Letter from the Executive Director, Agribusinesses

Volume 01 Is

Issue 23 April 2014

# Lal Pakri can be a Solution to Potato Farmer's Problem

Lal Pakri is one of the indigenous potato varieties in Bangladesh. From research it has been found that through genetic intervention it is possible to store Lal Pakri in normal temperature and condition for three to four months as it has a higher shelf-time which increases its durability. Yield can be enhanced up to 35 MT/ha under optimal production condition, tubers are red and extensively preferred by the consumers for its fine taste and it is also well fit in "rice-potato-rice" cropping pattern. These high-quality attributes of Lal Pakri could be used as a good solution in eradicating the recently faced problems by the farmers. It has been observed that potato farmers are facing similar kind of problems every year.

- As supply of potatoes have surpassed the demand by a large scale, price of potatoes have reduced, eventually not allowing the farmers to get the proper price.
- The farmers could not bring enough profit as the input farmers had excess pressure in giving their money back which they took on credit leading to an early harvest pressure of immature potatoes.
- After harvesting owners were unable to store more potatoes due to less storage capacity in cold storages which resulted in a lot of potatoes being wasted.

If we could promote Lal Pakri these problems could have been solved easily as it would increase the consumer demand as the taste is better than other potatoes. Farmers won't need to harvest immature potatoes any more as this variety is a short duration variety. Since, it can be stored in normal room temperature and farmers condition for a short time don't have to store them in cold storage, neither will they have to sell their crops in low prices immediately after harvesting. Actions to be taken in future will include Lal Pakri variety purification, promote Lal Pakri by agricultural extension and provide subsidy seed and make widely available of the developed Lal Pakri seed variety and ensure proper training to the farmers about how to store this harvested potato.

We hope that this newly developed seed variety would bring fruitful result for the farmers through the implementation of the above mentioned action plans which will also result in solving the ongoing crisis for the farmers.





## Contents

- 3 6 Events and Activities
- 7 9 Agri-tech and Communication
- 10 11 Readers' Corner

3

# Demonstration of Summer Tomato and Cauliflower Cultivation as High-Value Crop



ACI is promoting cultivation of summer tomatoes and cauliflower in Jessore, Chuadanga and Rajshahi as a high value crop.

### Establishing Strong Network through Partnership Building

ACI Cropex is going to establish a strong supply chain network with M4C (Making markets work for the Chars) for Chili Marketing.



5

#### Niche Marketing for Rubber Cultivation

On 11th March 2014, ACI Fertilizer organized a program with Rubber Garden Managers in Chittagong. 20 Rubber Garden Managers, General Manager & Deputy General Manager of the rubber board participated in the program.



6

### Pioneer Announces New 2014 Soybean Varieties

- Higher Yield Potential



To maximize return from their soybean acres,growers are looking for higher soybean yields, and DuPont Pioneer soybean breeders are delivering with a large class of new products available in 2014.

### Unlocking the Genetic Secrets of wheat

Scientists at Swinburne
University of Technology have
discovered how wheat seedlings
defend themselves against
bacteria, opening the door for food and
health applications.



### **EDITORIAL BOARD**

#### **Advisory Editor**

Prof. Dr. Lutfur Rahman Adviser, ACI Agribusinesses

#### **Editor**

M. Saifullah Head of Strategy ACI Agribusinesses

#### **Assistant Editor**

Ehsanul Karim Executive ACI Agribusinesses

#### **Members**

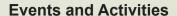
Yusuf Alam Assistant Product Manager, ACI Fertilizer

Mohammad Mizanur Rahaman Assistant Product Manager, ACI Seed

Dr. Md. Amjad Hossain Product Manager, ACI Animal Health Md. Shiful Alam Coordination Officer, ACI Motors

Md. Mustafizur Rahman Khan Marketing Manager, ACI Cropex

Dr. Akhter Head of PDS, ACI Seed Adeeba Raihan Research Specialist, Advanced Seed Research & Biotech Centre





# **Establishing Strong Network through Partnership Building**

ACI Cropex is going to establish a strong supply chain network with M4C (Making markets work for the Chars) for Chili Marketing. On 17th March 2014, ACI Cropex attended a M4C workshop for this project. In the next month, ACI Cropex will start purchasing chili from M4C. ACI Cropex will play a vital role in this partnership as they will be informing the farmers regarding the methods of transportation, quality and packaging procedures.

ACI Cropex has successfully made a Partnership Contract with Katalyst. Katalyst is a market development project that is co-founded by the UK Government and implemented by Swisscontact. Katalyst and ACI Cropex has agreed to work together and share resources for the purpose of collaborating in establishing a procurement channel for sourcing quality agro products.



