The Daily Telegraph

PAYS :Royaume-uni
PAGE(S) :5
SURFACE :10 %
PERIODICITE :Quotidien

RUBRIQUE :News
DIFFUSION :(555817)
JOURNALISTE :Henry Samuel

► 17 septembre 2024

Cows will be bred to burp less to cut their carbon hoofprint

By **Henry Samuel** *in Paris*

COWS could be bred to burp and fart less methane in a breakthrough scientists say could cut livestock's massive carbon hoofprint.

Flatulent cows that belch all day have long been the bane of climatologists who point out that methane, while shorter-lived than carbon dioxide, is 28 times more potent in warming the atmosphere. Cattle are the leading agricultural source of greenhouse gases worldwide. Each year, a single cow emits about 100 kg of methane, mostly through belching and the remainder through the rear end.

Scientists at INRAE, France's National Research Institute for Agriculture, Food and Environment, said experts had decoded genomes that influence the levels of methane a cow emits, enabling them to pick strains that release lower levels of the gas.

A simple blood test can determine the propensity of each cow to let off methane. Such tests will be made available to all French farmers by next year. "It's a revolution," Philippe Mauguin, president of INRAE, told *Le Parisien*.

The tests are part of a French programme called Methane 2030 to reduce emissions of the gas by 30 per cent over the next six years.

"It's ambitious but possible," said Mr Mauguin, who added that genetic selection will account for a third of this reduction, with another third being achieved through diet, and the remainder through farm management.

Researchers have been mapping out methane emissions at an experimental farm called Le Pin in Gouffern en Augue in Normandy, which rears Holsteins, Jerseys and local Normande breeds, with the aid of a special device called a "sniffer" initially created to avert explosions in mines, and which can pick up wafts of gas.

A cow emits around 100kg of methane a year, a major cause of climate change

The sniffer, amongst other tools, has helped them make a link between "amino acids and methane emissions" said Solène Freco, a bovine genetics expert at INRAE, who said the more amino acids a cow's milk contains, the more methane it produces.

Methane emissions can also be reduced via diet, notably by adding ingredients such as algae or essential oils to the cattle's regime, along with plants such as white or red clover, which aid digestion.

Another methane-busting solution is to start calving earlier, at two years instead of three, to avoid feeding young cows that are not yet producing milk. This would reduce the animal's methane emissions by around 10 per cent. To encourage farmers to opt for low-methane animals, a special methane rating may be introduced along with those in place for productivity, fertility and morphology.