19 April 2016
Nectar Lifesciences Ltd. Punjab	25 April 2016
Troika Pharmaceuticals Ltd. U.K.	05 May 2016
Sharon Biomedicine Ltd. U.K.	16 May 2016
Swift Lifesciences Pvt. Ltd. U.K.	17 May 2016
GMP Pharma Industry, U.K.	01 June 2016
J Mitra & Company, New Delhi	17 June 2016

In addition the Institutes also play a paramedical courses. About 125 internships for the students of the period.

proactive role in arranging students ware assisted during the

Decline in numbers due to poaching, pollution

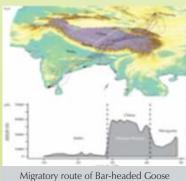
In a written reply, he said as per the Asian Water Bird Census' coordinated by Wetlands International, some migratory birds in the region showed a decreasing trend during the last decade while some species indicated a stable population.

"The decline in the number of migratory birds is attributed to various factors including wetland reclamation, pollution of wetland through domestic sewage, hunting, trapping of migratory routes, indiscriminate use of pesticides and climate change," he said.

On the steps taken by the government for protection of migratory birds, mr Javadekar said rarer and endangered species are included in the Schedule 1 of Wildlife Protection Act 1972 thereby according the highest degree of protection.

Other steps also include stringent punishments for violation of the Act, notification of important habitats of these birds as protected areas,

fertilizers, reduction of habitat, establishment of wildlife crime control bureau for control of illegal trade and others. (Source: The Hindu April 26, 2016).



Faculty Corner

Myths of the origin of 'Rudraksha'

Rudraksha, also rudraksh, Sanskrit: rudrāksa ("Rudra's [Shiva's] Teardrops"), is a seed traditionally used for prayer beads in Hinduism. The seed is produced by several species of large evergreen broadleaved tree in the genus Elaeocarpus, with Elaeocarpus ganitrus Roxb. (Elaeocarpaceae) being the principal species used in the making of organic jewellery or mala. Traditionally, it is believed that the number of beads used should be 108 plus one. The extra bead is the bindu or "guru bead". Its medicinal and divine properties have been known since times immemorial. It is believed that who

divine bead. According to the religious text of

has the blessings of Lord Shiva, gets

the opportunity of wearing this

"Devi Bhagwat Puran", there were three Demons known as Tripurasuras, who was very strong and had innumerable powers. Due to these qualities he became so proud that he started to trouble deities and sages. No one was able

> strong demon. On noticing Demon's immoral actions, Brahma, Vishnu and other deities became very

to fight and defeat this

worried. They approached Lord Shiva and prayed to give salvation from the demon Tripurasur. Lord Shiva half closed his eyes and meditated for some time before engaging the Demon in fight. When he opened his eyes, tears fell down on the earth. Wherever his tears fell the Rudraksha tree grew. Lord Shiva then used his deadly divine weapon



known as Aghor and finished the demons Tripurasuras forever. According to another religious text "Shiva Mahapuran", Parvati the divine consort of Lord Shiva asked him the origin of Rudraksha. On hearing her question Shiva said that once he did penance for a thousand years. Tired of keeping his eyes closed for a time so long, Shiva opened them and a few drops of tear fell on the ground and turned into beads and grew into trees. Thus the Rudraksha trees were born.

Compiled by: Dr. K.P. Tripathi, HOD- Department of Botany, DIBNS, Dehra Dun.

Student Corner



कितने सुन्दर लगते हैं तारे, गिनने लगुं तो गिनती भुलूं, जी चाहता है इनको छूलूं कितने दूर, कितने पास, कौन जाने इनकी बात? देखते बीते सारी रात. भोर होते ही, ये छिप जाते हैं, रात होते ही, ये आ जाते हैं, अजब निराला इनका संसार, इनका रहस्य अपरम्पार।