# International Exhibition on Dairy, Aqua and Pet Animals

Animal Health Companies Association of Bangladesh (AHCAB) initiated a three day international exhibition on Dairy, Aqua and Pet animals from 27th February to 1st March 2014 at the Bangabandhu International Convention Centre (BICC). Honorable finance minister, Abdul Mal Abdul Muhith formally inaugurated the exhibition. He asked the private entrepreneurs of the dairy and fish sectors to come forward as they will be facilitated with all the resources from the government. He also said that if we could process the fish in the proper way it will allow us to increase the profit by ten times. Major participants also present in the exhibition were Mr. Muhammed Sayedul Hoque (Minister of Fisheries and Livestock), Mr. Narayon Chandra Chanda (State Minister of Fisheries and Livestock), Mr. Kazi Akram Uddin Ahmed (Guest of Honor) and Ms. Shelima Afroza (Secretary of Fisheries and Livestock). Around 120 national and international animal health companies participated in this exhibition where day-long seminars were being held. The main objective of this event was to display the availability of products to the guests in Bangladesh. Through the display new innovations and technology such as zero-fly mosquito net and mastitis control management were being illustrated as part of technological advancement in the animal health sector. Stalls consisting of discussion centres were arranged in order to provide solutions to the problems asked by the visitors. Major criteria's discussed during the event were about nutritional deficiency, different disease management and the features of the products that will help them get solutions to their problems. These discussion tables were set up so that guests get a good perception about the present situation and hence get influenced in investing in our company in the near future.







# Demonstration of Summer Tomato and Cauliflower Cultivation as High-Value Crop

ACI is promoting cultivation of summer tomatoes and cauliflower in Jessore, Chuadanga and Rajshahi as a high value crop. In March 2014, a total of ninety three innovative farmers of Jessore, Chuadanga and Rajshahi received training and input support (seed, fertilizer, and hormone) from ACI Seed and ACI Fertilizers to cultivate summer tomatoes and cauliflower.

Generally, tomatoes are grown in Bangladesh as a winter vegetable. Recently, ACI has introduced tomato: SUMMER KING and cauliflower: MARADONA for summer cultivation season.

For tomato, there is a need to partially cover the production plots with transparent polyethylene-bamboo sheds, which will protect the crops from heavy rainfall. A hormone called BAMPER FOLON is applied to flower for better fruit development. Farmers received an orientation about the new varieties and hands-on training on the cultivation of summer tomato and cauliflower. A dummy poly-bamboo shed was constructed in the training venue to take practical orientation on tunnel development for tomato. No polythene shed is required while cultivating cauliflower. In March 2014, Dr. Akter Hossain, PDS Manager worked with his team in close collaboration with upazila DAE staff in Jessore, Chuadanga and Rajshahi to train and motivate farmers. It is anticipated that the farmers will get 5-8 kg of tomatoes from each plant for a profit of Tk.6000-7000 from each decimal of land. While from Maradona cauliflower they will get Tk 70,000 as profit from 33 decimal of land.

This is a new and bonus crop for these localities that will generate employment and income in the lean period of the cropping system.



## **Dealer Motivation through Pleasure Trip at Sundarban**

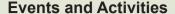
On 7th March2014, ACI Seed has arranged a three days long pleasure trip for its dealers at Sundarban. Around 34 vegetable seed sales achiever along with three highest contributing dealers were present and enjoyed the exquisiteness of the world's largest mangrove forest. The tour was covered by visiting three beautiful spots like herbaria eco-tourist spot, Kodtka and Kochikhali. All sites were full of natural gratification and great enthusiasm was seen during the participation of different sport events like football, dart, playing cards, quiz competition etc.

The main objective from the programme was to achieve the business budget of 2014 through strengthening vegetable seed sales. We shared the USP of our products and also shared success stories of some highlighting products so that the customer's fill even more motivated.

The customers were also sharing their experiences with us which will benefit our business for future planning.

Eventually, customers paid their gratitude to ACI Seed for arranging such a program and requested us to arrange such programs by including their wives next year. They showed their commitment to the business that this year they will sale even more ACI products and contribute significantly by being part of the ACI family.





