

DThe Baily Star DUSINESS



Adoption of biotechnology may revolutionise agri output

Application of newly emerging biotechnology could revolutionise agricultural production in the country, concerned scientists told a workshop on the topic here yesterday, reports BSS.

But research on biotechnology in different universities and government-run laboratories started very recently and many of the research programmes are yet to give any conclusive result, papers presented at the workshop said.

Biotechnology comprises techniques for using plants. animals and micro-organisms to produce useful substances or improve the existing varieties. It provides the various tools and technologies needed to alter the functioning of living system at the basic genetic level which includes tissue culture and recombinant DNA.

technologies. In their joint keynote paper at the workshop Prof A S Islam of Dhaka University and Dr S H Khan of BARC said country like Vietnam had joined many other countries in the world in producing disease free potato seeds by applying tissue culture and had increased their potato production by five folds. Even Nepal is about to attain self sufficiency in potato by producing seed potato through tissue culture, they said,

They said Bangladesh imports potato seeds every year from abroad costing about Taka 300 to 400 million and introduction of tissue culture to produce virus free seeds here was being delayed by the vested quarters to serve their narrow interest

Saiful Alam Bhuiya and Dr Helalul Islam, scientists from Bangladesh Agricultural Research Institute (BARI) in their joint paper at the workshop said BARI had already'started research on production of virus free potato seeds. Large scale production of such seeds would depend on the success of their virus free seed tuber production programme which was underway, they added.

Dr Islam said Dhaka University tissue culture group had developed a technique, application of which could produce 30,000 potato seeds from one kg seed material. He said to produce the same number of traditional potato seeds about 1,000 kg potato would be re-

The keynote paper said the technology for production of disease-free banana through tissue culture was about within the reach of Bangladeshi scientists. Developed by Prof Hadiuzzaman of Dhaka University and Dr Ashraf of BARI the technology was reported to be at the advanced stage.

Tissue culture technique could also be applied for production of onion seeds, propagation of improved variety of sugarcane, large-scale production of different varieties of flower and fruit bearing, and

Global sugar production to equal consumption

WASHINGTON, June 25 Global sugar production and consumption next year are projected to be 116.30 and 116.09 million metric tons respectively, the US Department of Agriculture said yesterday, reports Xinhua.

This would be the first year since 1991 that consumption did not surpass production. the department's economic research service said in its quarterly updated sugar and sweetener situation and outlook report.

It said that average world raw sugar prices from September 1993 through May 1994 were up 12 per cent from a year earlier, and cur-. rent world sugar ending stocks are forecast at 18.21 million

markets plunge despite dollar intervention LONDON. June 25: Eurotimber trees. The botany de-

partment of Rajshahi Univer-

sity was reported to be work-

culture the paper said some

foreign farms were interested

to raise orchid seedlings on

large scale in Bangladesh and

workshop pointed out com-

mon problems of standard

chemicals, equipment and

fund to organise biotechnology

and tissue culture research.

They suggested withdrawal of

all sorts of duties and taxes

from import of such chemicals

and equipment and simplifica

tion of clearing procedure at

that the chemicals could be

arrival of the aircraft.

conference room here.

spoke on the occasion.

received within two hours on

The workshop on "present

status and future directions of

biotechnology research in

Bangladesh" was organised by

the Bangladesh Agricultural

Research Council (BARC) at its

BARC Dr M Sujayetullah

Chowdhury presided over the

inaugural session of the work-

Executive Vice-Chairman of

President of Bangladesh

Academy of Sciences Dr S D

Chaudhuri and CSO in-charge

of BARC Dr M A Razzaque also

The scientists attending the

Referring to orchid tissue

ing in this field, it said.

then import those.

pean stock markets shrugged off expectations that the central banks intervention to support the dollar would halt the currency's downward trend and all key indices experienced sharp falls yesterday. reports Xinhua.

European stock

The markets were unmoved as 17 central banks, including US Federal Reserve and Ger man Bundesbank bought dollars for both marks and yen.

