

The Smarter Way of Roof Gardening - Drip Irrigation

Any plant needs regular supply of water with a regular interval. Pouring water in the morning & afternoon may not serve the purpose. Drawing an analogy, let us consider that anyone needs to drink 3 liters of water in a day. If he drinks 2 liters in the morning and no water later in the day, it is inappropriate.

Water supply through mini drip irrigation system can help to supply appropriate quantity of water to plant using clean filtered water without impurity. As a result plants grow efficiently; vegetables taste good and flowers look beautiful due to higher quality yield.

Plants and gardens look aesthetic- a great purpose of roof gardening is served.

When there is none at home, Mini Drip Irrigation System continues to supply water. Who won't like to see their lively roof garden after returning from a long vacation?

Roof gardening is happiness!

(Source: Food and Agriculture Organization of the United Nations; www.fao.org/docrep/s8684e/s8684e07.htm)

Dr. F H Ansarey
Managing Director & CEO
ACI Agribusiness



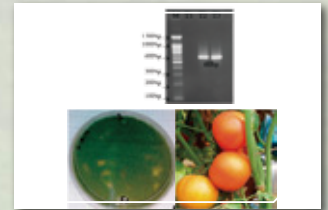
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Trichoderma formulations to control Fusarium wilt in plants: Tomato as a case study

Bio-control of plant diseases is now practiced worldwide. Among the bio-control agents *T.harzianum*, and *T. viride* have been found to control root diseases and also effective against foliar diseases of crops. The potentiality of *Trichoderma* spp. as efficient bio-control agents against tomato wilt, caused by *Fusarium oxysporum* f. sp. *lycopersici* (Sacc.) has also been established. The bio-control activity of the *Trichoderma* comes from their successful characteristic parasitism, antibiosis and host-plant resistance and competition. The ASRBC isolated samples of the same controlled highly virulent *Fusarium* wilt within the range of 85 to 95 percent under invitro conditions. *Trichoderma* has also been found to enhance growth of tomato in both green house and field conditions.

Fusarium wilt is one of the severe soil-borne fungal diseases, which negatively affects plants growth and yield. It causes a tomato yield loss of 60-70% in Bangladesh. The isolated samples from Dhaka at ASRBC under Accession # FOL 07 and 08 have been found to be 100% virulent. *Fusarium* wilt in tomato causes yellowing of one side of the leaf, shoot and branch resulting in death of plants within

a short period with reduced yield. At present there is no resistant tomato varieties for cultivation in Bangladesh. Also use of nonpathogenic *Fusarium* to control the wilt is not effective. The use of chemicals to the soil born disease like *Fusarium* is not only costly, but also is hazardous to health and the environment.

Tomato is one of the most economically important crops grown in Bangladesh. It has high market value because of its diversified use, nutritional contents and medicinal properties. In Bangladesh, the average yield of tomato is undesirably low, mostly due to several diseases, affecting plant growth and yield. *Fusarium* wilt is one of the severe soil-borne fungal diseases that reduce tomato yields. Thus, in controlling *Fusarium* wilt of tomato the ASRBC isolated and characterized *Trichoderma* which can be used in the form of bio-pesticide and bio-fertilizer.

Assistance of Adeeba Raihan, ASM Nahiyen Senior Scientists, ASRBC, ACI Limited is highly acknowledged.

