



A farmer harvests cucumber. Evidence is surfacing that widespread use of pesticides in the farming sector has been contaminating water sources. — Picture by Marcus Pheong

Be serious about pesticide use

Just Points

By Jaspal Singh



ON March 4, the nation was shocked by news of a food poisoning case in Siputeh, near Batu Gajah, which was caused by pesticide contamination.

In the few days following the incident, 102 people were checked at the Batu Gajah Hospital.

A total of 40 people who consumed food sold at a stall in Siputeh fell sick.

When the incident occurred, the initial suspicion was the poisoning was caused by the chemical compound organophosphate.

However, laboratory results conducted on food samples by the Chemistry Department later identified the chemical compound as carbamate.

Both chemicals are used in pesticides and insecticides and both chemical compounds, when ingested, will cause similar symptoms.

The symptoms include dizziness, diarrhoea, confusion, muscle twitching, pinpoint pupils, excessive sweating and excessive salivation.

The striking difference between organophosphate and carbamate lies in their effect: the latter is reversible, the former is not.

However, the reversibility factor, it is claimed, also depends on how much carbamate had been ingested and how promptly treatment was administered.

In the Siputeh case, at least 33 patients were warded between March 4 and 6. Today, only one patient remains at the intensive care unit at the Raja Permaisuri Bainun Hospital.

The patient, 48-year-old Hawa Buyong,

is unconscious and her breathing is aided by a ventilator.

No one can say for certain when her condition would improve. From the evidence gathered by the health authorities, Hawa had collapsed at her work place shortly after consuming food bought from the stall.

By the time she was brought to the Batu Gajah Hospital, her heart had allegedly stopped beating. She was immediately transferred to the government hospital in Ipoh.

The first laboratory report on food samples found traces of carbamate in the sambal used for nasi lemak, fried koay teow, kuih bom and cucur badak.

A second report containing analyses on utensils found traces of the same chemical compound on a knife, chopping board, ladle and trays, among others.

A thorough inspection was carried out at the stall area by health authorities with the aid of the Fire and Rescue Department. No traces of carbamate were found either inside or outside the stall.

So how did the carbamate find its way into the food sold at the stall?

Was there foul play? Or did the food stall operator accidentally contaminate the food with carbamate?

The health authorities have left the matter in the hands of the police. The Batu Gajah district police are investigating the case and it is expected to be wrapped up soon.

I agree with the stand taken by the Pesticide Action Network Asia Pacific, which wants the government to ban highly hazardous pesticides and to stringently regulate agrochemicals.

The use of pesticides, especially some of the more dangerous and banned ones, is a serious issue.

In the case of carbamate, the organisation says the pesticides from the carbamate group are "generally neurotoxic and have been associated with adverse effects on human development, affecting both babies and children".

This has got me thinking about the 40-odd people who were affected in Siputeh.

Except Hawa, the rest have been discharged.

The incident has certainly made a lot of people worried. I believe related quarters, including the Health Ministry, must give an assurance that we have good contingency plans in case there is a major, large-scale pesticide poisoning incident.

Am I being paranoid? Maybe. But, let me share with you the findings of a team of expert academicians from Universiti Kebangsaan Malaysia (UKM) which found traces of banned pesticides in water sources in Cameron Highlands.

Banned pesticides such as endosulfan, edrine ketone, aldrin and DDE, a derivative of the dangerous DDT, were found in six sampling sites conducted by the UKM team.

The study was conducted between August and December 2014. It showed the pesticides are POPs, or Persistent Organic Pollutants, which are regulated globally by the Stockholm Convention, to which Malaysia is a signatory.

More shocking was the discovery by the team that traces of endosulfan beta, a dangerous endocrine disruptor chemical, was present in one of the samples taken from the highlands' tap water.

Prof Md Pauzi Abdullah, from UKM's School of Chemical Sciences and Food Technology, who led the study, provided a shocking revelation: "It is clear there is widespread presence of dangerous chemical pollutants in the water catchment area, rivers and even tap water."

He sounded worried the water catchment area at Kuala Terla, which supplies potable water needs in Cameron highlands, was contaminated with pesticides.

He told me last year it was unbelievable the authorities failed to protect the water catchment area by allowing proliferation of illegal farms around the catchment area.

"This is very unnerving. We found pesticide contamination right at the source. I cannot understand how this was allowed to go on."

Yes, "unnerving" is the right word. Pesticide usage is a widespread activity. Pesticides are dangerous and they have a long-term effect on humans.

But just because we did not end up in hospital like the Siputeh victims does not mean the authorities can deny we are already ingesting these chemicals daily through our food.

What we need now is education about the effects of pesticides on us and our children. What we need is for us to know whether our health has been affected by pesticides.

In this respect, I am on the same page with Prof Yang Farina Abd Aziz, who heads the Water Research and Analysis at UKM, who said: "I believe the time has come for a thorough study to be carried out to determine the presence of pesticides and endocrine disruptors among the population. This is a pressing issue. We need to carry out this study as fast as possible to find out how far the human body and the food chain has been contaminated by pesticides, some of which are potent endocrine disruptors. Or, do we have to wait for a death knell before jumping to action?"

JASPAL is Malay Mail Perak bureau chief. He can be reached at jaspal@mmail.com.my