The dollar rose to a high at 1.6102 marks and 101.90 yen after the intervention from 1.5960 marks and 100.40 yen. but later slipped back to 1.5986 and 101.05.

The London stock markets suffered an 11-month low. The Financial Times-Stock Exchange Index of 100 leading shares dropped below the psychological barrier of 2.900 points in mid morning and later fell further to close at 2,876.6. down 65.8 on the day.

Many dealers expected that the market would soon test 2.850 barrier and then 2.800.

The London market has declined by 18 per cent since the US central bank raised the interest rate in February. The market, along other key European exchanges, is still haunted by fears of high interest rates as inflation pressure



Prime Minister Begum Khaleda Zia inaugurating the seventh branch of the Eastern Bank Limited at Laldighir Paar, Sylhet on Thursday.

Economic growth will get top priority at next G-7 summit

WASHINGTON, June 25 Economic growth and lob creation will again be the top economic priority for the Group of Seven summit next month in Italy despite improvement in the world economy, a senior US official said yesterday, reports AFP.

Robert Rubin, a top Economic Adviser to President Bill Clinton, said the summit in Naples July 8-10 will also seek closer coordination on areas such as telecommunications job training and infrastructure improvements.

The meeting will be "a broad-based discussion in an ever more global world in which each of our economies is becoming ever more interdependent... of our common problems and our common objectives," Rubin said.

Economic growth remains a top priority despite improvements since last year's summit in Tokyo, he said.

"The US is now enjoying solid growth, moderate inflation," he said. "Europe has begun to recover economically ... there is real movement in the world economy toward

growth.' The leaders may go beyond traditional cooperation in monetary and fiscal policy to more precise projects such as harmonizing cooperation in the information technology

"The change from the trac-

tor to the ox yoke (means)

they move from eight mechan-

ical operations ... to 25 that

cause more work," said Raul

Mejillas, the Communist Party

not a romantic step into the

past," said Raul Espinosa, a

leading researcher at the

Institute of Agricultural

Sciences. "Sustainable agricul-

ture is the application of the

most advanced science and

"Sustainable agriculture is

leader at the institute.

and telecommunications. Rubin

We think there is a great deal to be gained by all the countries in the world by cooperating and harmonizing their various efforts," he said.

Rubin said trade liberalization, health care reform and regulatory simplification also will be on the agenda for the summit.

The G-7 will also encourage international organisations including the World Bank and International Monetary Fund to review their mission, he said.

"The World Bank and the IMF have been around for a long time now, and it wouldn't be a bad idea... for institutions that have been so enormously productive to now, in a very changed world, take a look at themselves and look at their mission," Rubin said, adding that Washington had no position on how the organisations should reform.

US administration officials said that in addition to economic matters, discussions would take place on security concerns over North Korea, Bosnia, terrorism and nuclear proliferation.

One official said Russian President Boris Yeltsin would be a "full partner," in these talks, which would take place

on the final day of the summit. but added that it would not mean the group was expanding to an eight-nation club.

Russian parliament okays budget MOSCOW, June 25: After

rejecting appeals from the military, parliament on Friday approved a tight 1994 budget that is the centerpiece of President Boris Yeltsin's economic programme, reports AP.

The budget was passed over the objections of reformers who argued that it was still too generous to Russia's state-run industries.

The document, sent to Yeltsin for his approval, calls for revenues of 124.4 trillion roubles (62.2 billion dollars) and spending of 194.4 trillion roubles (97 billion dollars).

Parliament's upper house, the Federation Council, had pushed for much higher defence spending and a wider deficit, but in the end accepted the government's demands that the deficit be controlled.

The new budget envisages a deficit of 70 trillion roubles (35 billion dollars), or 9.6 per cent of the gross domestic product (GDP). Last year, the gap was higher -10.5 per cent

strategy concerning seed jute

and another steering commit-

tee headed by the Jute Secre-

tary to review the situation re-

garding the purchase of green

jute after every, 15 days com-

Abdul Hye, Agriculture Secre-

tary M Akhter Ali, Jute Secre-

tary Mohammad Abu Hena,

Industries Secretary A H M

mencing July 15.