Prof. Lutfur Rahman,
Advisor, ACI Agribusiness & Editor, Biolife

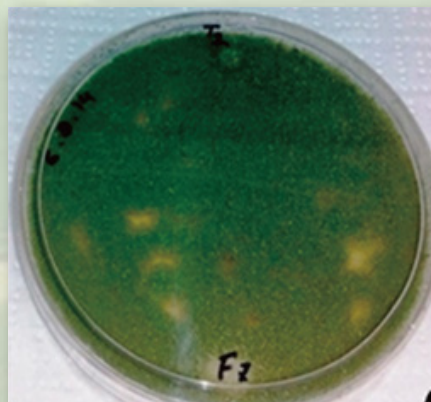
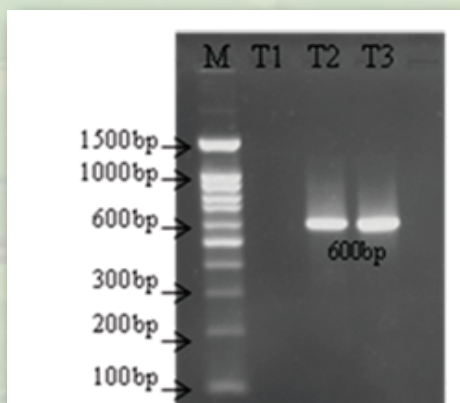


Fig A-C: Antagonistic efficacy of *Trichoderma* spp. against tomato wilt pathogen (FOL) under in vitro condition A. *Trichoderma* lines were specifically confirmed through Molecular Characterization of ITS1 region B. Green *Trichoderma* suppressed white *Fusarium* C. Disease free healthy tomatoes

Improving Tribal Communities through Vegetable Cultivation Training



ACI Seed and its Training Department organized a program for the tribal LC (learning center) farmers on vegetable cultivation technique and subsistence Jhum cultivation technology. The training took place from 22 October to 15 November 2017 in 12 different venues and the lead farmers participated. There are 300 tribal lead farmers among 1800 LC farm families. These farmers are living in 24 unions of 5 upazilla under Bandarban district.

The main objective of the training was to increase the capacity of tribal people for a collective response in production and marketing of vegetables. The empowerment of the smallholder farmers is an expected outcome of the program. An NGO, Helen-Keller International Bangladesh distributed the improved and high yielding varieties of ACI vegetable seeds among 1800 LC farmers for changing the socioeconomic status of the tribal communities through the Sapling Project. The training were consecutively conducted by Md. Abdullah Al Masud (PM, ACI Seed), Md. Amanotullah (Training Executive) and Md. Tanvir (PE). They trained the Lead farmers how to cultivate the distributed vegetable varieties in a scientific way at their homestead areas as well as on hill top slope for more benefit in respect of income & nutrition.

The unique dimension of the program was overcoming the challenge of accessing remote areas and language barrier. As about 50% of the participants are not fluent in Bangla, trainers used non-verbal communication techniques like showing vegetable production related videos, pictures, ACI Seed packages, Poster etc. Moreover, translated lectures were provided with the help of local Union Supervisor (US) or FF, the authority of the NGO. Introducing new technology (ACI Vegetable Seed) and Training on modern cultivation technique will bring a revolutionary change among the tribal farmers of Bandarban district.



ACI Fertilizer Launches NPKS Fertilizer “Ratno”



ACI Fertilizer launched NPKS fertilizer “Ratno” on 16 November 2017 at Dream Square Resort, Gazipur. Honorable Managing Director and CEO of ACI Agribusiness Dr. F.H. Ansarey launched the product while Business Director of ACI Fertilizer Mr. Bashir Ahmed, Sales Manager Mr. Md. Mustafizur Rahman Khan and Firoz Hossain and Assistant Marketing Manager Mr. Yusuf Alam were present in the ceremony. The NPKS Fertilizer “Ratno” is a result of the partnership between Mazim Agro Industries Ltd. and ACI Fertilizer. Mazim Agro is looking after the manufacturing while ACI Fertilizer is looking after the finished goods marketing and distribution.

For the healthy up breathing plants need proper nutrition. Nitrogen (N), Phosphorus (P), Potassium (K), and Sulphur (S) are most important nutrients for yield.

