

'We are not insects'

DON'T be alarmist by trying to relate insects to humans, Asia Metropolitan University president and CEO Prof Datuk Dr N.K.S. Tharmaseelan advises.

While insecticides may persist in plants and soil for prolonged periods, Malaysian Medical Association (MMA) president Dr Ashok Zachariah Philip sees "absolutely nothing" to suggest any connection between dementia, whether due to Alzheimer's or other causes, and these insecticides.

"No studies thus far have pinned the blame on any chemical or pesticide as the cause of Alzheimer's or Parkinson's, a Down Syndrome is due to a chromosomal abnormality during foetal formation, not pesticides," adds Dr Tharmaseelan, who is also a former MMA president.

The Pesticides Action Network Asia and Pacific has warned that the use of neonics or neonicotinoids, which are nicotine-like chemicals that are the most widely used insecticides in the world, can cause DNA damage in human lymphocytes and chromosomal aberration in rats.

Nerve and brain damage in insects, if proven, may be attributed to toxins crossing the blood-brain barrier in them. But they are invertebrates and this isn't replicated in mammals (including humans) and vertebrates, Dr Tharmaseelan states.

Federation of Private Medical Practitioners' Associations Malaysia president Dr Steven Chow thinks the controversy raging in North America, Europe, and Japan around neonics is not without merit.

In view of its known neurotoxic effects in cases of accidental exposure and the result of studies on its adverse effects on newborn rat brains, it's best to err on the side of caution, he offers.

"The pesticide safety precaution standards in developing and third-world countries is an important factor to consider when dealing with long-term environmental and food exposure issues involving children and pregnant mothers. It would be most useful if studies are done in the poorer countries."

Health Ministry director-general Datuk Dr Noor Hisham Abdullah says the ministry has been monitoring cases of pesticide poisoning. It's often difficult to determine the type of pesticide, as the patient can't recall what they were exposed to and details such as exposure dose are scarce.

According to records, most of the cases involve complaints of nausea, vomiting, headaches, dizziness, drowsiness and abdominal pain, he says, assuring consumers that all of the ministry's healthcare facilities are equipped to deal with all poisoning cases, including those involving pesticides.

Saying that a toxicology study of neonics is not under the Health Ministry, he adds that the Pesticide Board only registers a pesticide after careful deliberation on all concerns, including health effects.

However, all pesticides are dangerous and must be used with care and according to instruction to prevent over-exposure and side effects, he says.

"Label instructions will tell you what to do during incidents of over-exposure but personal protective equipment should always be worn and, where possible, less toxic pesticides used."

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