Md Azharul Islam (3rd-R), Secretary, PDB, F M Scoppa (2nd-R), Representative of ABB SAE SADELMI SpA, Italy and W Noestlinger (4th-R) of VOEST-ALPINE, Austria, signed an agreement on behalf of their respective parties yesterday in the city to rehabilitate two power generating units of the Karnafuli Hydro Power Station at Kaptai. — Star photo

voured hundreds of thousands

of tons of forage in the sur-

rounding Valle Rojo, leaving

the cattle hungry, taking meat

Leon's job is to fight such

and milk from Cuban mouths.

predators without the pesti-

cides Cuba has been unable to

afford since the fall of

European communism devas-

tated the island's economy by

wasps, fungi and bacteria form

ingredients as simple as wheat

and honey, using equipment

agricultural field station on a

hill top is one of 150 scattered

around Cuba. They are critical

parts of what some scientists

WASHINGTON, June 25:

and its allies are united to halt

a worrisome slide in the dol-

lar's value, but so far interna-

tional currency traders seem

to have the upper hand, re-

massive coordinated effort

Friday to buy perhaps as much

as 5 billion dollar in Green-

backs in international currency

markets to boost the dollar's

value in relationship to the

Japanese yen and the German

joined with the United States,

the effort was overwhelmed by

market forces as currency

traders continued to dump

But even though 16 nations

The United States led a

ports AP.

mark.

dollars.

The Clinton administration ished the day in New York

Tuesday.

insists that the United States lower than it had been on

The whitewashed little

that seems homemade.

He breeds pest-fighting

depriving it of Soviet-bloc aid.

reports AP.

PDB move to rehabilitate 2 power generating units

By Staff Correspondent

The Power Development Board (PDB) Saturday signed a 15-million dollar-agreement with a foreign consortium to rehabilitate two power generating units of the Karnafuli Hydro Power Station at Kaptai.

The agreement envisages rehabilitation of the two units of the five-unit plant aimed at increasing the overall power generating output of the units by 12 per cent.

Following rehabilitation in June 1996, the two units would together generate 94 Mega Watt electricity.

The comprehensive rehabilitation, first of the kind since installation of the Karnafuli Hydro Electric Plant in the 1960s, is being financed by the World Bank through IDA.

The ABB SAE SADELMI SpA, Italy and the VOEST-

consortium which supplied the original generator and turbine to the Kaptai project, will carry out the rehabilitation and overhauling of the plant.

Md Azharul Islam, Secretary, PDB, ABB SAE SADELMI SpA representative F. M. Scoppa and W Noestlinger of the VOEST-ALPINE signed the agreement on behalf of the respective par-

The ABB, a moghul in the global power generation business, has so far contributed to around 30 per cent of the total power generating capacity in Bangladesh.

The government should attach top priority to the rehabilitation of the power generation stations since there is a considerable short-fall in power generating capacity, ALPINE M.C.E. Austria, the observers said

95, reports UNB.

It was disclosed at a meet-

The meeting was informed that approximately 4,000 tonnes of jute seed is required by the country per year. Some 1,000 tonnes of seed is produced in the country through organised cultivation under the supervision of BADC while the remaining 3,000 tonnes comes from private sources.

Jute seed growers get Tk 5,000 by selling seeds and jute stick per acre, but if the growers sell seeds and green jute to BCIC, they will get Tk 7,450 per acre, resulting in additional income of Tk 2,450.

The meeting decided to form an interministerial tech-

BCIC takes up project to produce 25000 MT pulp Bangladesh Chemical Indusnical committee to work out

tries Corporation has taken up a programme for producing 25,000 metric tonnes of pulp from 1,30,000 tonnes of green jute (whole jute plant) in the ensuing jute season of 1994-

ing on production of pulp from green jute plant held yesterday in the conference room of the Ministry of Industries with Industries Minster A M Zahiruddin Khan in the chair.