So the present annual market demand for NPKS fertilizer is about 50,000 Metric Ton in Bangladesh. The key objective of the launching event was to introduce the key benefits of ACI’s “Ratno” as an alternative to basic fertilizers to the top 100 dealers of the SBU. ‘Ratno’ is launched in two categories. The first category is for rice where N:P:K:S ratio is 8:20:14:5. The second category is for vegetable and fruits where N:P:K:S ratio is 12:15:20:6. As ‘Ratno’ is a balanced fertilizer it ensures proper nutrient for the soil. Farmers generally use nutrients separately which results in imbalance and lacks timeliness. This new product of ACI Fertilizer will ensure proper nutrient for the soil. As it is a mix of NPKS, “Ratno” will give all the nutrients at a time to the soil.

“Ready Mix Soil” & Green Garden Award to Promote Urban Gardening

With the vision of ‘Green Dhaka’, ACI Fertilizer launched the core product for urban gardening “Ready Mix Soil” at Central Auditorium, Sher-E-Bangla Agricultural University, Dhaka. Managing Director and CEO of ACI Agribusiness Dr. F. H. Ansarey launched the product. Business Director of ACI Fertilizer Mr. Bashir Ahmed, Treasurer of Sher-E-Bangla Agricultural University Professor Dr. Anwarul Haque Beg, Vice President of BAPA, Architect Mr. Mubassar Hussain along with 498 urban gardeners participated in the program.

Ready Mix Soil basically contains soil, compost fertilizer, coco dust, sands and other important fertilizer in a balanced manner. It helps to plant a tree without any other additional soil as well as fertilizer.

That’s why; the plant can grow in a natural way with increased yield. Ready Mix Soil also helps to manage the cost for gardening as all necessary elements already integrated in one bag.

Apart from this, ACI Fertilizer sponsored a program of Green Garden Society at Sher-E-Bangla Agricultural University where best 5 gardeners were awarded. The program started with a colorful procession followed by the main event at the central auditorium of the University. Green Garden Society is an online platform that promotes urban gardening. They provide different solutions of urban gardening. ACI has the vision to play a great role in urban gardening so that the landscape of Dhaka and other major cities can be improved.



NEB Info Tent & Retailer Training

ACI Fertilizer set up a tent-based information booth at Rangpur in November 2017. In this booth, visitors could collect information regarding the features, benefits, and economic impacts of using NEB at different crops especially on potato. The booth also provided information regarding dosage of NEB along with other important agricultural information like irrigation system recommendation. ACI Fertilizer also conducted result demonstration near this info tent under DAE & BADC.

Experts recommended solutions to farmers for quality yield at optimum cost using NEB. It is remarkable that Nitrogen Efficiency for Bioavailability (NEB) is now applied to maximize uptake and decrease environmental impact by decreasing usage of urea fertilizer. It is a blend of natural Root Exudates, which helps to increase microbial activities in the soil. By the use of NEB, plants get more of the N for longer period of time, which helps to give significant growth advantages of plants.

Events and Activities

Besides, ACI Fertilizer organized a retailer-training program at Madanin, Kishoreganj on 24 November 2017. Sales Manager of ACI Fertilizer Mr. Md. Firoz Hossain was present there as the chief guest. The special guest of the event was Md. Golam Mastafa, Officer of Department of Agricultural Extension. Retailers and model farmers got training on how to use NEB for the best

yield. The key discussion was on the features, benefits, application and impacts on economy of using NEB at different crops especially on potato. A decision was made to conduct result demonstration under DAE in upcoming potato season. Kiosks were set to prescribe farmers for different problems related to their crop.



ACI Fertilizer at Patuakhali Agricultural Fair



ACI Fertilizer participated in a two-day long agricultural fair held at PPS Field, Sadar, Patuakhali. The fair took place on 19-21 November 2017.

ACI Fertilizer's mission of promoting balanced nutrition got momentum with the presence of thousands of people from all walks of life at the Fair. The Agro Value Chain (AVC) project and Agriculture Extension Department jointly organized the fair. The objective of the fair was to establish a geographical branding for specific crops like- vegetables, pulses, and oil seed crops.

