

Lifestyle



This photo shows a farmer watering straw used to grow mushroom in Can Tho.



This photo shows a farmer checking water metering equipment in a rice field in Can Tho.



This photo shows a farmer holding a basket of straw mushrooms in Can Tho.

As a child, Dong Van Canh watched while the rice fields of Vietnam's Mekong Delta were set alight to make way for the next crop, blackening the sky and flooding the air with potent greenhouse gases.

Rice — Asia's principal staple — is to blame for around 10 percent of global emissions of methane, a gas that over two decades traps about 80 times as much heat as carbon dioxide. Usually associated with cows burping, high levels of methane are also generated by bacteria that grow in flooded rice paddies and thrive if leftover straw rots in the fields after harvest.



This photo shows farmers driving a truck carrying rice bags in a field in Can Tho.

The message from scientists is: rice cannot be ignored in the battle to cut emissions. In the Mekong Delta, Canh, now a 39-year-old rice farmer, does not leave straw out to decay on the paddies — nor does he burn it, as his parents did before him.

Motivated by the memory of being forced inside his home on days the smoke was thick — sometimes so acrid it made him choke or faint — he joined an initiative that removes straw from the fields and turns it into mushrooms and organic fertiliser, earning a small income on the side.

"If we can collect the straw and make money, all of us benefit," he told AFP, running his fingers through a large, soft mound of straw, cow dung and rice



How Vietnam is trying to stop rice warming the planet

husks that will soon become nutritious food for Mekong crops.

Shrinking emissions

The programme — organised by the International Rice Research Institute (IRRI) — is one of a handful across Vietnam and the region trying to steadily shrink methane emissions from rice production. Many of the initiatives are not new but have been spotlighted since around 100 countries signed the Global Methane Pledge two years ago, agreeing to reduce emissions by 30 percent from 2020 levels by 2030.

Several of the world's biggest rice producers, including Indonesia, Bangladesh and Vietnam, are on board — although the two largest, China and India, failed to sign. In Vietnam, as the harvesting season draws to a close, farmers push carts overflowing with

straw bales that will later be soaked and laid out to grow straw mushrooms.

Once the fungi are ready they will be sold before the farmers take back the straw and funnel it into a composting machine. Two months later it will be



This photo shows farmers using a roller to collect straw in a field in Can Tho.

ready — and can be sold for around 15 cents a kilogram (2.2 pounds).

"In the past a few farmers did this manually but it took too much manpower and the cost was high. Now we've cut costs by half and we will expand to meet the demands of the market," said Le Dinh Du, a rice farmer who also heads the local district's plant protection department. "The rice goes on a nice journey. We don't waste anything."

Methane-producing bacteria

Vietnam's environment ministry says irrigated rice accounted for almost half of methane emissions in 2019. Climate-friendly straw management has been introduced and spread "widely to farmers and local agricultural officials" throughout the country, according to CGIAR, an international agricultural research centre.



This photo shows bales of straw being transported down a river in Can Tho.



This aerial photograph shows a farmer driving a roller to collect straw in a field in Can Tho.



Farmer Dong Van Canh arranging bags of fertilizer at his house in Can Tho.



Farmers pushing carts carrying straw used to grow mushrooms in Can Tho.



Farmer Dong Van Canh checking fertilizer made by mechanized straw composting method at his house in Can Tho.



A man carrying straw from a truck to a mushroom field in Can Tho.



This photo shows farmers mixing straw to grow mushrooms in Can Tho.

Benin star Angelique Kidjo wins top music prize

Benin singer Angelique Kidjo won one of Europe's top music prizes Tuesday along with Britain's Chris Blackwell, founder of Island Records, and Estonian composer Arvo Part. The five-times Grammy winner, described by the organizers of Sweden's Polar Music Prize as "one of the greatest singer-songwriters in international music", sings her in native Fon and Yoruba languages as well as in French and English.

Dubbed "Africa's premier diva" by Time magazine, she is best known for her hits "Agolo" and "We We". Blackwell founded the Island Records label in Jamaica that went on to sign such legendary stars as Bob Marley, Cat Stevens, Roxy Music and U2. Estonia's

Arvo Part, who the jury described as "the world's most performed living composer", was highlighted for his "unique compositional technique, tintinnabuli" which he invented in the 1970s. The Polar Music Prize was founded in 1989 by former ABBA manager Stig Anderson and last year honored Iggy Pop and US songwriter Diane Warren. The laureates will receive their 600,000 kroner (\$58,000) prize at a ceremony in Stockholm on May 23. —AFP



In this file photo Beninese singer-songwriter Angelique Kidjo performs during the Library of Congress Gershwin Prize for Popular Song ceremony in Washington. — AFP

Sugar traps force cockroaches to adapt new intimate 'gifts'

Humans using sugar in cockroach traps has inadvertently led to female roaches being turned off by the sugary "gifts" males use to entice them into mating. But don't celebrate the demise of cockroaches just yet — some males have adapted new ways to continue wooing females, including by shortening the length of foreplay, a study said on Wednesday.

The small but stubborn German cockroach is the most common species of the insect, lurking in kitchens and bathrooms across the world. Glucose, a form of sugar, has long been used to bait these cockroaches into deadly traps.

Thirty years ago, researchers first noticed that some German cockroaches had developed an aversion to glucose and were avoiding the traps.

This distaste for glucose may save them from death, but it has also put a

dampener on their sex life, according to the study published in the journal Proceedings of the Royal Society B.

Male cockroaches have a very particular manoeuvre to attract females into mating. They lift their wings and expose a special gland that secretes a "nuptial gift," a cocktail which includes the sugar maltose.

The female jumps on the male's back to lap up the treat, which keeps

her occupied "long enough for the male to extend his abdomen under the female and engage her genitalia," the study said. However the saliva of the females quickly converts the maltose into glucose. Females who have developed an aversion to glucose jump off "before the male can grasp the female genitalia," potentially affecting the future reproduction of the species, the study said.

But never fear: male cockroaches who have also evolved an aversion to glucose can now get around the problem. These males have changed the composition of their nuptial gift, slashing the glucose content and more than doubling the amount of maltotriose. This sugar is both hugely popular with females and converts into glucose much more slowly than maltose. —AFP