BCIC Chairman Wasek-Al-Azad and other high officials of the Ministry of Industries were present at the meeting. India to develop oil, gas fields

in Russia NEW DELHI, June 25: A

state-run Indian company plans to develop oil and gas fields in Russia in a move which could lead to Indo-Russian cooperation in third countries, a newspaper reported on Friday, reports AFP. A delegation from the Oil

and Natural Gas Commission (ONGC) and the Indian Petroleum Ministry will travel to Moscow in July to finalise the details of the proposal, the Economic Times said. ONGC and Petroleum Min-

istry officials declined to comment on the report.

The newspaper said the subject was discussed recently by Petroleum and Natural Gas Minister Satish Sharma and Russian officials in Norway

"Officials feel India's in-

volvement in the Russian oil and gas sector would be useful in the long-run as the country (Russia) has huge reserves of both oil and natural gas," the newspaper said.

' It said India and Russia could also cooperate in developing oil fields in other countries.

india earlier sought assistance from the former Soviet Union to develop its oil sector. Now Russian officials have told their Indian counterparts that they need India's involvement due to uncertainties (in Russia), it said.

Cuba experimenting with large-scale organic farming as a model with pesticides and fertilizers plowing, mixing scientific indescribe as a historic experi-ZARAGOZA, Cuba, June 25:

policy COFU, Greece, June 25: European Union leaders meeting here Friday agreed on the Juan Jose, Leon opened a outlines of a common ecocreaky wooden cage and nomic policy, an essential step plucked out an inch-long enif they are to bring their emy of Cuba's desperate effort economies towards greater to feed its 11 million people,

The talks on price stability, sound public finances and labour market flexibility were brief, the main points having already been approved at a meeting on the EU member's ministers of economy and finance two weeks ago.

union, diplomatic sources said,

reports AFP.

EU leaders agree

on outlines of

common economic

They had to be approved by the heads of government at the EU summit here before being formally adopted by the finance and economics ministers at their next meeting.

Danish Prime Minister Poul Rasmussen told European leaders that the union had to offer a clearer explanation to the public indicating that the policy was aimed at fighting unemployment, the source

Aluminium prices jump to a fresh high

LONDON, June 25: Aluminium prices jumped to a fresh high on Friday, the latest of the industrial metals to soar as major economies recover and boost demand, reports Reuter.

The light metal broke through 1,500 dollars a tonne in opening trading on the London Metal Exchange (LME) for the first time in more than three years and was about 16 dollars up from the previous

"It's moving up but it's finding bands of selling," one trader said.

Fresh speculative interest could see prices head up to 1.550 dollars, traders said.

The latest price rise was given a lift on news that stocks in LME warehouses had fallen

by more than 13,000 tonnes.

ment in organic farming.

In his laboratory of blistered-whitewash walls, bare lightbulbs, empty sockets and dangling wires, Leon raises moths in wooden boxes and exposes their eggs to tiny Thin, green caterpillars like wasps that live on moth eggs. those in the cage have de-

When the wasps have borrowed into the clusters of eggs, the eggs are distributed in fields and the wasps emerge to attack the eggs of other moths.

On a shoestring, Cuba is making "the largest conversion of any nation in history from conventional modern agriculture to large-scale organic farming," said Peter Rosset, executive director of the Institute for Food and Development Policy in San

"What the Cubans are doing in agriculture is important to the world," said Paul Gerster, soil scientist at the University of California, Berkeley, who has visited Cuba to study the pro-

As a result, the dollar fin-

Thursday against both the yen

and the mark. In fact, it fell to

a 15-month low against the

Germany currency, with 1 dol-

lar buying just 1.5865 marks.

The Greenback was down to

100.45 yen, very near the

post-World War II low set on

Administration officials in-

sisted that while the Friday ef-

fort may not have succeeded.

the markets would soon un-

derstand that the world's

seven richest industrial coun-

tries, known as the G-7, and

their major trading partners

were united in their resolve.