There were around a 100 stalls showcasing thousands of varieties of trees, agro inputs etc. Among around 100 stalls showcasing tree varieties and agro inputs, ACI Fertilizer presented its organic fertilizer, micro and macronutrient along with PGR products. Agriculturist provided usage, dosage, and applications of fertilizer on plants at the stall.

Events and Activities

ACI Motors Nobanno Utsob-1424



ACI Motors organized **Nobanno Utsob-1424** at Laldighi Bazar, Badargonj, Rangpur on 26 November 2017. Nobanno Utsob, one of the popular cultural and traditional festivals in this country, is also known as New Harvest Festival. The valued dealers, customers, agents, and other stakeholders enjoyed the festival. High officials of ACI Motors including MD, DED, Director Sales, RSM, AM, ASE, TI, MO, ARO and others were present during the festival. Local Government Representatives and officials along with print media personnel were invited to the festival. Product delivery, field demo & cultural program were also included in this Festival



YAMAHA presents Dhaka Bike Carnival 2017



Country's first ever Bike Carnival 'YAMAHA presents Dhaka Bike Carnival 2017' was held on November 10 and 11 at International convention city Bashundhara (ICCB), Dhaka. This bike carnival had been successful to get immense attention of the country's bikers. Their wait was over with the inaugural bike rally on the first day of the carnival. Other attractions included exciting bike game show,

cultural programs as well as the concert. As a milestone of the event, the Lady Biker Group from India demonstrated their skills with motorcycles. Also, with the presence of all bike-lovers, YAMAHA Bangladesh celebrated its 1st anniversary. On the last day of the carnival, a grand concert was organized with the participation of popular band Nemesis, LRB and many others.

Events and Activities

To cope up with the dynamic public demand, ACI Motors always organize different types of events. Through this, it continues to celebrate the strong

relationship with its valuable customers. Dhaka Bike Carnival 2017 was such an occasion where more than 15,000 people gathered in celebration.



Bacterial Gene Boosts Corn's Nutrition

Rutgers scientists have found an efficient way to enhance the nutritional value of corn -- the world's largest commodity crop -- by inserting a bacterial gene that causes it to produce a key nutrient called methionine, according to a new study. The Rutgers University-New Brunswick discovery could benefit millions of people in developing countries, such as in South America and Africa, who depend on corn as a staple. It could also significantly reduce worldwide animal feed costs.

"We improved the nutritional value of corn, the largest commodity crop grown on Earth," said Thomas Leustek, study co-author and professor in the Department of Plant Biology in the School of Environmental and Biological Sciences. "Most corn is used for animal feed, but it lacks methionine -- a key amino acid -- and we found an effective way to add it. The study, led by Jose Planta, a doctoral student at the Waksman Institute of Microbiology, was published online today in the Proceedings of the National Academy of Sciences. Methionine, found in meat, is one of the nine essential amino acids that humans get from food, according to the National Center for Biotechnology Information. It is needed for



A field of corn, the world's largest commodity crop.
Photo Credit: NASA

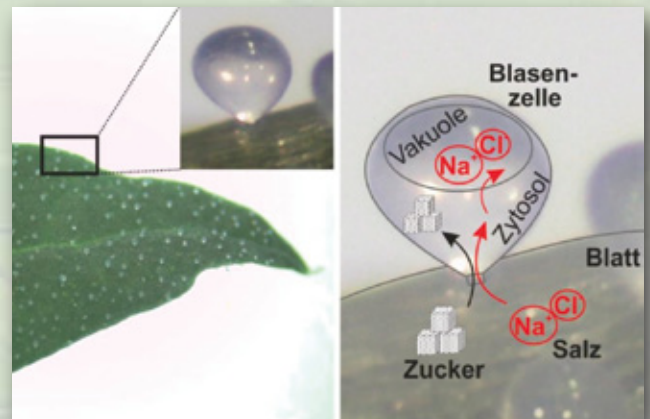
growth and tissue repair, improves the tone and flexibility of skin and hair, and strengthens nails. The sulfur in methionine protects cells from pollutants, slows cell aging and is essential for absorbing selenium and zinc.

