

The Chairman of ACI Plants a New Dream

In 1992, a ray of hope kindled when Mr. Anis Ud Dowla planted the seed of ACI. Today Advanced ACI Limited is one of the largest conglomerates of the country branching out to four successful business units: ACI Pharmaceuticals, ACI Consumer Brands, ACI Agribusinesses and ACI Logistics. The products and services of ACI Limited are reaching the lives of innumerable people of Bangladesh. The brand ACI is now a household name which is used, appreciated and loved by people of all ages and areas. Such success was only possible because of the strong vision of the chairman. Now, he has visualized a new hope of revolution for his country. He has planted a seed of a dream at the Advanced Seed Research and Biotech Center (ASRBC); a dream to create a Bangladesh where farmers will only smile after bountiful harvest of their crops, a dream to ensure that every single dweller of the country goes to bed with filled stomach, a dream to make the country a better and happier place to live in.



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ACI Fertilizer Focuses on Enhancing the Production of Potatoes

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With that aim, ACI Fertilizer organized trainings for officers of Bangladesh Agricultural Development Corporation (BADC) in several potato growing areas of Bangladesh and Bangladesh Agricultural Research Institute (BARI) in Rangpur, Lalmonirhat, Nilphamari and Kurigram.



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ACI Motors, organized a Training and Demonstration Program for Farm Machinery Technology Development & Dissemination Project at Bangladesh Agricultural Research Institute (BARI) in Joydebpur, Gazipur.

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ACI Cropex has started marketing different vegetables to the retail shops at various wet markets which are more hygienic and fresh than the vegetables found in other markets.

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Combating Diseases and Malnutrition: ACI Animal Health Introduces Eight New Products

We know that the demand for food is increasing but it is shocking when you find out that only 9% demand for milk is being fulfilled and only 10% of the meat (beef and mutton) is being met in Bangladesh. Population is increasing and hence the demand and supply gaps are meant to increase if precautions are not taken. ACI Animal Health is putting its best effort to come up with solutions that can ensure better production of milk and protein.

In Dairy we have launched 6 products which are Gold Zinc, UB-SACC, Acimox Vet 1gm Inj., Acimox DS Vet Inj., Bicarb and Promix. Mastitis, the persistent, inflammatory reaction of the udder tissue, is one of the most common diseases among dairy cows. ACI Animal Health has introduced organic zinc in the market for the very first time. Gold Zinc, 100g Sachet (Zinc proteinate) proves efficacy for correction of anorexia and formation of hair follicle and controlling mastitis. Organic zinc can readily be absorbed so it is more effective than the existing inorganic zinc. UB-SACC is a probiotic preparation used for the production of micro flora in rumen. Since it contains high concentration of Saccharomyces, UB-SACC can control mastitis in ruminants. Imported from Unibiotech Company of South Korea, UB-SACC is available in the market in 100g sachet and complements the new product, Gold Zinc. Acimox Vet & Acimox DS Vet Injection both are the preparations of Amoxicillin which are used to treat the animal affected by bacterial diseases like Anthrax, Hemorrhagic Septicemia, Black Quarter, Mastitis, Pneumonia, Bacterial Diarrhoea and as such.

Promix, available in 1kg packet, is a digestible protein which is useful for the production of milk and meat in animal. Bicarb, available in a 1 Kg packet, contains 99.01% of Sodium Hydrogen Carbonate. It is recommended for control of acidity in the rumen and uterus of cattle, sheep and goat.

In poultry, the two new products are NO-TOX and Jefo choline chloride. NO-TOX is a toxin binder and feed preservative used in poultry feed formulation to prevent toxicity produced by Fungus, Yeast and Bacteria. Jefo choline chloride, launched under the pack size of 25Kg, is a feed additives used in poultry feed to prevent liver from Fatty Liver Syndrome and increases the appetite of poultry.



Events and Activities

ACI Seed Arranges Plant Variety Demonstration at Rajshahi University

To disseminate the knowledge on plant varieties to the students of Rajshahi University Agriculture and Botany, a joint program on Plant Variety Demonstration 'RU-ACI/ASRBC Collaborative Research and Development Program' has been undertaken by ASRBC and Rajshahi University. The program was held at the field laboratory of Institute of Biological Sciences (IBS) at Rajshahi University. This demonstration will not only serve as a learning resource for students but they will also be able to observe the growth and development of each crop throughout the year and collect problems of the crop for further research and development. The director of IBS, Rajshahi has allotted ACI 0.15 acre of land for this demonstration. The field activity started in October 2013 and several varieties of ACI Seeds on vegetables and oils were sown for demonstration in Rabi 2013-14. The progress of November 2013 is impressive as many winter vegetables grown largely.