The seven are the United States.

Japan, Germany, Britain.

France, Canada and Italy.

One reason Cuba's effort intrigues advocates of alternative farming is that its Soviet-style farms are more like the sprawling industrial farms of California than the subsistence plots in many Third World countries.

The UN Food and Agriculture Organization is sharing data and experts with Cuba with an eye to making its programme a model.

When aid from the Soviet bloc disappeared in 1990, Cuba was left without the pesticides, fertilizers and fuel that kept the big farms running. Fidel Castro's government had began experiments with alternative farming in the early 1980s and plunged into it a decade later.

Leon and his colleagues are expanding the use of organic fertilizers —such as fermented cane runoff - and biological pest controls, combining production of new plant varieties with increased use of oxen for

"We intervened today to

demonstrate that this adminis-

lar," said a written statement

Washington, speaking to re-

porters on condition of

about inflation.

tration prefers a stronger dol-

vestigation of beneficial bacteria with old-fashioned mulching. They look for plant varieties

hardier than the delicate hybrids that need heavy doses of imported chemicals, and are switching to breeds of cattle that may produce less milk. but also need less care. Most of the techniques are

used elsewhere, but not on so great a scale, Gerster said. Cuban leaders have told

agricultural researchers to concentrate on alternative farming, making only limited use of chemicals.

Matias Brull, vice rector of the Higher Institute for Agricultural Sciences of Havana, the country's largest farm research center, said it is "trying to work so that everything agrees with that line."

"It isn't easy," he said, "some of our own professors in agrochemistry - are resisting." For farmers, going from vast fields of a singles crop sprayed

ences over the timing of the

dollar-buying effort, there had

With Cuba facing serious food shortages, "we cannot be romantics," he said. Those shortages indicate alternative farming has not

> US experts on organic farming say output usually falls sharply after a switch from chemicals because single-crop chemical farming depletes the soil, but that yields usually recover in about three years.

is difficult.

technology."

performed miracles.

US, allies united to halt slide in dollar's value anonymity, insisted that while economist at Morgan Stanley wide lack of confidence in US there had been some differ-

attributed to an unidentified been no problem lining up support for a collective move. senior Treasury Department official. "It is our view and the President Clinton played down the dollar's latest trou-G-7's that further appreciation bles, saying it was, "important of the mark and the yen (against the dollar) would be that we not overreact to this. counterproductive for global Other officials noted pointedly that the dollar had suffered recovery. steeper declines in shorter Some recent remarks by periods during the Bush ad-German and other European monetary officials had called

into question how committed yen and the mark. major countries were to supporting the dollar, especially in light of domestic concerns dence vote in the Democratic such as Germany's worries administration. But a monetary source in

ministration against both the But Republicans in Congress portrayed the dollar's troubles as an international no-confi-

"I, among many others, attribute this recent precipitous drop in the dollar to a worldleadership that threatens prospects for sustained future US economic growth," Sen Pete Dominici said on the Senate floor. US financial markets were

unhappy with Friday's devel opments; the Dow Jones in dustrial average tumbled by more than 62 points and the yield on the 30-year Treasury bond shot up to 7.52 per cent Economists said Wall Street is worried that the Federal Reserve will soon be forced to boost interest rates for the fifth time this year in an effort to defend the dollar.

"Intervention (in currency markets) never works unless it is followed by significant interest rate adjustments," said Stephen Roach, senior and Co. in New York.
But Bruce Steinberg, senior economist at Merrill Lynch in New York, said the Fed Traditionally has been reluctant to jack up interest rates

solely because of a weak dollar

since higher rates increase the

risk of economic recession. Some economists said the dollar could remain under pressure for much of this year until economic growth overseas begins to revive demand for US exports and thus start to shrink America's growing

trade deficit. While the weaker dollar raises the risk of inflation in this country because it makes imports more expensive, it helps to boost foreign demand for US products by making them cheaper.