(Source: Agriculture and Food News, Science Daily.
www.sciencedaily.com)

Breeding Salt-Tolerant Plants

Soil erosion is considered as a problem that puts the nutrition of the human population at jeopardy. One of its aspects is soil salination, which affects in particular dry regions of Earth, where farmers are forced to irrigate their fields heavily. Large quantities of the salts dissolved in the water, such as sodium and chloride, are diffused into the soil and remain there after the water has evaporated. The salt stunts the crops and can even make soils infertile in the long run.

"All approaches so far to breed salt-tolerant plants must be considered more or less as failures," says Professor Rainer Hedrich, plant scientist at the Julius-Maximilians-Universität (JMU) Würzburg in Bavaria, Germany. They all aimed at making crop plants grow on saline soils and to identify



Quinoa leaf with typical salt bladders. On the right, you see the plant transporting the dissolved salts sodium and chloride first into the bladder and then in its vacuoles. The sugar carried along with them provides the necessary energy.

Photo Credit: Jennifer Böhm

Agri-tech & Communication

salt-tolerant breed lines in the process. But this approach cannot work. And that is for a reason: "Our crop plants are the result of many years of breeding. During that time, man has sheltered them from nearly all negative environmental influences, so that they have lost a lot of their natural resilience," explains Hedrich. "As soon as these elite lines come in contact with too much salt, they usually die."

So Rainer Hedrich, together with Professor Sergey Shabala (University of Tasmania), set out to develop a new strategy. The two scientists placed their bet on plants that are naturally salt-tolerant. One such

plant is quinoa (*Chenopodium quinoa*). It comes from the Andes, where it has been used as food for 7,000 years. Meanwhile the seeds of this South American pseudo-cereal, which are free from gluten and rich in vitamins, have found their way to European supermarket shelves. The plant absorbs salt from the soil and stores it in bladder-shaped cells on the surface of its leaves. This protects the salt-sensitive metabolic processes, and the plant can grow well even on saline soils.

(Source: Agriculture and Food News, Science Daily. www.sciencedaily.com)

Forest Grazing Counteracts the Effectiveness of Trees to Reduce Flood Risk

Planting trees can reduce flood risk, but a high intensity forest land use, such as grazing, can counteract the positive effect of the trees, a recently published study suggests. As the frequency and severity of flooding becomes an increasing problem, land managers are turning to natural flood management measures, such as tree planting, to reduce the risk. When rainfall exceeds the rate at which water can enter the soil it flows rapidly over the land's surface into streams and rivers. Trees can help to reduce the risk of surface runoff by increasing the number of large pores in the soil through which water can drain more easily. Land use, such as grazing, also affects the soil's ability to absorb water; however, while the effect of land use on surface runoff has been well studied in grasslands, little is known about the effect of land use in forests.

The study, undertaken by Lancaster University and the Centre for Ecology and Hydrology and published in the journal *Geoderma*, investigated the rate that water infiltrated the soil under trees at an experimental agroforestry site in Scotland. Researchers found that infiltration rates were between ten and a hundred times higher under trees, when the forested area remained relatively undisturbed, compared with adjacent pasture. Where sheep were allowed to graze under the trees there was no observable difference from the pasture. They also compared forest types -- conifer forest planted with Scots Pine and broadleaved forest planted with sycamore -- and found that infiltration rates were significantly higher under Scots Pine than under sycamore, but only when the forest was ungrazed.

(Source: Agriculture and Food News, Science Daily. www.sciencedaily.com)



Experimental agroforestry site in Scotland used for the research.
Photo Credit: Lancaster University

Are We at a Tipping Point With Weed Control?



