Beef cheaper than chillies

BLOWIN' IN THE WIND

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SHAMSAD MORTUZA

Martinez gave us a brief respite from the crazy conversations that we were having over green chillies during the Eid holidays. The price per kg of chillies rose over Tk 1,000, which should not exceed the Tk 100 mark by any count. The rainy season has been used as a pretext to snap the market supply and artificially increase the price. In India, which shares our monsoon weather, the price per kg of green chillies is Tk 21. Chillies are now being imported using foreign currency to stabilise the local market and control local traders.

The way the captain of Bangladesh national men's football team was intendedly or unintendedly humiliated during the World Cup-winning goalkeeper's short visit to Dhaka made me think of the proverbial three-second memory span of a goldfish. Only a couple of days earlier, Jamal Bhuyan and his men led us to believe that a slot in the final of the SAFF Championship was not impossible. His team won our hearts by playing superbly against Lebanon and Kuwait, and winning convincingly against two regional contenders Maldives and Bhutan. Special cash prizes were announced to tease the team into the final, but Kuwait pipped our national team to end our dream. The return of our booters was rather unceremonious as they failed to replicate what the women's team did last year. The focus shifted to the visit of the Argentine goalkeeper Emiliano Martinez. When Jamal tried to meet the visitor at the airport, there was no one to introduce him. Jamal rued the day saying this was not the way to treat your national team captain. It was an insult to all the professionals who donned green and red to uphold the nation's honour.

And here I was, searching for an answer to the goldfish memory myth. Contrary to the popular saying, this species of fish passed many memory tests with flying colours. In a fish tank, goldfish can adapt to the timing of the food dispenser or even remember the lever that needs to be pressed to release food. So comparing our treatment of the Bangladeshi footballer to that of a goldfish memory would be an anomaly. What was even more wrong was for Jamal to show up at the airport hallway and wait for Emi *Dibu* like an ordinary fan. Wasn't Jamal signed up for an Argentine club as part of the football diplomacy prompted by the warmth of Bangladeshi supporters for La Albiceleste?

Bangladeshi fans warmed the hearts of the Argentines, who decided to reopen their embassy that was shut down in 1978. There were even talks of the Argentine national team coming to Bangladesh for a friendly match. Instead, all we could get was a 11-hour visit of their Golden Glove-winning player who came for a whirlwind visit to Dhaka before flying to Kolkata, where he received a public reception given to him by one of the oldest football clubs. Martinez took part in a series of interactive events in which he could taste the real fervour of football frenzy in our part of the world. In contrast, Martinez's Dhaka itinerary included a series of private audiences involving high-profile politicians. Decency would have allowed a meeting with our professional booters, particularly the national team that had just fought hard for the country.

PHOTO: COLLECTED

Martinez's Dhaka itinerary included a series of private audiences involving high-profile politicians.