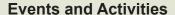


## **Niche Marketing for Rubber Cultivation**

On 11th March 2014, ACI Fertilizer organized a program with Rubber Garden Managers in Chittagong. 20 Rubber Garden Managers, General Manager & Deputy General Manager of the rubber board participated in the program. The objective of the event was to promote ACI Fertilizer solution in rubber cultivation. Major products which were promoted during the event were Organic Fertilizer, Zinc Sulphate, Gypsar, Boron and Magnesium Sulphate. Apart from the program, demonstrations of different products were also done such as organic fertilizer was used 1-3 kg/plant, gypsar 200-300 grams/plant, zinc sulphate 25 grams/plant, boron 25 grams/plant and magnesium sulphate 200grams/plant. Currently rubber is cultivated in hilly areas mainly in Chittagong, Cox's Bazar, Sylhet, Tangail, Panchagarh and Sherpur.

Organic matter, R.P.G and Magnesium, these nutrients are very important for the land in which rubber is cultivated. Ph level is very important for rubber cultivation. Organic fertilizer and Gypsar are required to balance this ph level. In Bangladesh, rubber cultivation is currently done in 40,000 hectare land with a production of 14,000 metric tones per year. Government is planning to achieve 60,000 metric tones per year by 2020. Currently the cost of producing rubber is 100-110 Tk/kg but locally the production is not sufficient to meet the current demand. Therefore, ACI Fertilizer has to import the rubber which is costing more than 200 Tk/kg. Demand for natural rubber is very high worldwide, so if the production could be increased there is a high opportunity to export worldwide and also meet the local demand.







# ACI-IAP-SIDA Project Successfully Completed Training of 800 Women

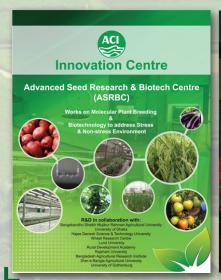
ACI in collaboration with the Innovation Against Poverty (IAP) Program of the Swedish International Development Cooperation Agency (SIDA) has been funding a project to promote climate smart sustainable agriculture in the coastal belt of Bangladesh. In the 8 project locations, in the districts of Barisal, Borguna, Patuakhali women of the participating farm families are encouraged to take part in the food production system through homestead gardening. They were given vegetable seeds by ACI Seed and invited to a training session. 800 women showed interested and participated in the training program held throughout March 2014. Apart from this 80 new field demonstrations have been established, while the previous 80 demonstrations and 1600 homestead gardening activities are ongoing.





# The ASRBC attends conference in Rajshahi University

Prof. Lutfur Rahman, Advisor of ACI Agribusinesses gave a presentation at the "Biotechology for Better Tomorrow" international conference at the Institute of Biological Sciences (IBS), Rajshai University on 29 March 2014. This is the first international conference in which the ASRBC has participated in. Prof. Lutfur Rahman spoke on the "Partnerships among Public and Private Organizations in Biotech Research only will lead to better future", which is an extremely important subject for the future growth and product development through biotechnology in Bangladesh. Dr. F. H. Ansarey, Executive Director of ACI Agribusinesses Chaired the plenary session. At the end of the conference, Dr. Tanzima Yeasmin, Director of IBS presented them both with crests.







## **Pioneer Announces New 2014 Soybean Varieties**

## - Higher Yield Potential

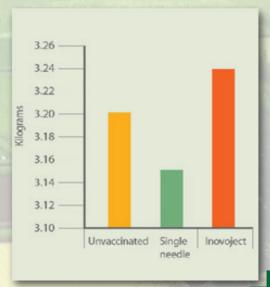
To maximize return from their soybean acres, growers are looking for higher soybean yields, and DuPont Pioneer soybean breeders are delivering with a large class of new products available in 2014. These elite new varieties continue the Pioneer pursuit of improved yield potential while offering the agronomic and defensive traits needed to protect this potential. In addition, Pioneer is introducing four new products that feature the Plenish® high oleic trait. This trait allows growers in participating processor areas to contract Plenish soybeans for the high oleic oil market, providing attractive oil alternatives to food and industrial markets. These varieties offer top tier performance and on par with elite Pioneer soybean varieties plus processorpaid contract premiums for added per acre returns. The new Pioneer T Series products carry resistance or tolerance to key yield-robbing diseases and pests, including Phytophthora root rot, soybean cyst nematode (SCN), sudden death syndrome, brown stem rot, iron chlorosis and frogeye leaf spot.



# Studies Demonstrate Benefits of Dual-needle in-ovo Vaccination for Marek's Disease

In a challenge study believed to be the first of its kind, chickens vaccinated in ovo with a dual-needle delivery system were better protected from Marek's disease than those receiving the same vaccine with a conventional single-needle in-ovo delivery system. The level of protection, determined by the absence of tumours, was significantly better in birds from the dual-needle group compared to the single-needle group and a group of unvaccinated controls. The dual-needle group also had better weight gain.