Imagine walking the cereal aisle at your favorite grocery store. Are you reading labels? Scanning prices? Thinking about weeds? If you're like most American consumers, weeds probably aren't at the forefront of your mind when buying food. But if farmers could no longer control weeds with existing herbicides, Americans would take notice pretty quickly. "I think the future of cheap food is strongly related to the availability and effectiveness of existing herbicides," says Adam Davis, ecologist in the Department of Crop Sciences at the University of Illinois and USDA Agricultural Research Service. That is, without working herbicides, food could get a lot more expensive.

Davis and George Frisvold, an economist at the University of Arizona, recently teamed up to consider the possibility that we've reached a critical tipping point in our ability to control agricultural weeds with the herbicides currently on the market. They published their analysis in the journal *Pest Management Science*. "I believe if we fully lost chemical control of certain weeds, and if farmers continued with the corn-soybean rotation, they'd be forced to reduce their acreages as they spend more time and money managing weeds. And the cost of the end product, our food, would go up as well," Davis says. If you're not in the farming industry, you might not be aware that weeds like common waterhemp and Palmer amaranth can reduce corn and soybean yields anywhere from 30 to 80 percent, and that those weeds are developing resistance to available herbicides. Like antibiotic-resistant "superbugs," resistant weeds simply can't be killed by herbicides.



Researcher Adam Davis from the University of Illinois says we're close to losing chemical control of weeds like Palmer amaranth in some locations.

Photo Credit: Patrick Trane

There are lots of herbicides on the market, but they all fall into one of 16 categories describing their mode of action (MOA), or specific target in the plant that the chemical attacks. Because of various regulations and biological realities, a smaller number of herbicide MOAs can be used on any given crop and the suite of weeds that goes along with it. At this point, many weeds are now resistant to multiple MOAs. "In some areas, we're one or two MOAs away from completely losing chemical control for certain weeds. For example, in east central Illinois, we have common waterhemp that is resistant to five out of the six relevant MOAs in a corn-soybean rotation," he says. "And there are no new herbicide MOAs coming out. There haven't been for 30 years.

(Source: Agriculture and Food News, Science Daily. www.sciencedaily.com)

Plants Become More Tolerant When Living in Symbiosis with Fungi



By developing a symbiotic relationship with fungi, plants not only become more tolerant to diseases but can also help contribute to more sustainable agricultural practices. This is the conclusion of a new study from the University of Gothenburg. Most crops can form symbiosis with fungi to gain key nutrients. The fungi in turn gain carbohydrates generated through the plant's photosynthesis. This type of symbiosis is called arbuscular mycorrhizas

and is of key importance to sustainable agriculture since it helps crops utilise better the phosphate in fertilisers. 'This symbiosis is very important since the leakage of phosphate from farm fields contributes to harmful eutrophication of rivers, lakes and seas,' says Cornelia Spetea Wiklund, professor at the Department of Biological and Environmental Sciences, University of Gothenburg.

Agri-tech & Communication

The fungal symbiosis also makes the plants more tolerant to certain diseases and environmental factors such as drought. In order to learn how to better utilise the symbiosis in agriculture, the researchers have explored what causes the increased hardiness of plants. One mechanism involved seems to be that the fungi increase the plant's levels of several hormones in both its roots and shoots.

(Source: Agriculture and Food News, Science Daily. www.sciencedaily.com)



Medicago plants to study how mycorrhizal symbiosis affects their growth.
Image courtesy: University of Gothenburg

Strips of Prairie Plants Slow Loss of Soil, Nutrients and Water from Ag Fields, Double Biodiversity

A clean white plastic flume in an Iowa soybean field is testimony to a novel and possibly heretical idea: prairie plants, once plowed under by farmers growing corn and soybeans in the Midwest, yield benefits for farmers as well as the environment when integrated with rowcrops. The flume is just one of many used on and near the Neal Smith National Wildlife Refuge east of Des Moines, Iowa, over the course of a decade of research called "Science-based Trials of Rowcrops Integrated with Prairie Strips" or STRIPS. Without strips of prairie plants arching down the sloped field of soybeans, the flume would likely have held several inches of soil after a heavy rain.