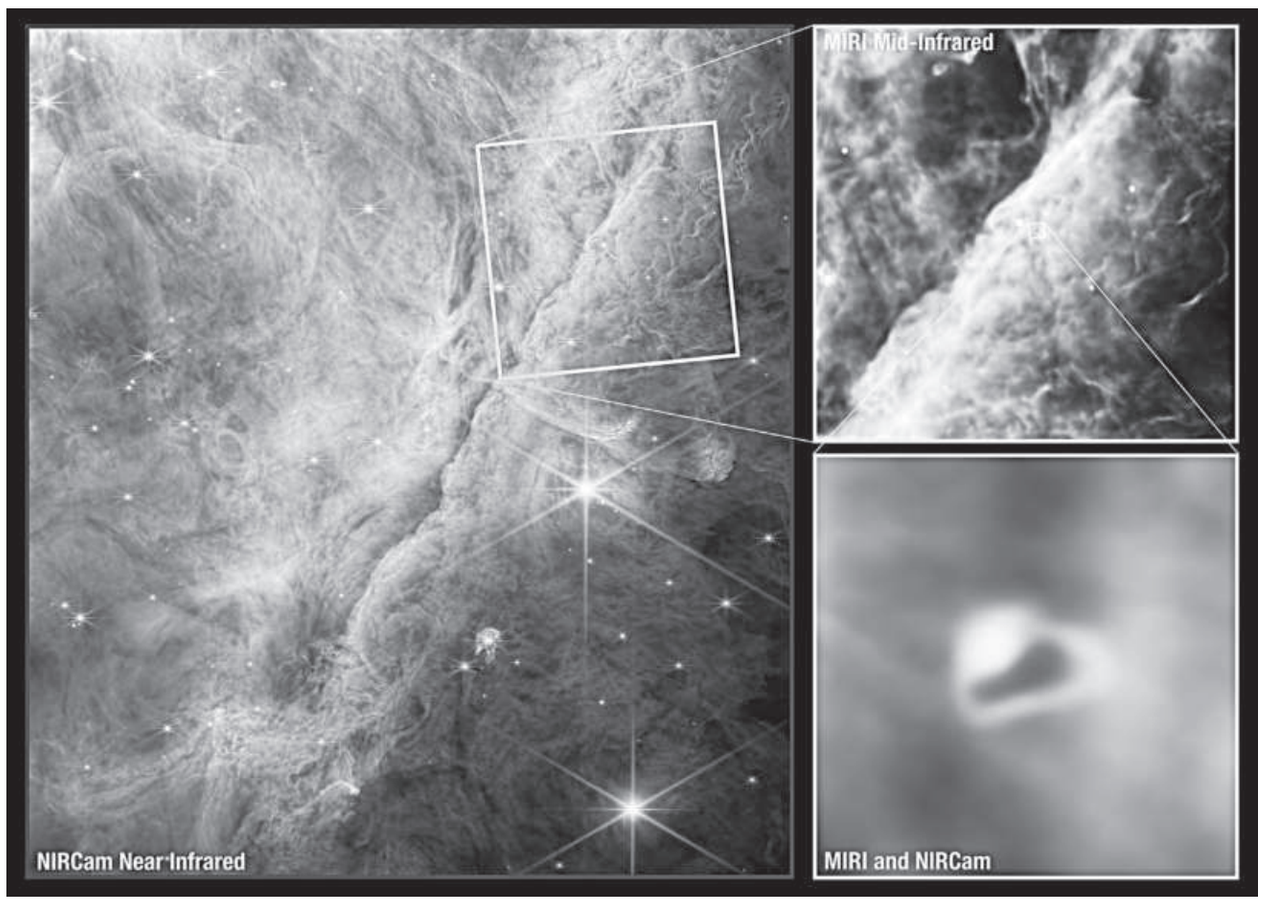
These are little things that make a lot of difference. You cannot always buy success. Players are not corporate employees where an announcement of performance-based increments will encourage them to do better. The recognition has to be spontaneous and genuine. The culture of forgetting the contributions of the real actors is not anything new. Earlier, we saw the coach of the women's team, Golam Rabbani, being phased out of his role. We don't know what conditioned the retirement of our national men's cricket team captain in the middle of a bilateral series only a few months ahead of the World Cup. We can only blame our goldfish memory with a pinch of salt.

Looking at the list of people with whom the Argentine goalkeeper met, it was obvious that the objective of the visit was more personal (or should I say, personal is political) than professional. This is indeed a missed opportunity to incentivise the Bangladeshi brand of football. Whoever was responsible for Martinez's itinerary focused on gratifying their political patrons at the expense of the taxpayers. Martinez left Dhaka saying, "I am the hawk of Bangladesh," a zesty statement with no real beef.

Martinez gave us a brief respite from the crazy conversations that we were having over green chillies during the Eid holidays. The price per kg of this spicy condiment rose over Tk 1,000, which should not exceed the Tk 100 mark by any count. The rainy season has been used as a pretext to snap the market supply and artificially increase the price. In India, which shares our monsoon weather, the price per kg of green chillies is Tk 21. Tonnes of chillies are now being imported using foreign currency to stabilise the local market and control the local traders. Our commerce minister, who came under fire from his parliamentary colleagues for his inability to control the syndicate, admitted that taking action against the market manipulators would further destabilise the system. It is better not to rock the syndicate boat (i.e. ahead of the election).