Discussion Program with Tea Garden Managers: ACI Fertilizer Spreads Knowledge

Most tea farmers know about applying organic fertilizer during nursing and planting tea leaves but little do they know about the impact fertilizer can have on the growth when applied during the maturity stage, i.e. the tea harvesting stage. To disseminate this knowledge, ACI Fertilizer organized a discussion program with tea managers in Chittagong on November 23, 2013. During this meeting, training was given on organic fertilizers, Gipsar and Bioferti (liquid humus). Fertilizers contain humus and humus is a store house of nutrients and hence during the maturity stage humus can increase the ease of nutrition uptakes from the soil. Few days back, ACI Fertilizer carried out a trial in Bangladesh Tea Research Institute in Srimangal and the result of that test was an increase in 16% yield in the production. In the discussion meeting, 50 tea garden managers were present who appreciated this endeavor and suggested that ACI Fertilizer should do formal trial in Chittagong as well.



Events and Activities

ACI Fertilizer Focuses on Enhancing the Production of Potatoes

This is the season of potatoes and potatoes are one of most common and loved vegetables in Bangladesh. ACI Fertilizer, to ensure proper production of potatoes, promoted the fertilizers that are specifically made for potatoes. With that aim, ACI Fertilizer organized trainings for officers of Bangladesh Agricultural Development Corporation (BADC) in several potato growing areas of Bangladesh which include Rangpur, Bogra, Tangail, Nilphamari, Rajshahi and Dinajpur. The products of ACI Fertilizer that were exhibited during these training were organic fertilizers, Gipsar, Bogra, Zinc Sulphate and liquid fertilizers. Also, training programs were arranged for officers of Bangladesh Agricultural Research Institute (BARI) in Rangpur, Lalmonirhat, Nilphamari and Kurigram. Here, the products were Boron, liquid fertilizers, Gipsar and Magnesium Sulfate. Both BADC and BARI do potato seed productions so they need very high quality fertilizers. The two institutions are thoroughly impressed with ACI Fertilizer products and they are using these in their researches.



ACI Motors Takes a Step in Promoting Advanced Technologies

ACI Motors, with the constant endeavor of familiarizing Bangladesh with new and better agricultural machineries, organized a Training and Demonstration Program for Farm Machinery Technology Development & Dissemination Project at Bangladesh Agricultural Research Institute (BARI) in Joydebpur, Gazipur. Along with the Chief Scientific Officers of BARI Dr. Aiyub Hossain and Dr. Nurul Amin, scientific officers, mechanics and operators were present during the training. The machineries that were given training on included harvester, transplanter, vegetable transplanter, reaper, heat pump and dryer. The officials of BARI liked the machineries and they are going to do further research to see the positive effects of these on fields. ACI Motors expects that BARI will have a contribution in popularizing these new technologies in the farmers' level in future.



R24 Promotion: ACI Motors Arranges Farmers' Meetings

R24, the new model by ACI Motors, is a breakthrough in the power tiller industry in Bangladesh which comprise of 24 blades instead of the existing usual 18 blades. In November, ACI Motors arranged three farmers' meetings in Rajshahi, Naogaon and Dinajpur with more than a hundred of customers and potential customers in each of them. In the meetings, the customers shared their opinions and satisfactions related to R24 to potential customers. The farmers thoroughly enjoyed the gatherings and ACI Motors expect that this would have a positive impact on making new customers.



ACI Cropex Enters the Vegetable Market

ACI Cropex has started marketing different vegetables such as cauliflower, cabbage, radish, carrot, beans, turnip and potatoes to the retail shops at various wet markets. These vegetables are more hygienic and fresh than the vegetables found in other markets. This is because ACI Cropex is monitoring the whole supply chain of their supply along with maintaining a strong postharvest management. Around 2 MT of fresh vegetables were sold in the month of November in two wet market and the retailers and consumers have appreciated this step.



Gene that Makes the Roots of Plants Grow Downward Discovered

Water stress is slowly becoming a colossal problem in the world of agriculture. Due to constant increase in urban and industrial use, the water level is increasing which is a giant threat for crop production. To combat this problem of water scarcity, scientists are working rigorously to find an alternative. Recently, a research team led by the National Institute of Agrobiological Sciences (NIAS) in Japan has discovered a “deep rooting” gene named DEEPER ROOTING 1 (DRO1) which makes the roots of rice plants grow downward instead of outwards. Scientists found out this DRO1 gene in a deep-rooting rice variety in the highland of Philippines. Locally known as Kinandang Patong, this rice variety can reach water held deeper in the soil and hence can continue to grow and produce grain even under extreme water stress. The researchers also found that the DRO1 gene appears to change only the angle of root growth and slightly increase the length of the root tips so that energy is not diverted away from the production of grain. Each year drought affects around 23 million hectares of rice in South and Southeast Asia alone and the persistent water scarcity can reduce rice yields drastically. At the same time, population is increasing; there will be 9 billion more mouths to be fed in 2050. Thus, DEEPER ROOTING 1 (DRO1) gene is, indeed, a ray of hope during this condition.