The STRIPS research team is led by Iowa State University, the USDA Forest Service, Leopold Foundation for Sustainable Agriculture, and the U.S. Fish & Wildlife Service. A paper published in the journal Proceedings of the National Academy of Sciences (PNAS) describes research quantifying the effects of integrating strips of native prairie species amid corn and soybean crops, with prairie strips arranged to arrest runoff on sloped catchments. Researchers report that replacing 10-20 percent of cropland with prairie strips increased biodiversity and ecosystem services with minimal impacts on crop production.

(Source: Agriculture - 2017 News and Scientific Articles on Live Science. www.livescience.com/topics/agriculture)



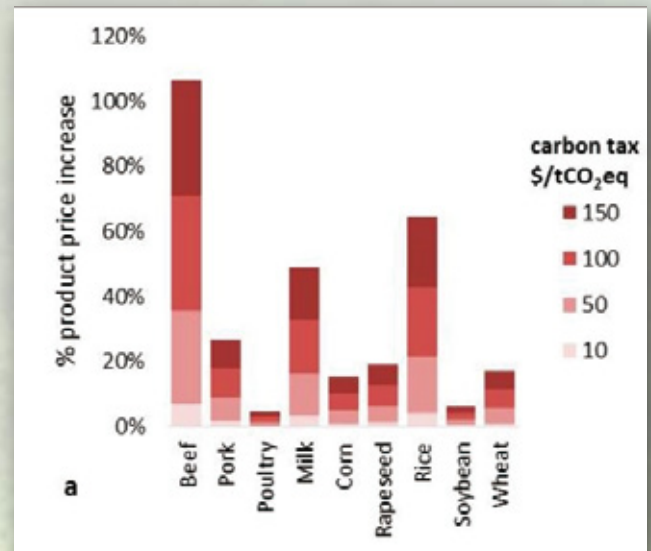
Matt Helmers, a professor in Iowa State University's Department of Agricultural and Biosystems Engineering and a principal investigator on "Science-based Trials of Rowcrops Integrated with Prairie Strips," described how strips of prairie plants have reduced soil erosion and runoff during a tour of a soybean field near Des Moines.

Photo Credit: Jane Hodgins, USDA Forest Service

Win-Win Strategies for Climate and Food Security

Climate policies that target agriculture and forests could lead to increased food prices, but reducing deforestation and increasing soil carbon sequestration in agriculture could significantly reduce greenhouse gas emissions while avoiding risk to food security, according to new research published in the journal *Environmental Research Letters*. As countries look to reduce their greenhouse gas emissions, many see potential in their forests and farms. The land-use sector, which includes agriculture and forestry, contributes approximately 25% of the human-caused greenhouse gas emissions that are contributing to climate change. At the same time, vegetation, including natural as well as agricultural lands, take up CO₂ from the atmosphere and can store it in biomass and the soil.

"The land-use sector is key for successful climate change mitigation," explains IIASA researcher Stefan Frank, who led the study. "But providing an increasing amount of biomass for energy production to substitute fossil fuels while at the same time reducing emissions from the land use sector, for example through a carbon tax, could also have the effect of raising food prices and reducing food availability." In the study, Frank and colleagues explored the impacts of climate mitigation policies on food



This is the relative price impact of a carbon tax (0 - 150 \$/tCO₂eq) on emissions from agriculture on global commodity prices (a) and regional food price index.

Photo Credit: Frank et al., 2017

prices. They examined the potential impacts of both global action, represented by a carbon tax, and regional and national policies.