There were endless memes on the absurdity of meat being less expensive than green chillies. Somehow, it symbolises the national failure of setting our priorities right. There is a lack of planning everywhere. Even if there are, they are not for the ordinary people. Surely, some devious brains have planned the manipulation of the kitchen market all along. Despite the country's claim for self-sufficiency in food, we remain heavily import-dependent. It is one thing to import edible oils, but when local agricultural products like potatoes, onions or chillies are imported allegedly to reign in the market syndicate, there is a problem. The efforts of the hardworking Bangladeshis are dismissed. Foreigners get glorified. Middlemen get benefited. And some people share the limelight at the expense of others.

Chillies can be green and red to become a real symbol of our national plights. We can keep the price real without making it a pawn on someone else's chessboard.



The JWST has detected a carbon compound called methyl cation in the Orion Nebula. SOURCE: **NASA**

Answer to the origin of life on Earth may be in a distant star

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QUAMRUL HAIDER

The origin of life is the classic chicken-and-egg conundrum, although it is well-known that carbon-based compounds are the main components of all forms of life. For example, out of a host of complex organic compounds, two that are essential for living organisms are uracil and niacin. Made up of carbon, hydrogen, nitrogen and oxygen, uracil is one of the constituents of RNA, which contains the blueprint of life, while niacin (Vitamin B3) controls the cholesterol and triglyceride levels. Hence, scientists working to understand the origin of life on Earth are particularly interested in compounds containing carbon.

Our planet was born about 4.55 billion years ago, but life might have had a difficult time during the first several hundred million years of Earth's history. This was the time of heavy bombardment, when Earth was struck repeatedly by large comets and asteroids. Studies of craters on the Moon suggest that the last major impacts of the heavy bombardment occurred between about 4.2 and 3.9 billion years ago. A few of these bombardments had sufficient energy to wipe out any life that might already have been present on Earth.

So, how did life arise on Earth? The unifying theory through which we understand the history of life on this planet is the theory of evolution, proposed by Charles Darwin. Before the publication of his *On the Origin of Species* in 1859, the widely held view of life was that it arose spontaneously from non-living matter. Darwin essentially debunked such an idea by showing how species develop gradually as a result of environmental pressures. But he made no attempt to explain how life came into being on a once lifeless Earth.

In 1907, Swedish chemist and Nobel Laureate Svante Arrhenius suggested that life on Earth was introduced billions of years ago from outer space, originally in the form of microscopic spores that float through the cosmos, landing here and there to act as seeds for new biological systems. This idea, called the Panspermia hypothesis, can be traced back to Anaxagoras, the Greek philosopher who lived in the fifth century BC. He claimed that the Universe is made of an infinite number of *spermata*, or seeds, which gave rise to life forms on reaching the Earth.

The idea that life could travel through space to land on Earth once seemed outlandish. After all, it is hard to imagine a more foreboding environment than that of space, with no air, no water, and constant bombardment by dangerous radiation from the stars. However, the presence of a rich array of carbon compounds in comets, asteroids and meteors tells us that the building blocks of life can survive in space, and tests have shown that some microbes can survive in space for years.

Thus, the Panspermia hypothesis may not be an improbable idea. Analysis of Hale-Bopp, the comet that lit up the night sky for the better part of 1995-1997, clearly revealed that the chemicals that evaporated from its nucleus – a ball of ice a few kilometres in diameter – were not just tonnes of water, but a frozen "primordial soup" of many organic materials that are the basic ingredients of life. These materials were also found in Halley's Comet by Giotto, a robotic spacecraft of the European Space Agency, as it flew by and studied its composition in March 1986.