Study Shows GM Rice Has No Adverse Effects

Genetically modified plant varieties are always at the center of controversies. One group of people are always resisting the intrusion of genetically modified foods in people's lifestyle by claiming that these foods are harmful for human beings. Recently, China's National Institute for Nutrition and Food Safety have revealed the result of a long term study that that genetically modified rice does not cause adverse health effects when fed to rats. According to the study, 180 rats were randomly selected and separated into three groups: the first group was fed rice containing two genes, Cry1Ac and sck, that give rise to insecticidal proteins; the second was given non-GM rice and the third was fed a control diet. The researchers then monitored the rats' body weight, food consumption and blood chemistry and after 78 weeks, the rats consuming the GM rice expressed no adverse health effects.





Did you know???



Grapes explode when you put them in the microwave

Rice is the staple food for **50%** of the world's population

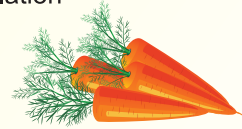
There is no butter in **buttermilk**

Carrots contain 0% fat

27% of food is thrown away in developed countries

Switzerland eats the most **chocolate** equating to **10 Kilos** per person per year

It's possible to lead a **cow** upstairs but not downstairs



Calorie Chart

Fresh Fruits (Half Cup)	Calories	Fat (g)	Carbohydrates (g)	Protein (g)
Cucumber	6.8	0.1	1.4	0.4
Carrot, cooked	35.1	0.1	8.2	0.9
Cabbage	11.1	0.1	2.4	0.6
Tomato	18.9	0.3	4.2	0.8
Radish	11.6	0.3	2.1	0.3
Potato	57	0	13	1
Eggplant, cooked	13.9	0.1	3.3	0.4
Cauliflower, cooked	14.3	0.3	2.5	1.1
Zucchini, cooked	14.4	0	3.5	0.6
Banana peppers	17	0.3	3.3	0.9
Green beans	17.1	0.1	3.9	1
Mushrooms, cooked	21.1	0.4	4	1.7

Source: www.blogilates.com

Question & Answer



Q1. I have very recently opened up a small poultry farm near my house. People around me are talking about a disease named Gumburo. I am not sure what this disease is. Can you tell me how we can identify that the chicken is attacked by Gumburo?
Saleh Amin, Sherpur, Bogra

Answer: To diagnose if you chicken Gumburo or not, you need to observe it properly. The chicken will have very high fever and along with that it will produce a watery diarrhea and may have swollen feces-stained vent. Most of the flocks are recumbent and have ruffled feathers. If it remains for more than a day then go to the nearest "Polli Chikitsok" or PS for immediate treatment.

***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

WORD Game

Figure out the vegetables from the box!



S	P	I	Q	P	A	P	A	Y	A	E	X	F	E	T	F
U	R	T	G	R	F	O	Z	D	W	L	N	Q	T	U	M
Y	B	A	N	G	U	A	V	A	B	P	W	T	A	P	S
J	J	M	G	N	E	J	W	D	E	P	Y	I	N	Y	C
S	E	A	D	R	S	L	F	I	F	A	G	G	A	V	K
T	T	R	V	G	I	W	S	J	N	E	M	P	R	N	X
A	X	I	F	G	M	M	L	H	A	N	S	L	G	X	S
R	T	N	W	S	A	G	W	A	T	I	M	L	E	K	F
F	R	D	N	R	V	B	A	T	V	P	P	W	M	J	H
R	Z	N	W	K	B	I	R	T	D	F	C	Y	O	X	Y
U	E	B	U	J	U	J	Q	D	D	B	V	N	P	T	W
I	C	P	O	L	T	I	U	R	F	K	C	A	J	X	S
T	I	W	H	Q	W	V	S	Q	T	Y	Y	R	W	P	L

***To win exciting prizes take a picture of this page with marked answers and send the picture to biolife@aci-bd.com

Winner & Answer of the previous Word Game!!!

Mubarak Saud Bin Mlnhaz
Logistics Officer
ACI Cropex

- Aubergine
- Cabbage
- Carrot
- Cauliflower
- Mushroom
- Tomato
- Zucchini

G	D	S	I	W	M	L	C	T	N	A	U	M
C	A	T	I	J	R	R	A	X	I	F	R	O
U	Z	H	V	D	X	L	O	G	K	M	J	R
X	I	C	Z	S	S	I	O	P	P	O	J	R
I	P	C	C	N	H	F	A	M	W	F	H	S
S	K	U	Y	M	P	L	M	O	P	A	Q	U
I	A	Z	C	M	K	O	T	M	Y	B	U	M
R	D	O	W	H	X	W	T	J	J	B	Q	C
B	E	N	I	G	R	E	B	U	A	K	H	E
H	S	U	C	A	R	R	O	T	G	Y	E	O
H	S	Z	X	O	L	K	Q	P	E	N	O	

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