(Source: Agriculture - 2017 News and Scientific Articles on Live Science. www.livescience.com/topics/agriculture)

Climate Change, Population Growth May Lead to Open Ocean Aquaculture

A new analysis suggests that open-ocean aquaculture for three species of finfish is a viable option for industry expansion under most climate change scenarios -- an option that may provide a new source of protein for the world's growing population. This modeling study found that the warming of near-shore surface waters would shift the range of many species toward the higher latitudes -- where they would have better growth rates -- but even in areas that will be significantly warmer, open-ocean aquaculture could survive because of adaptation techniques including selective breeding. Results of the study are being published this week in the *Proceedings of the Royal Society B*.

"Open-ocean aquaculture is still a young and mostly unregulated industry that isn't necessarily environmentally sound, but aquaculture also is the fastest growing food sector globally," said James Watson, an Oregon State University environmental scientist



A new study suggests that open-ocean aquaculture can survive climate change in three different climate regions.

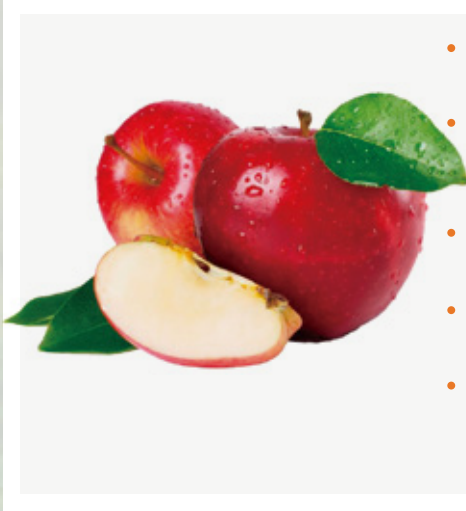
Photo courtesy: Dane Klinger

and co-author on the study. "One important step before developing such an industry is to assess whether such operations will succeed under warming conditions. "In general, all three species we assessed -- which represent species in different thermal regions globally -- would respond favorably to climate change."

(Source: Agriculture and Food News, Science Daily. www.sciencedaily.com)



Believe it or not!



- Apples are actually part of the rose family, just like pears and plums.
- There are more than 7,500 varieties of apples grown around the world. It would take you more than 20 years to try them all if you ate one a day!
- Apples ripen up to 10 times faster when you leave them out then when you refrigerate them.
- Ever wondered why apples float? It's because 25 percent of their volume is made up by air.
- Speaking of General/President George Washington, one of his favorite hobbies was pruning his apple trees. It is said that this helped him with stress-management.



Nutrition Chart

Pineapple (100 grams)	
Calories	52
Sugar	10 g
Total Fat	0.2 g
Protein	0.3 g
Potassium	107 mg
Sodium	1 mg
Dietary fiber	2.4 g

Source: USDA

Tips

- Apples can help give you a lovely and glowing complexion. Apple Cider Vinegar makes an amazing toner, not only because it breaks up the oil and grossness that causes acne and breakouts, but it also balances skin's pH levels, which in turn will keep your skin from over-producing oil in the first place.
- Some studies have linked apple consumption to a reduced risk of cancer. Quercetin, Procyanidins, Pectin, and Vitamin C can all help keep you healthy and prevent cancer from developing.
- Apples have zero fat, zero sodium, zero cholesterol, and about 80 calories, and if you're doing a "low sugar" diet, can really help curb cravings for sweets.
- Apple is a high fiber fruit. One apple provides the necessary requirement of fiber a day. Eating an apple daily helps in case of constipation.
- Eating apple at night before you go to bed helps to cleanse your teeth. It is a natural teeth whitener. It also helps in preventing bad breath.

Sharing is caring!

Apples have a large place in Mythology. Not only do people think that Eve ate an apple in the Garden of Eden (despite no Holy Text mentioning an apple). In Norse Mythology, apples gave eternal youth. In a Greek Mythology the goddess Eris uses Golden apple to start the ball rolling on the Trojan War. Celtic symbolism considers the apple blossom a symbol of fertility, and in Disney Lore, the Poison Apple is what the wicked queen gives Snow White to put her to sleep.



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



ACI Agribusinesses

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