These two comets together with the Comet Hyakutake that made its closest approach to Earth in March 1996 led researchers to conclude that life-forming material may not have been produced on Earth. Instead, they were brought here by heavenly objects when they bombarded the nascent Earth. Indeed, the earliest evidence for life on Earth suggests it was present some 3.83 billion years ago, overlapping with the bombardment period.

Furthermore, in 2019, scientists detected uracil and niacin in rocks obtained by the Japanese Space Agency's Hayabusa2 spacecraft from Ryugu, a carbon-rich asteroid that was formed in the cloud of gas and dust that created our solar system. This study also supports the hypothesis that pounding by comets, as well as asteroids and meteorites, seeded our young planet with compounds that paved the way for the first microorganisms.

And now, Nasa's James Webb Space Telescope (JWST) swung into action. In an article published last month in the journal *Nature*, a team of international scientists reports that JWST has detected a carbon compound called methyl cation (CH_3^+) for the first time in space in a star system, a small red dwarf about one-tenth the size of the Sun, roughly 1,350 light years away in the Orion Nebula. This discovery clearly shows that unlike Hubble or other space-based telescopes, JWST is not only capable of resolving smaller details in galaxies, stars and nebulae, but it can also pick out the signatures of specific molecules with great precision.

Although methyl cation does not react efficiently with hydrogen, the most abundant element in the Universe, it reacts readily with a wide range of other molecules, and therefore initiates the production of more complex carbon-based molecules that make up life as we know it. That is why this molecule, never before seen in space, is believed to be a cornerstone for studying the origin of life on Earth.

Interestingly, while ultraviolet radiation from nearby stars might degrade some organic compounds, researchers think it is also supplying the energy needed for methyl cation to form in the first place, and perhaps played a crucial role in the early stages of the origins of life.

In sum, discovery of methyl cation by JWST in a young star in the Orion Nebula lends credence to the Panspermia hypothesis that heavenly vans, such as comets, transporting tonnes of carbon-rich materials from interstellar space may have been the genesis of life on Earth. However, this does not preclude the hypothesis that we are simply highly evolved primates that progressively turned into modern, upright humans.

CROSSWORD BY THOMAS JOSEPH

ACROSS
1 Antlered animal
5 Cocoon, for example
9 Moon-based
11 Labor leader Chavez
12 Tibia's end
13 Skilled
14 Soup sphere
15 Long steps
17 Zebra trademark
19 Attempt
20 Desert spot
21 Happiness
22 Bisected
24 Paid spots
26 Mom's sisters
29 Bar cubes
30 Tries hard
32 Part of a diamond count
34 — Lanka
35 France's longest river
36 Spud
38 Supply with a grant
39 Alan Ladd classic
40 Freshman, usually
41 Son of Zeus

DOWN
1 Some hits
2 Choose on the redio
3 Turkey's capital
4 Guy's friend
5 Toenail treatment, for short
6 Familiar with
7 Like wasp nests
8 Pretentious
10 Extra shot at the slots
11 2006 Pixar film
16 Having a will
18 Egyptian goddess
21 Singer Mitchell
23 German sausages
24 Play start
25 Mock
27 Emmy winner, maybe
28 Placid
29 Key
30 Distort
31 Begets
33 Magnetic metal
37 Cry of discovery

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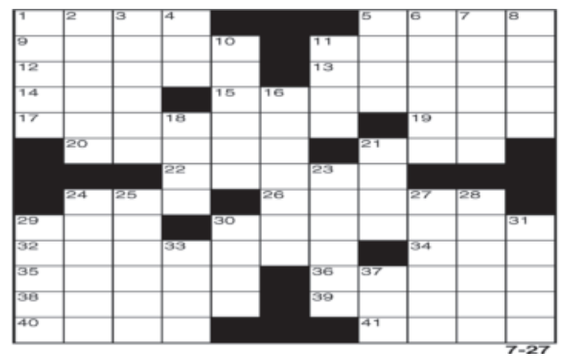

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YESTERDAY'S **ANSWERS**

A	M	U	S	E	S		R	O	O	F
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