## **Unlocking the Genetic Secrets of wheat**

Scientists at Swinburne University of Technology have discovered how wheat seedlings defend themselves against bacteria, opening the door for food and health applications. Puroindoline a and puroindoline b (Pina and Pinb) determine grain hardness. Peptides – short chains of protein building blocks – derived from these genes are known for their antimicrobial properties and are implanted in various crops. How these peptides defend wheat seedlings from diseases was not known. It was found that the peptides were aggressive towards a range of bacteria and fungi, but left mammalian cells unharmed, so could be used in any area that aims to reduce microbial contamination, such as food safety, hygiene and surface decontamination. The peptides also tolerate high heat and can be used as preservatives in food applications, such as milk or orange juice.



# Innvictis Crop Care Announces Launch of EndurX Technology Platform

Innvictis Crop Care, LLC has announced the launch of EndurX Technology Platform. Developed and tested in 2012 and 2013, Innvictis will be launching its first product containing EndurX in 2014. Endurx is premixed with key active ingredients where the two molecules attach to each other. When mixed with water and sprayed in crop, the EndurX escorts the active ingredient to the leading edge of the spray droplet. Upon hitting the leaf surface, the droplet rapidly spreads and immediately penetrates the leaf where more Al is at the target interface and attacks the target site much quicker. When contact is made with the insect, a higher dosage is delivered and quicker knockdown and control is achieved.

EndurX will also provide greater translaminar leaf penetration which protects the pesticide from drying and wash off of the leaf surface. The pesticide stays more active and available improving performance and mitigating loss to environmental exposure through evaporation and runoff.



## **Biomass Harvesters**

For years, the problem has been how to get rid of excess crop residue so it doesn't affect crop emergence. Now, alternative fuel makers have another use for biomass, and equipment companies are scrambling for ways to handle it. The Bio-Harvester™ enables utilization of hazardous forest fuel loads, habitat restoration materials and plantation thinning residues; providing a non-agricultural renewable energy biomass supply. The Bio-Harvester ™ enables utilization of hazardous forest fuel loads, habitat restoration materials and plantation thinning residues; providing a non-agricultural renewable energy biomass supply. They are also trying to modify existing equipment, develop new prototypes and design totally different machines to collect biomass. It turns out that alternative fuels may keep more than just farmers in business.





## **E Premium Tractor**

During a storm when the electricity goes out, the new John Deere 7430 E Premium tractor can pull up to the house and plug in an electrical cord for power. This new tractor is a change in direction for the equipment industry. The tractor generates electricity to run auxiliaries like air conditioning and will operate implements that are redesigned with electric motors. Without all the extras draining its power, the diesel engine can maximize its performance and save fuel. A side benefit of the tractor's generator is the ability to run power equipment wherever the tractor can go.



## Fertilizer Deep Placement (FDP)

Millions of rice farmers depend on urea fertilizer to meet the nitrogen needs of the continent's primary crop. Many farmers still spread urea into floodwaters to fertilize rice. This is highly inefficient about two-thirds of the fertilizer is lost as greenhouse gas or becomes a groundwater pollutant. Urea deep placement (UDP) is a more efficient and environmentally responsible method of fertilization. IFDC pioneered UDP research and helped introduce it in Bangladesh. IFDC developed FDP as a more effective alternative to the traditional method of applying fertilizer by surface broadcasting (spreading, usually by hand) across a field or paddy.

Farmers using UDP place urea briquettes into soil near the rice plants. UDP increases nitrogen use efficiency because most of the urea nitrogen stays in the soil, close to the plant roots where it is absorbed more effectively. The net result is that crop yields are increased while pollution is lessened. FDP is an innovative, proven fertilizer application technology that achieves average yield increases of 18 percent while reducing fertilizer use by about one-third.





#### Readers' Corner



## Did you know???



you can't taste food without Saliva.

it's possible to get sick or even die from drinking too much water. **Liquid Oxygen** is blue.

Fish scales are a common lipstick Ingredient.

