

'Herbicide not a long-term solution'

Experts: Killer weed will develop resistance

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PETALING JAYA: As the Agriculture Department shifts into high gear in locating and eradicating the invasive weed *Parthenium hysterophorus*, some quarters have warned the authorities against relying too heavily on herbicides.

Universiti Putra Malaysia's Dean of the Agriculture Faculty Professor Dr Abdul Shukor Juraimi said herbicides were not an effective method for the long-term as *P. hysterophorus* could develop resistance to the chemicals used.

"Chemicals are not good for the environment in the long term. Besides *P. hysterophorus* developing resistance, some herbicides can also affect the ecosystem," he warned.

The active ingredients in the weedkiller used by the DOA are *glyphosate*, *atrazine* or *metribuzin*.

The use of *atrazine*, which has been banned in the European Union, has raised some eyebrows as studies have shown it can contaminate drinking water and alter natural hormone levels in animals and humans.

Dr Abdul Shukor, who is currently working with the authorities and other academics on control methods, said that as *atrazine* could "stay for quite long in the soil", it should not be used frequently.

"It takes a while to leave the ecosystem, so we must calculate how frequently it can be

used. We will work hard to come up with safe controls."

He said his team was looking at biological controls such as fungal diseases to control and eventually root out the weed.

Dr Abdul Shukor added that the DOA was working with the Department of Veterinary Services to track cattle imports over the years to see where the weed might have spread, as it is believed that *P. hysterophorus* was transported to Malaysia via imported livestock.

The Pesticide Action Network Asia and Pacific (Panap) also highlighted their concerns over the use of herbicides.

"Despite having encountered the problem a year ago, the authorities have resorted to destroying the plant by increasing the dosage instead of using an integrated approach to weed management, including non-chemical alternatives," said its executive director Sarojeni Rengam.

Sarojeni warned that relying on toxic pesticides would increase human exposure and promote pest and weed resistance.

She said Panap's research over the years had shown that pests targeted with chemicals quickly developed resistance and subsequently required higher and higher doses.

"Inadvertently, this causes a drastic impact on the delicate ecological balance in the environment, as well as harming other living organisms including human beings," she added.