Mushrooms are 80-90 percent water





## Calorie Chart

Fruit(Per 100gm)	Calories		Fat (g)	Carbohydra	ate (g) Protein (	(g)
Apple		52	0.17	13.81	0.24	
Apricot		48	0.39	11.12	1.40	
Avocados	1	60	14.66	8.53	2.00	
Mango		65	0.27	17.00	0.51	
Watermelon		30	0.15	7.55	0.61	
Blackberries		43	0.49	9.61	1.39	
Banana		89	0.33	22.84	1.09	
Blueberries		57	0.33	14.49	0.74	
Cherries		63	0.20	16.01	1.06	
Grape		32	0.10	8.08	0.63	
lemon		29	0.30	9.32	1.10	
Papaya		39	0.14	9.81	0.61	

## **Question & Answer**



Hello, I am Solaiman Hossen. I live in Chapai-Nawabgonj. I am involved in this agro-forestry sector for last 4 years. From 2012 I am cultivating mangoes. Last year I cultivated mangoes on five acres of land and expected bumper yield. I wanted to earn more money by selling mangoes. However, that didn't happen. When the plant started growing, the leaves of the plants confined with yellow pale fade color. The soil hampered the formation and quality of the plant. It created the side effect for the other plants either. So that when the mangoes ripped, it didn't create the possible bumper mango yield. In this case in this year I don't want to take any risk which may create any obstacle in family earning.

Solaiman Hossen, Chapai-Nawabgoni

After going through entire feature we diagnosis your difficulty which are symptoms of Magnesium. Due to the deficiency of magnesium the color of the leaves will gradually confine with yellow pale fade color. It hinders the growth of the plant. With lack of the magnesium your mango will rot at the very early stage. So we can suggest you to use ACI Magsar which can help you to yield more mangoes with quality fruits.

<sup>\*\*\*</sup>In order to get answer to any of your agriculture related queries, please email us at biolife@aci-bd.com or visit our Facebook page www.facebook.com/aciagribusinesses.



### Readers' Corner



Figure out the vegetables from the box!





















В	R	U	S	S	Ε	L	S	S	Р	R	0	U	Т	Т	А
E	R	Т	G	R	F	Ε	Z	D	W	L	N	Q	T	A	S
E	В	А	N	G	U	Ε	V	A	В	P	M	T	А	V	P
T	J	M	G	N	Ε	K	W	D	E	N	D	Ι	N	0	A
R	Е	А	D	R	S	L	F	E	N	N	Ε	L	А	С	R
0	T	R	V	G	I	W	S	J	N	Ε	M	P	R	A	A
0	X	Ι	F	G	M	M	L	Н	A	N	S	L	G	D	G
T	U	R	N	Ι	Р	G	W	A	T	D	M	L	Ε	0	U
F	R	D	N	R	V	В	А	T	V	Ι	Р	M	M	J	S
R	Н	U	В	A	R	В	R	T	D	V	С	Y	0	X	Y
U	Ε	В	U	J	U	J	Q	D	D	Ε	V	N	Р	T	M
F	Ε	N	N	E	L	Ι	U	R	F	K	С	А	J	X	S
T	Ι	M	Н	Q	M	V	S	Q	Τ	Y	Y	A	M	Р	L

<sup>\*\*\*</sup>To win exciting prizes, take a picture of this page with marked answers and send the picture to biolife@aci-bd.com by April 20

### Winner & Answer of the previous Word Game!!!

Syeda Sabrina Sarwar

Apple	N	C	G	L	P	C	P	0	Т	A	T	0
Lychee	Z	V	A	L	V	E	A	U	(0)	U	A	0
	L	M	R	R	Z	V	A	P	A	C	R	0
Pineapple	T	0	W	Y	0	J	B	A	U	A	T	M
Papaya	0	F	T	C	C	0	R	R	L	R	I	S
Orange	K	N	A	M	F	(0)	I	S	I	R	С	J
_	I	D	I	C	В	A	N	L	F	0	H	K
Mango	0	Q	N	0	X	В	J	E	L	T	0	F
Guava	A	0	K	T	N	В	A	Y	0	Z	K	E
Banana	Z	V	0	Y	T	A	L	Z	W	D	E	J
Cherry	Q	T	Q	R	R	G	X	M	E	N	Q	J
Cileiry	т	т	TT	M	NI	E	7.7	C	D	7.7	7\	т

## **ACI Agribusinesses**

ACI Centre

245 Tejgaon Industrial Area Tejgaon, Dhaka, Bangladesh Phone: + 88 02 887-8603 E-mail: biolife@aci-bd.com sectoedab@aci-bd.com

www.aciagribusinesses.com



**ACIAgribusinesses** 

Creating Wealth for Farmers

ACI Agribusinesses, the leading agriculture integrator in Bangladesh, is dedicated to gaining prosperity of Bangladesh through food security. ACI Agribusinesses offers complete solutions to farmers and also educates them about the technical know-how.